SOCIOLOGY ON THE MENU

An invitation to the study of food and society

Alan Beardsworth and Teresa Keil



London and New York

Also available as a printed book see title verso for ISBN details

SOCIOLOGY ON THE MENU

Sociology on the Menu is an accessible introduction to the sociology of food. Highlighting the social and cultural dimensions of the human food system, from production to consumption, it encourages us to consider new ways of thinking about the apparently mundane, everyday act of eating.

This book provides a broad conceptual framework, based on the proposition that the food systems and food consumption patterns of contemporary Western societies are the products of the complex interplay of the social forces of change and innovation on the one hand and, on the other, those which engender stability and continuity. The main areas covered include the origins of human subsistence, the development of the modern food system, food and the family, eating out, diet and health, food risks and food scares, dieting and body image, the meanings of meat, vegetarianism and the role of sweetness in the human diet.

Sociology on the Menu provides a comprehensive overview of the multidisciplinary literature, focusing on key texts and studies to help students identify the main themes. It urges us to reappraise the taken-for-granted and familiar experiences of selecting, preparing and sharing food and to see our own habits and choices, preferences and aversions in their broader cultural context.

Alan Beardsworth is Lecturer in Sociology and Teresa Keil is Visiting Fellow, both in the Department of Social Sciences, Loughborough University.

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First published 1997 by Routledge 11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada by Routledge 29 West 35th Street, New York, NY 10001

Routledge is an imprint of the Taylor & Francis Group

This edition published in the Taylor & Francis e-Library, 2002.

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British Library Cataloguing in Publication Data A catalogue record for this book is available from the British Library

> Library of Congress Cataloging in Publication Data A catalogue record for this book has been requested

ISBN 0-203-42871-4 Master e-book ISBN

ISBN 0-203-73695-8 (Adobe eReader Format) ISBN 0-415-11424-1 (hbk) ISBN 0-415-11425-X (pbk) For Helen and Ian

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PREFACE

The origins of this book can be traced back to the mid-1980s when we first became aware of the curious fact that food and eating seemed to be topics for enthusiastic discussion for virtually everyone but the sociologist. This realization led us to begin a search for any sociologically relevant material that could satisfy our curiosity. We then went a step further by initiating our own research into the fascinating subject of vegetarianism, a choice of research area which was made in order to give us access to respondents who had critically examined much of our conventional wisdom about the day-to-day realities of eating. Grappling with the problem of explaining our findings helped us to clarify our understanding of what a sociology of food and eating might look like.

Happily, we were not alone in identifying an area of potentially fruitful expansion in sociology. The amount of research and writing in this field began to increase to such an extent that by the early 1990s we felt confident enough to offer an undergraduate course entitled 'Food and Society: Sociological Perspectives'. It is that course which provided the foundations of this book and helped us to identify the themes which we have sought to develop and illustrate.

Many people have provided assistance, both direct and indirect, in the preparation of this text. In particular, we would like to express our appreciation of the interest shown in our work by Alan Bryman, Nick Norgan and Alan Radley, and of the help provided by Frank Parry of the University's Pilkington Library. Special thanks must also go to those colleagues with whom we have worked in the context of a series of food- and nutrition-related projects, namely, Barbara Dobson, Jackie Goode, Cheryl Haslam, Marie Kennedy, Emma Sherratt and Robert Walker. We have benefited enormously from our discussions with them and from their insight and expertise. However, any shortcomings and inadequacies are entirely our own responsibility. The smooth progress of this whole project has also depended heavily on the invaluable secretarial support provided by Ann Smith, and additionally by Christine Mosley.

Alan Beardsworth and Teresa Keil Loughborough University October 1995

FOOD AND EATING: A CASE OF SOCIOLOGICAL NEGLECT?

One of the most effective ways of assessing which topics or issues are generally regarded as fundamental to a given discipline is to survey the contents of that discipline's standard introductory textbooks. In such hallowed volumes are enshrined, if only in their most basic form, those principles, theories and doctrines which are deemed essential for all recruits to master. However, scanning the contents pages of the wide range of introductory sociology texts available leads to an inevitable conclusion: alongside the themes which, in various guises, occur again and again (stratification, work and employment, crime and deviance, ethnicity, gender, the family, etc.) you will not come across food and eating as a specifically identified focus of interest. If such issues are addressed at all, they usually appear on the margins of one or more of the central themes.

In one sense, at least, this marginality is not too surprising. Quite clearly, it is feasible for sociologists with imagination and initiative to create an almost endless list of potentially fruitful sub-headings within their discipline (the sociology of housing, the sociology of sport, the sociology of transport, the sociology of tourismor, more fancifully, why not the sociology of furniture, or the sociology of children's games?). While such lines of intellectual pursuit may yield all kinds of fascinating insights, they are likely to remain relatively specialized interests, coexisting with each other and developing each along its own lines beneath the broad umbrella of sociology. Much the same might be said of the sociology of food and eating. Here we have a specialized area which deserves attention, but which is never likely to be of central importance. This is a perfectly viable position and one that allows interested teachers and researchers to get on with work in this area to the benefit of themselves, their students and their readers. On the other hand, we might argue that attempts to describe and understand the complex interrelations between food and society deserve special attention, deserve elevation to a position equal to that of the major themes of contemporary sociology. This view becomes eminently plausible if one considers just how fundamental a part of human experience eating really is, given the inexorable and relentless demands of the body for nutrients, and given the potent and multifaceted symbolic charges that food can carry. Moreover,

enormous amounts of human energy, ingenuity and co-operative effort are devoted to the processes involved in the production, distribution and preparation of food processes which are absolutely essential to the long-term survival and continuity of any society. What is more, the human food chain, with its myriad interlinked and interacting human and non-human elements, might justifiably be conceived of as the core sub-system of the social system as a whole, the very foundation of human social organization. With these arguments in mind, and given the high level of popular interest in this area, sociology's relative neglect of such issues and their virtual absence from its intellectual heartlands becomes something of a puzzle. However, this is a puzzle to which one might offer some tentative answers.

For example, it may well be that the very much taken-for-granted nature of eating has rendered this activity, and the complex of other activities and relationships which cluster around it, relatively 'invisible' to sociologists. Of course, for eating to be a mundane activity, for food to be an unproblematical aspect of daily life, one crucial condition must be fulfilled: the food supply itself must be secure. This is certainly the case for the vast majority of people in Western societies (and is especially so for the vast majority of sociologists). In circumstances where the food supply is less secure, food-related concerns will usually be a good deal higher on the agenda. In addition, in developed, industrialized societies, the processes of food production and distribution (if not of food preparation and consumption) are usually largely beyond the view and concern of the urban, middle-class individual that is the typical professional sociologist. It is frequently only within the confines of the specialized area of rural sociology that such issues come under sociological scrutiny. Indeed, this effect is mirrored at the domestic end of the human food chain. The purchasing, preparation and presentation of food (and, indeed, the disposal of leftover food and the more menial tasks of the kitchen) are strongly associated with the mundane, unglamourous labour of housework, the traditional domain of women, and hold little intellectual appeal to the male researchers and theorists who have historically dominated the profession.

There is an additional factor which may well have helped to inhibit the development of sociological interest in this area. In a sense, the study and analysis of food-related issues may have been seen as the intellectual property of other professions and other academic disciplines (for example, on the production side, the property of agronomists, economists and geographers, and, on the consumption side, of nutritionists and dietitians). What is more, since the inception of sociology as a recognized discipline, its practitioners have striven to assert its intellectual autonomy and to demonstrate that social processes exist at their own distinctive level and require their own distinctive explanations. This seems to have encouraged sociologists to be somewhat wary of becoming too closely associated with debates about the significance of the physiological bases of human experience and human existence, possibly out of concern about being seen as guilty of reductionism by their colleagues. Thus, activities where the physiological dimension is clearly salient have, to some extent, been seen as

outside the proper theoretical preoccupations and research interests of sociologists.

This coyness in relation to food and eating stands in contrast to the longstanding interest in the area shown by some of sociology's neighbouring disciplines. Historians, for example, have shown a good deal of interest in such issues. This is hardly surprising, given the tremendous impact that basic realities relating to the control of and access to food resources can have upon broader social, economic and political events and processes. Similarly, social anthropologists also seem to have been much more willing to incorporate the analysis of matters alimentary into their work. One can perhaps speculate that this fact is, to some extent, due to the nature of the subject matter of the discipline. Social anthropology's major concern in the twentieth century has been the detailed description, documentation and analysis of the workings of relatively small-scale, traditional social systems which have usually been conceptualized in broadly holistic terms. Looking at a traditional society in this holistic fashion virtually demands that some attention be paid to the processes involved in producing, distributing, preparing and consuming food, since these make up a complex of activities which provides the whole framework of life on a daily and a seasonal basis. What is more, in societies where the food supply is somewhat insecure and unpredictable, food-related matters are likely to be much more salient in the day-to-day concerns of the researcher's subjects.

However, it is perhaps within the discipline of psychology that an interest in food and eating has been particularly well developed. This interest has covered a wide range of topics, including the sensory, cognitive and emotional dimensions of eating, the processes of nutritional socialization and the causes and manifestations of eating disorders. Again, it is possible to speculate about why psychologists have devoted a good deal more of their attention to dietary issues than have sociologists. It may be that the key to this puzzle lies in the nature of the disciplinary range of psychology itself. Those working towards the physiological end of this range are well placed to investigate the physical processes of eating in their immediate sensory and behavioural contexts. On the other hand, those working towards the social end of this range are in a good position to investigate the complex influences of personality, biography and interpersonal relationships. In fact, the interests of the social psychologist may sometimes overlap with those of the sociologist, as, indeed, may those of the social anthropologist and the historian.

A SURGE IN SOCIOLOGICAL INTEREST

Despite what has been argued above, there can be no doubt that recent years have seen a marked increase in the willingness of some sociologists to direct their attention towards this previously neglected set of topics. Evidence for this rising level of engagement comes from a number of sources. Perhaps the most significant indicator is the increasing numbers of books and journal articles

produced by sociologists which are either directly or indirectly addressed to food-related issues. While it would certainly be an unwarranted exaggeration to suggest that what had previously been a trickle of material has become a flood, there can be little doubt that the current of publications (to continue the hydraulic metaphor) is now flowing more strongly than ever before.

Other indicators appear to confirm this overall impression. University courses which can be classified under the broad heading of 'Food and Society' are already widely available in the USA and Canada, and have now gained a foothold in the UK. Recent research developments also support this view. Perhaps the most notable is the research initiative entitled 'The Nation's Diet', set up in 1991 by the UK's Economic and Social Research Council. With a budget of $f_{1.4}$ million, this six-year programme was divided into two phases. In both phases a substantial number of the projects funded were sociological in orientation or contained a significant sociological component. The increasing inclination of sociologists towards research related to the social and cultural dimensions of food and eating is also indicated by their ever more frequent participation in both national and international conferences devoted to nutritional issues. What is more, there is an increasingly wide range of international organizations and associations dedicated wholly or partly to the study of the relationships between nutritional and social processes from a sociological perspective.

Accounting for this surge of sociological interest is undoubtedly as speculative an exercise as attempting to explain previous neglect. However, one factor that is almost certainly of considerable significance is the occurrence in recent years of a shift in the centre of gravity of sociology itself. A discipline once largely concerned with the analysis of the processes of *production* (in terms of their social organization and their consequences for the social, economic and political dynamics of society) is now increasingly turning its attention to the social organization of *consumption*, and to the ideological foundations of consumerism in its many guises. Such a change serves to push food-related issues up the sociological agenda, given the importance of food items in any household's expenditure patterns.

Another important shift in sociology involves the increasing salience of issues relating to the experiences of women, largely as a result of the initiatives taken by writers and theorists informed by feminist perspectives. Since the purchasing, preparation and presentation of food is still regarded, in many senses, as essentially women's work, such activities have been drawn increasingly into the domain of sociological scrutiny. Indeed, this has been closely associated with an enhanced recognition by sociologists of the significance of domestic work and the domestic sphere in general.

Furthermore, sociological concerns are often indirectly (or even directly) linked to the broader political and policy-oriented issues current in the society in which the discipline is practised. In this sense, sociology's increasing interest in food can be seen as, in part, a reflection of the increasing importance of a range

of nutritional issues in the various policy arenas. Pressure groups, professional groups and the state itself are engaged in a whole series of debates about dietary standards, food purity and hygiene, production methods and standards, animal welfare, the links between diet and health, and the nutritional adequacy of food intake patterns of certain vulnerable groups such as low-income households, to name but a few key examples. In this connection, it is also worth bearing in mind that environmental issues are now much higher on the agenda in the developed, industrial societies than ever before. Sociologists have realized, somewhat belatedly, that this area demands their attention, too. However, environmental concerns almost inevitably entail a consideration of the dynamics of human food chains in all their complexity. The ways in which food is produced and distributed have an enormous impact upon particular ecological systems and upon the environment in general. Conversely, environmental changes (for example, habitat degradation, erosion and various forms of pollution) can have significant implications for food supply and food quality. The increasing willingness of sociologists to focus upon such possibilities has also contributed to a rising awareness of food as a topic.

THE INCORPORATION OF FOOD-RELATED ISSUES INTO SOCIOLOGY

There are, perhaps, two basic routes through which the study of food and eating is being incorporated into the mainstream of sociology. The first of these involves the analysis of food production and consumption (and the elaborate social structures and relationships which underpin these) with the specific aim of illuminating existing sociological preoccupations. Thus, the analysis of patterns of food allocation and consumption has been used very effectively to illustrate the ways in which the underlying dimensions of social differentiation (gender, age and class, for example) manifest themselves in the experiences of everyday life. Similarly, the analysis of the processes of food production and distribution has been used to highlight the workings of capital-intensive, highly rationalized economic systems. The second of these two routes involves the reverse of the first. Instead of food-related social processes being investigated as a means to a particular sociological end, food-based topics can become ends in themselves, that is, specific questions can be asked about how we obtain, share, select, prepare and eat our food, and how we allocate meaning to what we are doing. Once these questions have been posed, well-tried sociological methods, perspectives and theories can be applied in order to attempt to understand what is going on. Of course, these two approaches may happily coexist within one piece of work, since the difference between them is essentially one of emphasis. However, if the sociology of food is to establish itself in the mainstream of the discipline, the second of these two approaches deserves attention, since the social and cultural dimensions of food systems raise many unique and fascinating issues, a selection of which it is the purpose of this book to address.

There can, indeed, be no doubt that the complex of human activities and experiences which relates to producing and consuming food is potentially a source of endlessly tantalizing puzzles for the sociologist. While food intake is an inescapable physiological necessity, eating entails far more than its basic physiological dimensions. Quite clearly, the act of eating lies at the point of intersection of a whole series of intricate physiological, psychological, ecological, economic, political, social and cultural processes. Such intersections present the human and social sciences with some of their most intriguing questions and challenges. However, in order to rise to such challenges, sociologists may need to be prepared to think more flexibly about the traditional boundaries of their discipline. Historically, sociologists have laid considerable stress on the idea of a clear dichotomy between the biological and the social, between 'nature' and 'culture', with the intellectual territory of sociology located firmly on the cultural/ social side of this deep divide. In the past, this confident demarcation has proved to be highly fruitful, and capable of stimulating brilliant analyses of the social organization and dynamics of modern societies, centred upon such enduring themes as conflict and integration, change and stability, rationalization and industrialization. However, such a clear-cut demarcation may have contributed to the marginalization of such themes as gender, sexuality, the body, health and illness and, of course, food and eating. For many reasons yet to be documented fully we now seem to be witnessing a softening of this previously strictly enforced boundary and an increasing recognition of its essential permeability. Interactions across this boundary are generating more and more sociological interest, thus opening up novel areas of study and moving previously marginal themes towards the centre of interest and into the mainstream of sociological debate.

THE AIMS OF THIS BOOK

A text such as this one has a number of interrelated aims, and it is helpful for the reader to see these set out at this stage in a reasonably systematic fashion:

- 1 To highlight for the reader the social and cultural dimensions of the human food system, from production to consumption.
- 2 To achieve this by providing accounts of key texts and studies which are to be found in the diverse and rather widely dispersed literature which exists in this area.
- 3 To focus the reader's attention on the main themes which have been addressed in the literature (these themes being reflected in the sequence of chapters which makes up the structure of the book).
- 4 To draw out the interconnections between these themes and to attempt to set them within a broad conceptual framework, which will be discussed in more detail in Chapter 3. This framework is based upon the proposition that the food systems and food consumption patterns of contemporary Western societies are the products of the complex interplay of, on the one hand, social

forces and processes inducing instability, change and innovation, and, on the other, social forces and mechanisms engendering stability and continuity.

- 5 To encourage professional social scientists (particularly sociologists) to develop an interest in this area, and, even more importantly, to begin to take up some of the intellectual challenges it presents.
- 6 To encourage the reader to consider new ways of thinking about the apparently mundane, everyday act of eating, and to see his or her own habits and choices, preferences and aversions in their broader cultural and social contexts.
- 7 To achieve these admittedly rather grandiose aims by presenting ideas and information in an accessible, although not necessarily undemanding, fashion.
- 8 Finally, if at all feasible, to entertain and engage the reader with some of the intriguing insights which are on offer.

The approach employed will be a deliberately eclectic one. While sociological sources will provide the bulk of our raw material, the ideas and findings of neighbouring disciplines will also be drawn upon, as and when these can be used in order to support sociological analysis and to extend sociological perspectives. The audience for this book is conceived in similarly broad terms:

- 1 Students of sociology at all levels, whether in the context of specific foodrelated courses or in the context of other sociology courses where such topics are relevant.
- 2 Other social science students, including those studying such diverse disciplines as social policy, psychology, social anthropology and human geography.
- 3 Students undergoing professional training in the areas of nutrition and dietetics.
- 4 Students undergoing professional training in the various branches of nursing and medicine.
- 5 Students undergoing training on food-related vocational courses.
- 6 Established professionals in areas related to nutrition, health or social policy.
- 7 The general reader who is attracted to a sociological approach to the contemplation of food and eating.

Quite clearly, with such a diverse readership in mind, the avowed aim of producing a text which is accessible to the non-sociologist but at the same time can provide the stimulus for the sociologically oriented reader to follow up the issues in more depth, is by no means a straightforward one to fulfil.

THE ORGANIZATION OF THIS BOOK

The text is organized into four main parts, each with its distinctive subject matter.

Part I seeks to set the scene by looking briefly at selected aspects of the prehistory and history of human food systems (Chapter 1). Chapter 2 deals with the far-reaching changes in human social organization which have produced a whole series of crucial transformations, culminating in the emergence of the modern food system in all its global complexity. Chapter 3 then goes on to lay down a basic framework for the sociological analysis of the food system and to examine the various sociological perspectives which have been, or might be, employed to carry out such analysis. This chapter also deals with complementary approaches from neighbouring disciplines which have influenced or informed the work of sociologists.

Part II sets out to examine a number of aspects of the social organization of eating. Chapter 4 looks at the processes of social differentiation within the family (for example, by age and gender) that influence the ways in which food is prepared and distributed within the household. The ways in which food consumption patterns can be seen to highlight class differences and reinforce family identity are also considered. Since an increasing proportion of food intake takes place outside the family or household setting, Chapter 5 focuses on the phenomenon of eating out, in its many guises.

Part III attempts to provide an insight into the very broad area of food, health and well-being by focusing on a series of issues which have emerged as important themes in the available literature. Thus, Chapter 6 describes changing conceptions of the linkages between dietary patterns, on the one hand, and health and disease outcomes on the other. Such conceptions, it will be argued, have undergone a fundamental process of rationalization in modern societies. Chapter 7 focuses on the interrelated phenomena of deep-seated chronic food anxieties and acute 'food scares'. Both these phenomena can exert a potent influence on food choices and consumption patterns, and their underlying causes will be analysed. Chapter 8 moves on to consider another characteristic set of anxieties frequently related to food intake. Unease in relation to body image and concern about the acquisition of body fat can reach obsessional levels in certain circumstances, and the cultural and social roots of these effects will be discussed.

Part IV looks at selected examples of patterns of food preferences and, on the other side of the coin, at food prohibitions or avoidances. The subject matter of Chapter 9 is the convoluted and sometimes contradictory symbolism of meat, simultaneously one of the most widely prized components of the human diet and one of the most ambivalent. Meat rejection and meat avoidance figure in Chapter 10, which sets out to describe the origins and multifaceted manifestations of vegetarianism as an increasingly popular dietary option. Chapter 11 takes as its topic the role of sweetness in the human diet, the importance of the production and consumption of sugar for the global food system and the symbolism of confectionery.

In a sense, each of the chapters described here is designed to provide a selfcontained introduction to its chosen subject matter. However, the social processes under discussion are themselves frequently shaped by a set of underlying ideological trends and structural transformations in human food systems. As has been indicated above, these trends and structures, which form the framework for the everyday practices of food production and consumption, will be analysed in Chapter 3, along with the various sociological perspectives which can be drawn upon. As a prelude to this, however, Chapters 1 and 2 set out to sketch the background to the emergence of the modern food system, the system which is the basic object of analysis of this book.

Perhaps at this stage the authors can be forgiven for succumbing to the temptation to use a nutritional metaphor in expressing the hope that readers will enjoy selecting from the menu of ideas displayed here and will find that their appetite for more has been whetted!

Part I

THE SOCIAL DIMENSIONS OF THE FOOD SYSTEM

1

THE ORIGINS OF HUMAN SUBSISTENCE

Any attempt to make sense of the contemporary realities of food and eating from a sociological viewpoint must involve some consideration of the past. If we wish to try to understand the food production systems upon which we depend and the food consumption patterns in which we participate, then a familiarity with certain crucial historical themes is essential. Indeed, it is also necessary to push beyond the boundaries of recorded history into the even more speculative and hazy realms of prehistory. The aim of this first chapter is to begin to provide that background. Of course, in this context, such a background cannot be provided in any great detail, since the history and prehistory of food is a vast subject in itself, covering broad sweeps of human activity and experience. Rather, the intention is to draw attention to a number of key ideas which can enhance our comprehension of the foundations of human foodways, foundations which, by their very nature, usually remain unexamined.

Our starting point will be a consideration of the diet of early humans, a contentious and complex question, but one which can lead to insights whose implications are as important now as they were in the early stages of human evolution. The issue of the basic forms of human subsistence will then be raised, along with a discussion of what is arguably one of the most important transitions in human social organization, the shift from an ancient, long-standing dependence on hunting and gathering to food production based on the techniques of agriculture. However, it will be argued that conventional views of this transition may require reconsideration and revision. Finally, we will go on to examine the enormous implications of this transition for human social relations and arrangements, not least of which was the facilitation of the emergence of increasingly complex and large-scale social systems.

THE EARLY HUMAN DIET

Perhaps the most basic nutritional question of all relates to the nature of the 'original' human diet. In other words, we need to ask how our evolutionary history as a species has shaped, or been shaped by, our dietary patterns.

Attempting to build up a detailed picture of the foods which our distant forebears ate and the relative importance of the various items which figured in ancestral diets, is a task beset with enormous difficulties. Foodstuffs are, by and large, relatively perishable, and thus traces of them rarely survive over long periods of time to provide the archaeologist with direct evidence about dietary practices and subsistence strategies. Thus, all too often, investigators are compelled to rely upon the indirect evidence provided by more durable artefacts like tools, or upon the animal bones which are assumed to be the remains of ancient meals. However, such evidence can be controversial and subject to conflicting interpretation. As Binford (1992) has pointed out, the fact that animal bones and stone tools are found together in particular caves and rock shelters does not in itself demonstrate that the hominids who occupied those sites were hunters, or were solely responsible for these accumulations, since carnivores like wolves, leopards and hyenas also occupied such sites and also created accumulations of prey animals' bones.

There are, however, alternative ways of addressing these questions, and one of these involves not only looking at evidence about the diet of early hominids, but also comparing human dietary patterns with those of modern non-human primates. This is the approach adopted by Leonard and Robertson (1994), who re-examine a range of nutritional and physiological data relating to humans and their primate relatives. They point out that among primates in general there exists a consistent negative correlation between body size and diet quality. That is, large primates (such as gorillas and orang-utans) depend upon diets which consist of large amounts of bulky, hard-to-digest foods which are relatively low in nutrients per unit of weight (for example, plant parts like leaves, stems and bark). In contrast, smaller primates' diets consist of much higher quality foods, in the sense that such foods are much more densely packed with nutrients and contain far lower proportions of indigestible bulk. Their diets include the reproductive parts of plants, like seeds, nuts, fruits, bulbs and tubers, and a wide range of small animals. The authors give the example of the pygmy marmoset, which tends to focus its feeding behaviour on protein-rich insects and energyrich plant gums and saps.

The explanation for this relationship between body size and diet quality appears to be related to metabolism, that is, the sum total of the chemical processes which drive and maintain a living body. Smaller animals have higher metabolic costs and energy needs per unit of body weight than larger animals. Although the latter have higher *total* energy needs, they need less per unit of weight, and can, therefore, make a successful living out of consuming large quantities of low-quality but relatively abundant foods. However, what is striking about humans is that they do not fit neatly into this broad overall picture. The authors examine data on the dietary intakes of a number of peoples dependent on foraging (i.e., the exploitation of wild animals and plants) for subsistence. These groups show a far higher level of dietary quality (as measured by a composite index) than would have been expected for primates of their size. They also consume a far higher proportion of animal material (material defined as high-quality in terms of nutrient density) than comparably sized primates (e.g., anthropoid apes). What is more, when the authors looked at data from agricultural societies, where much lower quantities of animal products like meat are consumed, the diet quality is still significantly higher than would have been predicted for primates in general in that size range, since the grains and cereals eaten by these human consumers are much richer in calories than are fibrous leaves and stems.

We are therefore faced with a puzzle, in that humans eat a diet which is of much greater quality than would be predicted by their body size. Indeed, Leonard and Robertson (1994) also demonstrate that this quality is higher than might be expected from humans' resting metabolic rate, a baseline which expresses the amount of energy required for metabolism when the body is at rest. In fact, the authors go on to argue that the key to this puzzle is the size of the human brain. The human brain is, of course, relatively large in relation to body weight compared with other primates, and for that reason its energy demands are proportionately higher. They calculate that humans spend around three to four times more on brain metabolism than do other primates. Thus, in humans 20–25 per cent of the energy expenditure making up the resting metabolic rate goes to the brain, as opposed to an average of 8–9 per cent for our non-human primate relatives. There seems to be a close association between the possession of a large brain with a high energy requirement and the consumption of a high-quality, nutrient-rich diet.

Switching their attention to the archaeological data, Leonard and Robertson (1994) note that early members of our own genus *Homo*, specifically *Homo habilis* and *Homo erectus*, seem to show signs of this characteristically human relationship between brain size, body size and resting metabolic rate. Archaeological evidence also indicates that these species ate higher-quality diets (in that they contained a higher proportion of animal material) than did, for example, the ancient ape-like primates belonging to the genus *Australopithecus*. All this would appear to indicate that in the course of hominid evolution, increasing brain size (with a concomitant increase in the brain's energy demands) would have had to be associated with a shift towards an increasingly nutrient-rich diet. While these authors, quite explicitly, do not argue that somehow dietary factors caused changes in human brain evolution, they do seem to demonstrate that a move towards a higher-quality diet would have been a necessary condition for sustaining an evolutionary trend towards a larger and more powerful brain.

If we accept the arguments of these two biologists, we are led to a striking conclusion: the very basis of our human distinctiveness, our large and uniquely sophisticated brain, appears to demand that we maintain a high-quality, energyrich diet. This appears to be confirmed by the fact that the human digestive tract is relatively short compared to most other primates, indicating its adaptation to high-energy, easy-to-digest foods. All these factors add up to what are, in effect, the nutritional 'facts of life' for human beings, facts rooted in our evolutionary past and our actual physiology. However, to state this is not to argue for a form of biological determinism. Our humanness imposes certain nutritional imperatives upon us, making us ominivores with a need for a high-quality diet, but these imperatives do not determine human nutritional endeavours and choices, rather they set a framework within which they are played out. Within that framework there is the scope for enormous variation, since human ingenuity is capable of generating an apparently infinite variety of solutions within an impressive range of cultural and ecological settings.

HUNTING AND GATHERING

However, varied as these solutions may be, attuned as they are to the mix of opportunities and constraints presented by their own unique circumstances, they can be placed into more general categories. Quite clearly, if we wish to consider the earliest forms of human subsistence, then we will need to focus our attention upon that broad category of activities that are often referred to as 'foraging'. In this sense, the term is used to describe the exploitation for food of plants and animals over which the user has little or no control (in other words, organisms which can be seen as 'wild'). When the organisms in question are animals that have sufficient agility and alertness to require active pursuit or stalking, the term 'hunting' is used. When the organisms consumed are plants, or animals with little or no mobility, the term 'gathering' is conventionally applied. (Trapping can be seen as an intermediate category, since certain forms of it permit the capture of active animals without the need for pursuit.) The combination of hunting and gathering has provided our species with its sustenance for most of its evolutionary history.

It is intriguing to note, however, that from the early days of scientific debate concerning ancestral patterns of human subsistence, far more stress has been placed upon the hunting component of the hunter/gatherer lifestyle than on the gathering component. Hunting has conventionally been seen as having exerted a potent formative influence upon human social and physiological evolution. Perhaps the clearest and most explicit academic expressions of the role of hunting in the development of human social, cultural and physical characteristics can be found in papers which emerged from a highly influential symposium entitled 'Man the Hunter', held at the University of Chicago in 1966. Thus, Washburn and Lancaster (1968) argue that human hunting (an activity almost entirely the preserve of males) represents a form of subsistence and a way of life that has provided the common factors which have dominated human evolution for over 99 per cent of its course. They point to key physiological and social adaptations which they see as closely associated with hunting: the development of a large brain, the use of tools and weapons which demand high levels of skill in their production and use, a sexual division of labour with females concentrating on food gathering and child rearing while being supplied with meat by males, and the development of complex forms of communication and co-operation between

males to facilitate hunting success. From this list, it is apparent that this view of hunting sees it as the root of human features as diverse as skill in the creation of artefacts, the male-dominated family and the emergence of that most sophisticated of communication devices, language.

This hunting-centred view is presented even more emphatically by Laughlin, who goes as far as to assert that, 'Hunting is the master behaviour pattern of the human species' (Laughlin 1968:304). He maintains that the fact that the human species achieved worldwide distribution while dependent on hunting for subsistence demonstrates the universality of this particular adaptation. What is more, he also suggests that an impressive range of human physical attributes arises directly from our hunting past. These include muscular strength and a high load-carrying capacity, sustained endurance at running speed, a high level of agility and manual dexterity, excellent colour vision, good hearing and a remarkably tough and durable outer skin. These features provide a degree of physiological flexibility sufficient to enable humans to colonize habitats far more diverse than those available to any other comparable animal. When these features are combined with a high-capacity memory, superior learning ability, the use of tools and language, and the development of complex forms of co-operation (these features also being seen as emerging out of the demands of a hunting way of life), the recipe for human success as a species appears to be complete. Indeed, so compelling is this view of human development that it has strongly influenced popular views of human origins and human nature.

THE EMERGENCE OF AGRICULTURE

However, while what has been termed the 'Hunting Hypothesis' does provide us with a number of fascinating possibilities concerning the links between human subsistence strategies and dietary patterns on the one hand, and human evolution on the other, it does exhibit some significant limitations. We will return to these limitations later in this chapter, although before doing this it is necessary to confront a fundamental conundrum which has been puzzling scholars for several generations: if the hunting and gathering approach to subsistence is such a successful one, and if it is so closely integrated with human evolutionary developments, why does there eventually occur a radical shift towards a very different form of subsistence? This novel approach to providing food involves deliberately and systematically *producing* food, rather than capturing food animals or gathering food plants which exist independently of human activities and interventions.

The timing of this shift is, in geological terms, comparatively recent. The end of the Pleistocene, some 14,000 years ago, saw the retreat of the glacial ice in the northern hemisphere, accompanied by dramatic climate changes. Tundra and grasslands were, in many areas, replaced by forests, and humans were compelled to adapt their hunting and gathering patterns accordingly. Foraging strategies appear to have become more diversified, since vast herds of large herbivorous mammals inhabiting wide, open plains were no longer available to the same extent in the northern temperate zones to provide human hunters with an abundant food supply. Shortly after these far-reaching environmental changes occurred, the emergence of agriculture began, spanning a period dating from between 9,000 and 12,000 years ago. As Hole (1992) points out, the shift to agriculture appears to have begun in the warmer latitudes and spread later to temperate regions. The process was dependent upon the domestication of a range of plant species, domestication itself being conventionally viewed as the replacement of the pressures of natural selection with artificial selection carried out by human beings. Artificial selection is seen as enabling humans to modify food plants in ways which make them more productive (in terms of yield per unit of land area), which make them more palatable, easier to harvest, store or process, and even aesthetically more pleasing.

The emergence of agriculture can be dated to approximately 10,000 years ago in southwest Asia (Palestine) and approximately 8,000 years ago in Central and South America. However, as Hole (1992) notes, although agriculture took hold in several other locations, the dating of these events is less certain. Nevertheless, it is clear that by 4,000 years ago all the basic agricultural techniques, such as ploughing and irrigation, had been developed. At each location in which agriculture was established, it was based upon a characteristic mix of domesticated plants which Hole documents in some detail. For example, the so-called 'fertile crescent' of southwest Asia is associated with wheat, barley, various legumes, grapes, melons, dates and almonds, while the area around the northern Mediterranean is characterized by olives, grapes, figs and cereals. Tropical West Africa embraced such crops as yams and oil-palm, whereas the eastern sub-Saharan zone is associated with millet and sorghum. The complex of domesticated plants originating in Southeast Asia includes such species as taro, yam, breadfruit, sago-palm, coconut and banana, although Hole notes that the origins of the current staple food of much of Asia, rice, are poorly understood. The region that is now Central America gave rise to such major domesticated species as maize, beans, squash and tomatoes. White potatoes originated in the Andean mountains of South America, and the Amazon basin saw the domestication of manioc and sweet potatoes. Of course, in the intervening millenniums, many of these crops have spread throughout the world, to become staples in areas far removed from their region of origin.

Hand in hand with the domestication of plant species went the domestication of animals. Domesticated animals, of course, did more than provide readily available sources of food products like meat, and non-food products like hides, hair and bone that might otherwise have been obtained from wild animals. Certain species also provided a source of muscle power far in excess of that achievable by human beings, muscle power which could be harnessed directly to agricultural activities (e.g., ploughing) and which could also be used for transportation purposes. The domestication of animals has had an enormous impact on human foodways, dietary patterns and social organization, yet our understanding of exactly how this process occurred is largely based upon supposition (Reed 1984:2). Nevertheless, it is possible to identify certain key attributes which, in effect, render a given species suitable for domestication (Clutton-Brock 1987:15–16). These include the ability of the young to survive removal from the mother and to adapt to a novel diet and environment, plus the possession of a set of behavioural patterns which facilitate the animal's incorporation into human society. Specifically, this requires a social animal, whose behaviour is based upon a dominance hierarchy, which will adopt a submissive role *vis-à-vis* its human companions. In addition, the species must be able to adapt to confinement and must be capable of breeding freely under such constrained conditions. All these features require an innate gregariousness on the part of the animal in question, as well as a relatively placid temperament that will tolerate human proximity and human interventions without exhibiting excessive signs of stress.

Domestication in mammals, for example, is usually accompanied by a number of characteristic physiological changes (Clutton-Brock 1987:22–4). In the early stages of the process, there is often a reduction in body size as compared with the wild ancestor (although this may be reversed later). In addition, domestic mammals tend to carry a higher burden of fat beneath the skin and distributed through muscle tissue. Perhaps most strikingly, the brain becomes much smaller in relation to body size, and sense organs are also reduced. What is more, in the skull, the facial region and the jaws may become much shorter and more compressed, which may in effect involve the retention of juvenile characteristics.

Animal domestication occurred in a number of locations around the world (Clutton-Brock 1992). In western Asia, around 9,000 years ago, there is archaeological evidence for the domestication of sheep and goats, although they appear to have been domesticated later than the dog, whose domestication is usually estimated at approximately 12,000 years ago. Domestic cattle and pigs appear to originate in western Asia roughly 8,000 years ago (although in the case of the pig, its progenitor, the wild boar, is so widespread there may have been several separate centres of domestication). The domestic horse originated in central Asia 6,000 years ago, about the same time that the donkey (descended from the wild ass) appeared in Arabia and North Africa. The domestic chicken (descended from the jungle fowl) can be traced to southern Asia approximately 4,000 years ago. The New World has contributed such species as the llama and the alpaca (domesticated in South America, roughly 7,000 years ago) and, more importantly in a global sense, the turkey (North America, 1,500 years ago). As we have already noted, the causes of the shift to agriculture, based on the domestication of key species of plants and animals, remain a puzzle. As might be expected, however, there has been much speculation about these causes. For example, Hole (1992) argues that a series of interconnected changes in global temperatures, sea levels and the distributions of plants and animals generated a range of human responses, one of which was a move towards agriculture and direct food production. This author suggests that, in a sense, the ecological and

social limits of the hunting and gathering lifestyle had been reached. This idea is echoed by Van der Merve (1992), who argues that archaeological evidence suggests that agriculture may have developed in response to situations in which the rates of food extraction by hunter-gatherers had begun to exceed the carrying capacity of the environments in which they were active.

However difficult it may be to identify the actual causes of these transformations in the ways in human beings obtained their food, there can be no mistaking the enormous and far-reaching consequences of these changes. Indeed, these consequences have proved so momentous that the shift from foraging to food production is often referred to as the agricultural or neolithic 'revolution', despite the fact that this was a revolution which took some thousands of years to run its course. Perhaps the most obvious consequence was a dramatic increase in the impact upon the natural environment of human subsistence-related activities. Of course, hunter-gatherers can have a significant impact upon the habitats in which they live. In intensely foraged areas, the whole balance of flora and fauna may be modified by human activities. In addition, hunters may use fire as a means of driving prey towards ambush or as a way of generating new plant growth to attract quarry species into the group's territory. The habitual burning of vegetation can produce extensive environmental changes if repeated over long periods of time. However, once agriculture takes hold, the rate and extent of environmental impact increases rapidly. Early agriculture took place on a shifting basis, involving, as Hole (1992:374) puts it, 'a cycle of use, abuse, abandonment and re-use'. The clearance of forests (by burning and felling) and the ploughing of relatively unstable or fragile soils could result in severe erosion and the wholesale degradation of the landscape. Such effects would also be exacerbated by the cumulative impact of heavy grazing and browsing by domesticated herbivores. In regions of settled agricultural activity, the progressive depletion of the surrounding habitat would be an ever-present hazard.

So extensive has been the impact of agriculture upon the natural world that in the regions of the globe in which it has been practised for several millenniums, it is now difficult to identify many areas which can in any sense be seen as 'natural' in the sense of being completely untouched by human intervention and manipulation. Indeed, the whole thrust of this great revolution has been to replace the diversity of natural ecological systems with a much narrower range of plants and animals linked to human beings through the nexus of domestication.

As well as transforming the interactions between humans and the natural world, this agricultural revolution was inevitably associated with fundamental changes in the organization of human social relationships. Relatively settled agriculture facilitated the building up of stocks of food (in the form, for example, of relatively durable grains, or livestock 'on the hoof'). Such stocks, quite clearly, might be built up as an insurance against future shortages or famines, but in social terms they could represent very much more than that. The power over

others that flows from the control of food stocks means that the whole concept of ownership becomes crucial in such societies. Stocks of wealth in the form of stored food surpluses could be used, within an appropriate system of barter and exchange, to command the labour, obedience or political allegiance of others. Gifts of food or the use of food animals in religious sacrificial rites could also be employed to gain status and enhance political influence. In short, the initiation of a system of agricultural production greatly facilitates the extension and elaboration of patterns of social differentiation and inequality. Privileged groups or elites could now emerge and be supported by the sustained efforts of their subordinates. There is clear archaeological evidence that such elite groups typically enjoyed higher nutritional standards than those lower in the social order. For example, in the Sumerian civilization in Mesopotamia, detailed records of the food rations allocated to the various strata in that society indicate that the highest groups enjoyed a rich and varied diet, while the diet of the lower orders was heavily dependent on a single staple, barley (Gordon 1987:28). For such subordinates, subsistence-related activities became ever more unlike those of hunters and gatherers.

There is a good deal of evidence to suggest that hunters and gatherers, on average, need to spend only relatively short periods of time actually engaged in catching or searching for food items in order to meet their nutritional needs (Sahlins 1974:14–27). What is more, the nutritional standards of early human hunter-gatherers in the Paleolithic appear to have been good, even compared with modern Western standards (Gordon 1987:30), given the typically diversified and balanced nature of their diets. The relatively low levels of effort, and the abundance of leisure time, has led Sahlins (1974:1-39) to refer to the hunting gathering lifestyle as 'the original affluent society'. In contrast, however, farmers find themselves committed to much more onerous, protracted and physically demanding inputs of labour, inputs which may be determined not only by their own subsistence needs, but by the need to generate food surpluses to support the debts and obligations they may owe to individuals who control more resources or wield more power than themselves. Indeed, it is tempting to assert that the actual concept of 'work' is one that could only have come into existence after the advent of agriculture.

Demographic changes were also associated with the spread of agricultural systems. The population densities of hunter-gatherers, depending upon the habitat, may be in the order of one person per square mile. In contrast, the densities of some early farming populations may have exceeded the level of sixty persons per square mile (Hartley 1972). These higher population densities, in turn, created the conditions for increases in overall population levels. Indeed, in certain circumstances population densities would eventually reach unprecedented values. This occurred through the creation of a novel form of human settlement, the city, a complex physical and social structure drawing its food resources from a wide agricultural hinterland (Sjoberg 1960). Thus, between

6,000 and 5,000 years ago there occurred in Mesopotamia, for example, what Roaf (1990) has termed an 'urban explosion'.

The shift towards agriculture was, therefore, clearly associated with a series of social and cultural transformations whose long-term implications were to prove enormous. However, the impact upon human nutritional and health standards was, in fact, often deleterious (Gordon 1987:30) (although privileged strata may have been protected from such effects to some extent). As has already been noted, agricultural diets are in general much more narrowly based than those of hunter-gatherers, often with a much greater emphasis on the consumption of carbohydrates and with lower intakes of protein. Hole (1992:378) suggests that relatively poor dietary standards led to higher levels of diseases related to nutritional deficiencies and also of infectious and parasitic diseases, which could spread more readily in the insanitary conditions pertaining in more densely populated, sedentary societies. He also argues that dietary changes may have led to an increased incidence of dental caries.

Van der Merve (1992:372) presents a striking case study which demonstrates dramatically some of the negative effects of the nutritional changes associated with agriculture. The people of the lower Ilinois Valley (of what is now the central USA) around the year AD 600 were still largely dependent for food upon wild plants and animals (although they obtained some maize by trading with neighbouring agriculturalists). However, by AD 1200 their society had undergone a radical transformation. By this time they had become maize growers in their own right, and their population was concentrated in large villages. However, these changes were accompanied by an increase in weaning deaths among infants and a slowing down in skeletal development, so that maturity was not reached until age 25. In addition, the incidence of the bone disease porotic hyperostosis (caused by iron-deficiency anaemia) had increased to such an extent that it was affecting over half the population. In fact, as the author points out, the increases in population levels associated with agriculture were not the result of improved life expectancy (which remained about the same as for hunter-gatherers) and were apparently accompanied by a heightened incidence of nutritional stress.

What is more, a dependence on agriculture could have other serious disadvantages. Thus, while a settled, food production approach to subsistence could facilitate attempts to even out short-term fluctuations in food supply (i.e., through food storage), more long-term fluctuations, produced by such factors as drought, climatic change and resource depletion, could potentially generate chronic food shortages (Gordon 1987:30). In the most severe instances such shortages could become full-scale famines. In contrast, hunter-gatherers were much less exposed to chronic food shortages and famines. The diversity of their diets made them less reliant on any one food item, and therefore a failure in the availability of any given food source was not as likely to prove catastrophic. In addition, the geographical mobility associated with foraging lifestyles would have meant that hunter-gatherers were much more capable of moving quickly

away from areas of food shortage into areas where food resources were more abundant. The development of agricultural systems also appears to have increased the scale and heightened the intensity of another of the major scourges of humankind, warfare (Harris 1978:35). With permanent settlements and the ownership of land, crops and livestock comes a much stronger sense of the occupation of an exclusive territory which must be defended from the incursions of others or, indeed, expanded at the expense of others.

Given some of the unwelcome effects of a shift towards agriculture, it is perhaps hardly surprising that we find evidence of hunter-gatherers actively resisting making the switch away from the foraging approach to subsistence (Van der Merve 1992:370). Sahlins (1974:27) provides the contemporary example of the Hadza people of Africa, foragers inhabiting a region of abundant wild food supplies, who, until recently, successfully resisted taking up agriculture despite being surrounded by cultivators. Given what we know about the spread of agriculture (for example, from southern Europe into northern Europe), it is tempting to speculate that an emphasis on farming did not replace the exclusive reliance on foraging because the former represented a more appealing and secure lifestyle (which it almost certainly did not). Rather, it may well have been that, once established, agriculturalists, as a result of their greater numbers and more intensive approach to warfare, could readily displace foragers from territory that was suitable for agricultural exploitation and settlement.

HUMAN SUBSISTENCE RECONSIDERED

In the previous section we examined a view of the origins and development of the basic forms of human subsistence which consists of a number of key elements, for example, the idea that the hunting component of the hunting and gathering lifestyle has had a particularly powerful influence on human physical and social evolution, and the notion that environmental changes and pressures eventually led human beings to respond by shifting their subsistence activities towards agriculture. This broad view carries considerable authority and appears to provide a coherent and plausible perspective on the prehistory of human food systems. However, as a perspective, it has its limitations and its critics, and these demand our consideration before we move on to the next stage of the discussion.

The first point which needs to be addressed relates to the conventional view that hunting represents an extremely ancient approach to human subsistence. While it has frequently been assumed that the animal remains associated with early hominid species demonstrate a reliance upon hunting as a food source, this view has frequently been questioned. Reviewing a broad spectrum of evidence, Gordon (1987) suggests that for early hominids, the acquisition of animal protein through scavenging may have been more likely than through actual hunting. It is only in the middle and upper Pleistocene that the clearest evidence exists for sophisticated hunting strategies and for the successful killing of large numbers of game animals. Thus, the claim put forward by advocates of the 'Hunting

Hypothesis', that hunting dominated the subsistence activities of the various hominid species for 99 per cent of human prehistory (Washburn and Lancaster 1968:293; Laughlin 1968:304) needs to be viewed with some caution. The picture is further complicated if we consider the hunting-gathering cultures of modern humans which have survived to the present day, or at least survived long enough to become the objects of systematic study by anthropologists. While some of these cultures did rely very heavily on meat and other animal products for subsistence (the Innuit of the high Arctic are usually cited as prime example; see Damas 1972), in general food gathering was probably the predominant activity. In most foraging societies, the hunting of game animals, which is the preserve of men, is a sporadic and often unpredictable activity, yielding highly variable returns according not only to the methods employed but to uncontrollable fluctuations in such factors as the weather and the behaviour of quarry species. On the other hand, the activity of gathering (and this includes 'gathering' immobile or slowmoving small animals as well as plant foods), generally the preserve of women, tends to provide the bulk of resources for everyday subsistence. Thus, the meat of game animals, although the single most highly prized category of food in such societies, does not usually constitute the principal source of nutrients.

A particularly interesting reinterpretation of the development of human subsistence patterns is offered by Foley (1988), who invites us to consider the possibility that evolutionary changes have occurred in our species since its first appearance, particularly relating to the ways in which we obtain our food. Examining data concerning the Cro-Magnon populations of the Upper Paleolithic period in Europe (the earliest anatomically modern humans), he notes two striking features. Firstly, the stature and 'robusticity' of these people was much greater than that of later populations. Secondly, the degree of sexual dimorphism (e.g., in terms of the larger size of adult males compared to adult females) was also more pronounced than that found in later populations. Foley puts forward the proposition that the powerful stature of these males was an adaptation which facilitated the hunting of the big game animals that were abundant during this period in this area and may also have been related to competition between males, where size and strength would have conferred clear advantages. The exploitation of abundant big game would then have enabled these males to support dependent females and their offspring.

However, as we have already noted, far-reaching environmental changes were afoot at the end of the Pleistocene (about 10,000 years ago). Foley (1988) points out that at this time there is a reduction in overall body size and a reduction in the degree of sexual dimorphism. He argues that these anatomical changes in humans were associated with the changed subsistence patterns which accompanied the disappearance of the vast herds of big game animals upon which the Upper Paleolithic peoples had depended. A more 'gracile' and less 'robust' anatomy, and reduced differences between male and female, may have reflected the fact that the foraging strategies of the sexes now became much more similar, and indeed, in a sense, more balanced and egalitarian. It is at this point in his argument that he introduces his most interesting contention. The Upper Paleolithic hunters who exploited the rich reserves of game in the late Pleistocene, he suggests, were very different from more recent hunter-gatherers, in that they had more complex social structures, a far heavier dependence on hunting and even a different, more robust, physical appearance. This leads him to argue that 'modern' (i.e., post-Pleistocene) hunting and gathering are not, in any sense, ancestral to agriculture. Rather, the hunter-gatherer lifestyle, examples of which have survived to the present day, was itself an adaptation to post-Pleistocene conditions and involved diversification of foraging strategies and a much increased significance for the gathering activities of women. Thus, recent hunter-gatherer lifestyles on the one hand, and agriculture on the other, are seen as parallel adaptations to the same set of environmental changes.

While such views are, by their very nature, somewhat speculative, they do help to shed some light upon otherwise puzzling facts. For example, it is intriguing that humans appear to have exploited intensively certain plant species for long periods before those species began to show signs of actual domestication (Gordon 1987:26). Moreover, despite the conventional use of the term 'revolution' to describe the switch to agriculture, this term is more appropriately applied to the eventual consequences of this change than to the timescales involved, which were often protracted. Indeed, many agriculturalists retained an involvement in foraging, particularly hunting, and such activities remained a significant component of their day to day activities (see e.g., Rosman and Rubel 1989; Sponsel 1989).

There is an additional aspect of the debate about the prehistory of human subsistence patterns which also needs to be approached with some caution. Much of the literature appears to be based upon the view that the process of domestication, upon which the development of agriculture inevitably depended, was a process which was quite deliberately and consciously initiated and carried through by human beings. This view of domestication and the emergence of agriculture is, of course, in line with our common-sense ideas about the ambitions and abilities of humans to exercise control over the natural world and to shape it according to human priorities. From this perspective, domestication would be seen as the result of the active selection of particular strains of plants and animals in terms of the desirable characteristics they exhibit. The processes of reproduction are then manipulated and regulated to ensure that these desirable characteristics are passed on to subsequent generations of the domesticated species.

While this might be a reasonably plausible description of the theoretically and scientifically driven forms of plant and animal breeding which have been developed in recent centuries, serious doubt has been cast upon the idea that domestication could actually have been *initiated* in this calculating manner. One of the most detailed challenges to the conventional view is presented by Rindos (1984). In fact, Rindos does not seek to deny that people act consciously and that these actions are oriented towards goals. However, he argues that in the context of plant domestication, for example, people could never have intentionally domesticated a crop, thereby deliberately 'inventing' agriculture. This is because the biological and evolutionary processes

involved in domestication cannot be accounted for in solely cultural terms. The long-term effects of deliberate environmental manipulations and attempts at selective breeding are highly unpredictable, and domestication-related changes can only occur within the genetic parameters of the species in question. Thus, human intentions can only play a limited role in the whole process. This is perhaps best illustrated by the existence of weeds. These plants have evolved alongside 'desirable' plants as part of the whole process of the development of agriculture. They are, in a sense, domesticated plants, but they are not wanted by farmers, who expend considerable effort in ultimately unsuccessful attempts to eliminate them.

Thus, Rindos is suspicious of the argument that agriculture developed as a deliberate response to specific environmental stresses in given historical situations. Rather, he argues that domestication arose out of an *interactive* process between plants and humans. Indeed, it would make just as much (or just as little) sense to say these plants 'chose' humans to protect and disseminate them as to say early agriculturalists 'chose' to domesticate them. In fact, Rindos suspects that crops evolved through a natural process, with humans acting as a largely unintentional selective force, the process itself conferring some evolutionary advantages on both the people and plants involved. Thus, Rindos reminds us, although we use the idiom of intention as a kind of literary convention, it is, in effect, a metaphor and not a description of reality. Agriculture, then, according to Rindos, represents a form of co-evolution between humans and certain plant species and is, in effect, a highly developed form of symbiosis. The term 'symbiosis', meaning a situation in which at least two different species interact to their mutual benefit, is also used by Reed (1984) to describe agriculture and domestication. However, he also adds the concept of the 'secondary energy trap'. In a symbiotic relationship, each symbiant represents a reserve of energy other symbionts may be able to draw upon (and thus a way of storing energy outside their own bodies). Agriculture, therefore, represents a complex system of mutual secondary energy traps for the species involved, with plants and animals drawing upon stored human energy for protection and dissemination, and humans drawing upon stored plant energy for food and stored animal energy for food and motive power.

Once we begin to think of agriculturally based food systems in these terms, our whole view of human subsistence necessarily undergoes an important shift. Domestication and agriculture come to be seen as something more than innovations created initially by the intentional application of human ingenuity. The impressive selective advantages which accrue to domesticated plants and animals through their association with humans become much more visible. Domesticated species have, by and large, achieved spectacular increases in their populations (or the sheer volume of 'biomass' which they make up) and in their geographical ranges and the environments they occupy. This has been achieved, in some instances, by species which, prior to domestication, may well have been on the verge of disappearance. For example, the Aurochs, which is now actually extinct in its wild form, is the direct ancestor of domestic cattle, and this animal is now one of the most numerous and widely distributed large mammals on earth. Furthermore, the impact of these changes on human beings may now be seen from a rather different perspective. Human population densities and overall numbers saw increases far beyond what could have been sustained by foraging lifestyles, although these increases were sometimes associated with an actual deterioration in nutritional standards. Extensive changes in culture and patterns of social relations also associated with the development of agricultural systems, and the move towards an emphasis on food production, saw human communities become increasingly sedentary and spacially restricted, their members (at least in the lower strata) committed to the physically demanding seasonal inputs of agricultural labour.

In seeing the human food system that emerged after the introduction of agriculture as a complex form of symbiosis, we begin to recognize the ways in which the biological and reproductive potential of a complex of domesticated plants and animals came to be organized and articulated through the unique adaptabilities of human intelligence and human culture. If, following the advice of Rindos (1984), we are cautious about using the idea that early farmers 'intended' to domesticate plants and animals, and 'intended' to create agriculture, then we ought also to be cautious about using terms like 'exploitation'. In an agricultural system, who is exploiting whom? Conventionally, we accept the idea that humans are the exploiters, although we base this notion upon the fact that we are at the top of the agricultural food chain (we eat the other members, but they do not eat us). But it would be equally logical to assert that the other members of these systems exploit humans (for dissemination, protection and nurture). In a very real sense, Homo sapiens in an agricultural system is also a domesticated animal, subject to the increasing demands and the unforgiving disciplines attached to our species' role in the complicated networks of symbiotic relationships. The human species must exhibit, in these circumstances, such domesticated characteristics as an acceptance of restricted mobility and a tolerance of crowding and close proximity with humans and non-humans.

There can be no doubt that the symbiotic complex that we call agriculture has come to dominate the land surface of large areas of the earth and, indeed, is continuing to extend this domination. At this stage in our argument, doubt must now be cast upon the notion that humans are actually in control of this process. Despite Western culture's deep-seated inclination to emphasize the idea of human control and manipulation of the natural world, it is extremely unlikely that generation upon generation of agriculturalists were really able to foresee in any detail the longer-term outcomes of their activities. This point is reinforced when we take into account the unpredictable nature of climatic and environmental fluctuations and the immensely complex genetic and environmental processes involved in the evolution of domesticated species, and of the diseases, pests and parasites which infest and colonize agricultural systems. Thus, although human agricultural activities are themselves goal-oriented and driven by more or less explicitly recognized intentions, their long-term outcomes may be quite unintentional, and often unforeseeable.

THE EMERGENCE OF THE STATE

It has already been argued that agriculture created the conditions in which increasing levels of population density and degrees of complexity in social organization became possible. These changes were eventually to give rise to forms of social organization which created, for the first time, many of the features of economic, cultural, political and religious life which we now take virtually for granted. In other words, conditions were formed in which the emergence of states was possible. The creation of states was to see a fundamental change away from the situation of human social groupings comprising relatively small mobile bands or relatively small sedentary villages. Where such units maintain their autonomy, levels of individual freedom and control over the pace and nature of daily and seasonal activities is relatively high and access to natural resources is relatively open (although it may be subject to competition). However, increasing social complexity appears to bring in its wake increasing social inequality. Highly privileged political, military and intellectual elites become increasingly distant in outlook and lifestyle from the strata beneath them, made up of castes or classes whose autonomy is severely limited by the power and authority of those they serve. We might legitimately ask how such highly structured relationships of dominance and subordination could come about. This is, clearly, a large question and has absorbed the efforts of generations of scholars of many different persuasions. However, of particular interest from our point of view are the ideas of Harris (1978:67-82), who puts forward the proposition that the control and redistribution of food resources may have been vital factors in this process.

Harris's specific concern is the issue of how a 'pristine' state can emerge, a pristine state being one which arises spontaneously, not as a result of the influences or effects of other states which have a prior existence. In fact, it is Harris's view that the pristine state can be seen as a consequence of attempts to intensify agricultural production (i.e., to increase agricultural output) in order to provide short-term relief of the pressures generated by a rising population. This contention is hardly a remarkable one, but what is interesting about Harris's analysis is his description of the mechanism through which this intensification may come about. He refers to the phenomenon that social anthropologists term the 'big man' (1978:70–1). These big men are typically renowned and respected war leaders, but in pre-state societies loyalty can only be maintained if the leader can keep up a constant flow of rewards to his followers. Food, of course, is one of the principal forms such rewards can take. What is more, in order to enhance further their prestige, these ambitious individuals may exhort and cajole their followers and relatives into increasing food output so that a spectacular feast can be held. This feast provides not only an abundance of food for his followers and their dependents, but also enhances the standing in the community of the leader himself and, by implication, that of all his supporters. Thus, we have what Harris terms 'redistributor war chiefs' (1978:73-6), who have the ability to accumulate large food stocks and then to expend these stocks in such a way as

to entrench and extend their own power. Harris actually calls these individuals 'food managers' (1978:71), given their crucial position at the centre of a web of food production and distribution. It is then but a short step for the chief-manager role to evolve into that of a hereditary ruler with coercive powers, the 'great provider' (1978:71) who can build up substantial reserves of storable foodstuffs on the basis of his position. As populations become larger and denser, food redistribution systems become larger and more elaborate, and the more powerful becomes the individual at the centre. In effect, the chief becomes a monarch, and what were voluntary contributions become obligatory taxes and tithes.

Thus, a crucially significant reversal takes place. Whereas the chief is dependent on the generosity and allegiance of his followers, the subjects of a monarch come to be seen as dependent on his (or, more rarely, her) generosity and dispensations. Indeed, even access to land and other natural resources comes to be defined in terms of such royal dispensation. The subjects themselves also become increasingly differentiated. Around the monarch there builds up an increasingly elaborate hierarchy of functionaries (military personnel, priests, administrators, artists and craft specialists) all supported and fed from the reserves controlled by the monarchy itself. Members of this network experience a lifestyle and enjoy privileges which set them apart from the strata of agricultural drudges below them. The embryo state is given further impetus towards even greater elaboration by the process that Harris terms 'impaction' (Harris 1978:78). This effect occurs when fertile land upon which the state relies is in limited supply, being bounded by relatively or largely infertile areas. This means that it is not feasible for outlying groups in the population to escape from demographic pressures and central control by moving outwards. The system is turned in on itself, and the processes of intensification are given further impetus. Harris cites the civilizations which developed in areas of high fertility surrounded by zones of much lower agricultural value, for example, the Nile delta in Egypt, the flood plain of the Tigris and the Euphrates in Mesopotamia, the flood plain of the Indus in what is now Pakistan, and the margins of the Yellow River basin in China.

Once this process of impacted intensification takes off, it appears to engender a self-reinforcing cycle of further intensification through increasing levels of taxation, tribute extraction, labour conscription and food production integration. In addition, relationships with neighbouring societies in terms of warfare, conquest, trade, or all three, also intensify. However, once pristine states have become established, secondary states may begin to emerge. These may develop among peoples seeking to resist conquest by a pristine state that has moved into an expansionist phase or, indeed, among peoples who seek to plunder the riches of a pristine state which is vulnerable to external attack.

Harris (1978) makes it perfectly clear that he regards the formation of a pristine state as an essentially unconscious process, not as an outcome of deliberate planning, manipulation or conspiracy. Over many generations, imperceptible shifts in the balances of power relating to the control and

redistribution of resources in general, and food resources in particular, eventually produced social institutions and relationships whose forms and directions could not have been foreseen by those involved. In this sense, we can see a close parallel with our earlier discussion of the changes which led to the establishment of symbiotic links between humans and domesticated species and the emergence of agriculture (an emergence which was a necessary condition for the later emergence of the state itself). These changes, in an important sense, can also be seen as the unforeseen and unintended consequences of incremental adjustments and adaptations in the ways in which humans went about the task of satisfying their nutritional needs.

OVERVIEW

In this brief sketch of the origins of human subsistence patterns attention has been drawn to several crucial insights. Perhaps the most striking of these is the idea that the extraordinarily high energy demands of the brain, arguably the very seat of our human distinctiveness, require us to consume a 'high-quality', energy-rich diet. Our basic physiology simply does not allow us the option of grazing or browsing directly upon the enormous quantities of structural plant material (stems, leaves, bark, etc.) which blanket vast areas of the earth's surface. For most of the history of our species (and of our closely related species) humans have relied upon harvesting wild animals and plants in order to obtain the dietary quality and variety that we need. The development of relationships of domestication with certain key animal and plant species brought about farreaching changes, not only in human subsistence patterns but also in human social organization. However, the causes and the dynamics of domestication and the move to food production remain obscure, even mysterious. We simply cannot assume that domestication and agriculture were, in the first instances, conscious human inventions or deliberately adopted strategies aimed at coping with reproductive or environmental pressures. These changes may indeed have provided adaptive advantages for all the species that were to become part of the human food system, but that does not prove that humans intended to obtain these advantages any more than it proves that cattle and rice plants, for example, 'intended' to obtain them. As we have seen, when dealing with relationships of symbiosis (of which the human food system is a particularly complex example), references to the intentions of the species involved are essentially metaphorical rather than literal.

With the establishment and development of the first pristine states, all the features that we would recognize as fundamental to agricultural production were in place. These included an extensive range of domesticated plants and animals, the use of the plough, the construction of irrigation systems, the use of natural fertilizers and the use of fallowing to allow land to regain fertility after cropping. What is more, trading in relatively non-perishable foods (for example, grains) became feasible with the production of food surpluses, and such foods,

THE ORIGINS OF HUMAN SUBSISTENCE

in turn, were to become the currency of tribute and taxation. The motive power for these agricultural systems came primarily from muscles, animal and human, although renewable sources of inanimate power (wind and water) also played a part.

On the basis of these forms of agricultural production, societies ranging from the limited world of the small village to the dazzling power and complexity of the ancient civilizations could be constructed. We have already referred to the intensification of food systems, but this was an intensification that occurred within the limits set by available technologies and forms of social organization. However, eventually these limits were to be overcome and new waves of much more rapid intensification and integration were set in train, waves which were to lead to what we now conceptualize as the modern food system.

THE MAKING OF THE MODERN FOOD SYSTEM

CONTRASTING TRADITIONAL AND MODERN FOOD SYSTEMS

A visit to any supermarket, with its elaborate displays of food from all parts of the world, is a readily available demonstration of the choice and variety available to the modern consumer. The supermarket itself may be considered one of the most successful outcomes of the development of modern systems of food production and distribution, indicating the extent of control over quality and the reliability of supplies. It might be tempting to consider such quality and reliability as unequivocal evidence of progress. However, in trying to understand the developments and beliefs which underpin the modern food system, we are faced with a fascinating paradox. In the past, certainly in the West, ascendancy over the natural world was taken for granted, yet it was not always possible to use that ascendancy to provide constant and reliable supplies of food. However, in modern society, where food supplies are virtually guaranteed, there are now serious doubts about the extent and moral acceptability of our control over the natural environment. In parallel with the technological, engineering and scientific changes which have established control over food production and distribution, serious debate has emerged about the unanticipated consequences of such changes, together with challenges to the allegedly overconfident exploitation of natural resources. Thus, in giving an account of the development of the modern food system, it is important to include some discussion of several issues: the character of the food system itself; the processes which made it possible; the operation of the system; current debates about the system. These issues are the focus of this chapter and all are relevant to understanding the making of the modern food system as we know it today.

The use of the term 'food system' may conjure up an idea of a formally organized set of links between food production, distribution and consumption which is arranged according to some well-thought-out plan or scheme. The issues discussed in Chapter 1 and the studies covered in the following pages will make it clear that such a model is inappropriate and unworkable. However, if we are careful not to assume that there is some underlying plan which informs its organization, the term food system can be a convenient way of drawing attention to the particular character of the complex of interdependent interrelationships associated with the production and distribution of food which have developed to meet the nutritional needs of human populations. (In Chapter 3 we will examine specific examples of the kinds of model which social scientists have devised to provide descriptions of such systems.)

In trying to understand the making of the modern food system, it is necessary to be aware of both continuity and change in the social processes which shape the ways in which food is produced, distributed and consumed. Chapter 1 has identified the physiological need for variety in food, the constant interaction between humans and their environment and the importance of the social and political control of food production and distribution. If we were to choose to emphasize continuity, it could be argued that the modern system is merely the most recent attempt of human societies to come to terms with these perennial problems of providing food, and that the only distinguishing characteristic is the scale of the endeavour. However, it has also been argued that the modern food system is, in many respects, radically different from what has gone before. It is this assertion which we explore and which provides the starting point for the discussion in this chapter.

An emphasis on change and discontinuities draws attention to the main contrasts between the food systems of traditional and modern societies. These are set out in Table 2.1. For ease of discussion, a distinction has been

Activity	Traditional systems	Modern systems
Production	Small-scale/limited	Large-scale/highly specialized/ industrialized
	Locally based for all but luxury goods	De-localized/global
	High proportion of population involved in agriculture	Majority of population have no links with food production
Distribution	Within local boundaries	International/global
	Exchange governed by kinship and other social networks	Access governed by money and markets
Consumption	Swings between plenty and want dependent on harvests and seasons	Food always available at a price/ independent of seasons
	Choice limited and dependent on availability and status	Choice available to all who can pay
	Nutritional inequalities within societies	Nutritional inequalities between and within societies
Beliefs	Humans at the top of the food chain/exploitation of the environment necessary	Debate between those who believe in human domination of the environment and those who challenge such a model

Table 2.1 Contrasts between traditional and modern food system
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made between the processes of production, distribution and consumption, even though in practice it is not always easy to separate them. In addition, it has been necessary to emphasize the similarities between traditional societies in order to bring out the contrasts with modern societies which are to be discussed. For example, although there is a wide variety of traditional systems, each associated with a particular organization of the interaction between humans and their environment, it is possible to identify some shared characteristics. For a start, traditional food systems are characterized by patterns of local, relatively smallscale production. In addition, the division of labour associated with food production involves a relatively high proportion of the population. Further, both distribution and consumption are linked to established social relationships, in particular, those of status and kinship. Gifts of food are often exchanged between relatives rather than being sold in the market, and social position determines the amount and type of food received. Importantly, choice is often limited for all consumers, whatever their status, and is constrained by the seasonal and local availability of food supplies. As a consequence, swings between times of plenty and those of want, particularly from season to season, are taken for granted. Also, there is little evidence of sharp differences in beliefs about dietary practices, possibly because food supplies are relatively uncertain and unreliable. There is one characteristic, that of nutritional inequalities, which appears in relation to both traditional and modern food systems. However, it can be argued that such inequalities are structured and organized in different ways and are underpinned by quite different assumptions about who may have access to food and the conditions in which it can be acquired.

At the risk of oversimplifying complex processes, the modern food system may be considered to have five key characteristics which differentiate it from those of traditional societies. Firstly, there is a highly specialized, industrial system of food production. This is large in scale, yet involves relatively small numbers of the working population. Indeed, it could be argued that most of the food production for modern societies goes on virtually concealed, not necessarily deliberately, from the mass of consumers. Secondly, distribution is through the commercial market; whatever our status, as long as we have the money, food is readily accessible. Thirdly, as the example which opened this chapter indicates, a visit to any supermarket demonstrates the opportunities for consumption and emphasizes choice and variety, and this is largely true for smaller food outlets as well. Fourthly, since the markets for buying and selling food are international, even global, shortages are rare. However, that is not to say that shortages do not occur in particular places for particular groups, only that these arise from social and political constraints rather than from the issues related to the availability of food. This latter point links with the final characteristic of the modern food system: constant debates about the sustainability of the system itself and the choices to be made about its future development.

THE EMERGENCE OF THE MODERN FOOD SYSTEM

The documentation of the transformation from the traditional to the modern food system has attracted the efforts of social historians, economists and nutritionists using a variety of approaches (Mennell, Murcott and Van Otterloo 1992). They have sometimes focused on one particular feature in explaining the changes observed, such as technology or transport, for example, or have attempted to analyse the entire process. Whatever the focus of any particular contribution to the literature, it is important to bear in mind several points which provide the context for all discussions. The first is that, in comparison with the period of time for which we have evidence of human social organization, writers who focus on the shaping of the modern food system are usually considering relatively recent developments, beginning approximately in the eighteenth and gathering momentum in the nineteenth century. The second point to bear in mind is that, although many writers document changes, they do not necessarily offer explanations of what happened, and, where they do, such explanations are often the focus of disputes about the validity of the evidence. Thirdly, even where writers concentrate on one particular aspect of change, it is important for the reader to recognize the interrelationship between factors of supply, distribution and demand. Each may have been stimulated by the other and, indeed, by yet other social and economic changes which at first sight do not seem to be linked in any way with food. These accounts and debates in the literature are valuable for giving an indication of the complexity of the processes which contributed to the shape of the modern world and provide a context for the sociological analysis in later chapters.

The process of urbanization in the ancient world had already broken the direct links between food production and consumers and had provided the necessary stimulus for developments in food production. However, it was the process of industrialization which altered the scale of urbanization, created an unprecedented demand for food supplies and distanced urban populations yet further from the sources of their food. Britain, as the first industrial nation, is one of the best-documented examples of the ways in which such changes took place and provides an ideal case study of the processes which contributed to the development of the modern food system. The precise turning point for industrial 'take-off' is still a matter of debate (Rostow 1990; Hudson 1992), but there is no doubt that industrialization 'created machines, factories and vast suffocating cities' (Tannahill 1973:257). Oddy (1990) argues that this rapid urbanization in the eighteenth century was a major contributor to the commercialization of food markets, since urban living, with its pattern of waged work and separation from the agricultural base, prevented greater populations than ever before from being self-sufficient in food. As these urban centres grew, the food demands of such concentrations of population could not be met from local resources, however efficiently organized. This precipitated the rapid growth of trade over longer distances in produce such as livestock and vegetables. For example, London as

a metropolitan market drew on national and not just local or regional sources for its food supplies. The markets at Smithfield for meat, at Covent Garden for fruit and vegetables and at Billingsgate for fish were renowned for the quantity and range of the produce they handled on a daily basis in response to the demand of the growing metropolis (Burnett 1989).

Such a rapid increase in demand created pressures to produce more, giving all those involved in agriculture an incentive to introduce new techniques and to change the scale of food production. For example, horticulture expanded in areas adjacent to the expanding conurbations (Scola 1992). Deliberate and systematic selective breeding of livestock spread rapidly from the middle of the eighteenth century as well as systematic seed selection for increased arable output and the widespread use of specialized agricultural equipment. Possibly one of the most significant changes was the move to the use of chemical rather than natural fertilizers (Sykes 1981). Increased yields and improved stock gave landlords a better return on their investments. Land rents were raised, putting pressure on farmers to change the pattern of land use to make it even more productive. One of the by-products of this transformation was to change the appearance of the landscape from open fields to fenced and hedged farms (Turner 1985).

A key element which ensured that these newly expanded food supplies reached their markets was the parallel expansion of methods of transport (Bagwell 1974). Traditional drove roads, along which animals were herded to market, often over long distances, were augmented by turnpike roads and canals in the later eighteenth century. These enabled agricultural produce to be moved in bulk, where speed mattered less than cheap and reliable delivery. From the middle of the nineteenth century the capacity of internal transport was further augmented by a railway system which was rapid, reliable and flexible in bringing food supplies to distribution centres and markets. By the end of the nineteenth century railways were even able to provide specialized facilities for handling foods such as fresh milk and chilled or frozen meat. At the same time, the rapid transport of fish from trawler catches in the North Sea and the Atlantic was possible. In the case of Britain, this was said to have established one of the most popular meals of the working classes, fish and chips (Walton 1992).

Specialized facilities for handling food resulted from scientific and technological advances in preservation. Traditional preservation methods, such as salting, pickling and drying, continued in use alongside the greater use of sugar as well as chemical additives (Roberts 1989; Muller 1991). As we shall see in Chapter 11, until the late eighteenth century, sugar had been a luxury confined to the use of the rich, but mass-production made it available for use in a very wide range of food processing (Mintz 1985). The metallurgical development of cheap sheet steel, covered with a veneer of tin, made canning an economic process with minimal health risks, whilst refrigeration and other types of temperature control extended the opportunities to abolish seasonal supply problems (Roberts 1989; David 1994). New foodstuffs were literally invented

by food scientists (margarine, for example), or manufactured (condensed milk, block chocolate and cornflakes). The life of some foods, such as milk, was extended by pasteurization. Because of improvements in temperature control in transport by sea, bananas became available in Europe for the first time in the 1890s.

By the beginning of the nineteenth century, Britain was a net importer of food and the contribution of overseas supplies to the British larder became of ever greater importance, particularly from the last quarter of the nineteenth century. In the twentieth century, such was the reliance on these overseas food supplies that Britain continued to import food even during two world wars when transport by sea was both dangerous and uncertain. The diminished quantities of these supplies led to wartime food rationing (Burnett 1989).

As a particularly powerful and affluent nation by the standards of the time, Britain was able to draw upon food supplies on a worldwide basis: grain from the Midwestern USA; dairy products from Denmark and Holland; beef from Argentina; lamb from Australia; tea from the Indian sub-continent; coffee from Brazil; cocoa from West Africa; sugar from the West Indies. All this was made possible by emerging international agricultural specialization combined with improved transport over long distances. By 1850, an international economy had been established which had transformed the landscapes and the organization of agriculture in the participating countries (Foreman-Peck 1993). Many of these, for example the tea gardens, the sheep pastures and the cattle ranges, remain and are part of the current global food system. (However, it is important to note that not all prospered and some led to ecological disaster, for example, the 'dust bowl' created in part of the American Midwest by attempts to grow grain.) Trade was often two-way. Countries of the British Empire, together with a number of nations with close economic ties to Britain, such as Argentina, Chile and Uruguay, paid for imports of capital and of manufactured goods from Britain by the export of food (Cain and Hopkins 1993; Saul 1960). Indeed, Tannahill (1973:257) suggests that 'the quest for empire was partly quest for overseas markets'. Studies of trade in specific foods (Hobhouse 1985; Mintz 1985; Solokov 1991; Visser 1986) have drawn attention to the ways in which such trade has shaped international relations.

Governments were not neutral in the development of the international economy. In Britain, there were parliamentary debates about the most advantageous policies to pursue in relation to trade with particular consequences for food, the most important debate being that focused on the relative merits of 'free trade' versus 'protection'. The publication in 1774 of Adam Smith's *The Wealth of Nations* anticipated by two years the Boston Tea Party, which signalled the determination of the American colonists to have 'no taxation without representation'. Indirect taxes on food levied by the British government have been cited amongst the causes of the American War of Independence (Langford 1989). Once the Americans had secured their victory, British governments moved with hesitating steps towards free trade and the removal of taxes on food and

drink. The main opposition came from agricultural interests which wished to retain protection for the cultivation of wheat. The failure of the potato crop in Ireland in 1845, with its terrible consequences of starvation for large numbers of the rural population, convinced the British government of the wisdom of seeking the cheapest food prices on world markets by removing all import taxes on food (Salaman 1985:289–316).

Governments had always been concerned to maintain standards in the food market, and weights, measures and qualities had long been the subject of legislation and intervention (Ministry of Agriculture, Fisheries and Food 1989). However, intervention in cases of food adulteration, which was alleged to have become much more common in the nineteenth century because of increased demand and unsupervised production, proved difficult. The development of scientific analysis, particularly in chemistry, made it possible to have reliable tests for impurities. In Britain, the prevention of food adulteration was part of the public health movement which culminated in the appointment of medical officers of health after 1848. Legislation specifically concerned with food and drugs followed once the scientific tests were acceptable to the legislature. In Britain the first law to protect consumers from adulterated food took effect in 1875 (Burnett 1989).

During this time there were concurrent developments in the distribution and retailing of food. Consumers in rural society usually had direct contacts with their suppliers at local markets or by regular contact with the dairy or the bakery. Once towns grew beyond a population of a few hundred families the establishment of regular shops became the norm, a process that accelerated with the urbanization which accompanied industrialization. As supplies to shops became both more regular and reliable, consumers lost contact with processes of production. The number of shops and their range of products increased rapidly with the expansion of retail trade in food. For example, the late nineteenth century was the time when greengrocers, confectioners and other specialist outlets came into separate existence (Fraser 1981).

These changes occurred in advanced economies during the nineteenth century. Large-scale production had begun during the eighteenth century with the establishment of larger breweries, such as Guiness in Dublin and Barclay's in London. A similar willingness to invest in technologies on a large scale to meet the demands of the growing market for manufactured foods gave rise to companies making a wide range of products, from custard powder to margarine. In Britain, from the middle of the nineteenth century, the use of brand names became an advantage in reaching consumers through advertising. The national market, by the end of the nineteenth century, covered a wide range of branded food products in most lines of grocery and confectionery (Roberts 1989).

At the same time as brands replaced locally produced foods or wholly new items became available, retailing itself underwent major changes. The reasons for this were not only a consequence of production methods or the supplies of products from overseas, but also the need to reach the greater numbers and

variety of consumers in urban centres. Such consumers included those who wanted value for money and guaranteed quality. In responding to such consumers in the working class, first in the field in Britain was the retail cooperative movement which had its successful origins in Rochdale in 1844. Within twenty years most towns had a co-operative society. Co-operative customers had a widening range of demands and the Co-operative Wholesale Society, established in 1864, had its own factories and, in due course, even its own tea gardens in the Indian sub-continent. Competition for these predominantly working-class customers led to the rapid development after 1870 of various retailing chains, for example, Lipton and Griegs. By the end of the century, there were shops glorying in their overseas connections, with names such as Home and Colonial and International (Matthias 1967). The chains of grocers were matched by chains of butchers. The Dewhurst company, for example, owned its own cattle ranches in Uruguay and imported meat, frozen, chilled and canned, from its plant in Montevideo. Interestingly, the middle and upper classes remained the customers of privately owned and independent shops (Adburgham 1989; Davis, D. 1966).

The mass market in Britain, the United States and in Europe created the conditions for international companies to emerge. Examples originating in the United States include the meat packing firms of Armour and Swift, the Heinz company and General Foods. In Switzerland, Nestlé, which began by selling condensed milk, was established. However, the response to the mass market was not one of uninterrupted expansion. The economic problems of the years between the beginning of the First World War and the middle of the 1950s limited or prevented many developments as large-scale unemployment diminished demand. Where prosperity continued even during the Depression of the 1930s, some retail chains continued to grow. The expansion of retail chains into supermarkets came with the prosperity, particularly related to higher incomes, of the late 1950s onwards. In organizational terms the self-service supermarket became the hallmark of the most successful retail traders. This selfservice element depended on sophisticated packaging of all kinds of foods and appropriate marketing skills to persuade customers to buy. Large numbers of urban consumers moved from older style shops to self-service stores. Experiences in the United States encouraged some retailers in Britain to create supermarkets and hypermarkets which offered a wide range of products, not only foodstuffs, for sale. Amongst the first were the French owned Carrefour and the American ASDA company. Soon British firms, such as Sainsbury, joined in the provision of newer-style shopping facilities (Williams 1994). The style relied not only upon most customers using cars but also upon their ownership of refrigerators. By the 1970s domestic freezers became a prerequisite when deep frozen foods were available for home storage. The middle of the 1980s saw the wider availability of microwave ovens giving scope for the expansion of sales of ready-prepared frozen or chilled dishes. Alongside these developments there occurred an increase in the numbers of those employed to prepare food outside the home (Gabriel

1988). All these processes combined to abolish the constraints of seasonal supply and made available to the general population foods which had previously only been available to the wealthy. This also permitted the expression of dietary preferences catered for by specialist, independently owned, shops.

This record of the triumph of technology and the organizaton of food production and distribution should not lead us to imagine there were no differences between consumers. Considerable inequalities remained, particularly in the nineteenth century (Tannahill 1973). Such divisions in society were reflected in differences between the diets of the rich and the poor. The poor, particularly the industrial poor living in housing with low standards of sanitation and lacking pure water, subsisted on a relatively narrow range of foods, for example, bread, tea, potatoes and a little meat (Tannahill 1973:287). The rich had access to a wider variety and, by the later nineteenth century, were beginning to demand consistent quality and stable prices. In the middle were greater numbers of people earning higher incomes as industrialization proceeded. These artisans and middle-class consumers had an increasing choice and variety of food. They also had access to the newspapers, magazines, cookery books and guides to household organization and cuisine. Perhaps the most famous example is Mrs Beeton's book on household management, first published in 1868, which remained in demand, with revisions, for more than a century. Ironically, the scientific revolution and its application to the manufacture of new foods sometimes worsened rather than improved the diet of the poor, for example, the cheaper brands of condensed milk (which were made with skimmed rather than whole milk and which contained a high proportion of sugar as a preservative) lacked fats and vitamins A and D, and may, in fact, have increased the incidence of rickets (Tannahill 1973:332). There are parallel arguments about the use of white bread, with its lack of wheatgerm, rather than brown bread (Tannahill 1973:333).

INTERNATIONAL INEQUALITIES

In the accounts which are focused on the development of the modern food system in the West, there is an emphasis on changes which can be interpreted as progress: the triumph over the difficulties of improving the scale and quality of production; the technological achievements in both preservation and the food distribution network; the extension of consumer choice free from seasonal constraints. However, considered from a global rather than a Western standpoint, a different picture emerges, one which draws attention to the variable consequences of such changes for those not in the 'First World'. For example, Pelto and Pelto (1985) argue that the transformation of world dietary patterns may be characterized using the concept of 'delocalization' in relation to food production and distribution. By delocalization they refer to the processes in which food varieties, methods of production and patterns of consumption are 'disseminated throughout the world in an intensifying and ever-increasing network of socio-economic and political interdependency' (Pelto and Pelto 1985:309). They acknowledge that the process of delocalization makes it possible for an increased proportion of the daily diet to be drawn from distant places and that it arrives through commercial channels. However, they also draw attention to the fact that the same process of delocalization has quite different consequences in industrialized societies compared with those which are less industrialized.

In industrialized societies, delocalization is associated with an increase in the diversity of foods available and an increase in the quantity of food imports. Initially, access to such foods may have been for those in privileged positions only, but in the twentieth century they become widely available to most of the population, with the exception of the very poorest. In contrast, delocalization has the opposite effect in less industrialized countries. Where people have been traditionally dependent on locally produced supplies and have distributed food outside the commercial network, the delocalization process draws them into the farming of non-traditional plant and animal varieties, into commercial production of cash crops and new kinds of food-processing on an industrial scale, and into migration from rural to urban settings. In consequence, there is not only a deterioration in food diversity locally but also a loss of control over distribution. In other words, these traditional societies are not in the process of 'catching up' with the West but are caught up in a global system which provides food choice and variety for industrialized societies at the expense of economically marginal peoples.

Bennett (1987) takes this argument even further and suggests that the subordination of underdeveloped socieities' economies to the production of food and other commodities for the West can be identified as 'The Hunger Machine'. Drawing upon a considerable range of evidence from the Third World in the 1980s, Bennett argues that famines are, in fact, relatively rare and account for only a fraction of hunger-related deaths. It is poverty, and its associated inability to afford an adequate diet (what Bennett terms 'normal' hunger) which kills children in their first year or undermines the health of those who survive into adulthood. In seeking to explain such a state of affairs, Bennett argues it is important to look beyond conventional Western explanations, such as localized food shortages, overpopulation or droughts, and to consider the 'institutions, policies and ideologies which serve to widen the gap between rich and poor' (Bennett 1987:13). These create the distinctions between the powerful North (that is, industrialized societies) and the subordinate South (that is, non-industrialized societies). Bennett's analysis draws attention to the impact of the pursuit of profits through cash crops which are exported, to the burden of Third World debt and to the use of food as a weapon in the political struggles between colonizers and the colonized. These are the dramatic consequences of the disappearance of the traditional food systems of the Third World which, Bennett argues, were rational, relatively well-balanced adaptations to the local environment.

The differences between the North and the South are not the only inequalities which can be understood in terms of a political analysis of the global food system. It has been suggested that 'The world re-discovered hunger in the mid-

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1980s' (Warnock 1987:ix), not only in the Third World but also in the cities of the West. Warnock draws attention to the contradictions in the policies of governments, such as those of the United States and the European Union, which either pay farmers not to produce or allow food 'mountains' to accumulate, whilst at the same time some groups in these societies go hungry. All the evidence suggests that there is no shortage of food on a worldwide basis, that food supplies have been increasing and that reserves of several staples, for example, grain, are high. The question then becomes that of why hunger persists in a world of plenty.

For Warnock, the question of who is undernourished and why, draws attention to issues which challenge Western complacency and optimism and are uncomfortable to contemplate from the perspective of the secure middle and upper classes. For example, 'free' trade in food does not necessarily benefit all countries equally and the model of the 'developing' country which suffers temporarily in the transition to fully developed status conceals the structure of political domination from which it is difficult to escape. Even the so-called 'Green Revolution', entailing the use of scientific knowledge to improve Third World agriculture, benefits the elites of the Third World and the general population of the North, to which foods are exported, more than the underdeveloped countries as a whole. These writers make the reader aware that the modern food system is not a neutral organization of food production and distribution but a political system which benefits some nations more than others. The solution to the problems of world hunger and the inequalities within specific societies are, they argue, political. 'The elimination of poverty and hunger comes at a high price' (Warnock 1987:297). This price includes challenges to the hierarchical structure and lack of democratic control in the institutions of government, including those linked with the production and distribution of food.

REFASHIONING NATURE

The literature outlined in this chapter presents us with contradictory accounts of the making of the modern food system. It first provides a perspective of growth, expansion and rapid change, all of which appeared to be leading to increases in choice and quantity of food for all, and to a food system which has a responsive and sophisticated articulation between production, distribution and consumption. More recently, the note is more cautious, emphasizing the inequalities, particularly in the distribution of food, and indicating that no society, whether of the North or of the South, is exempt from sharp differences in access to food resources and that the modern food system has variable consequences which depend on political power. From the first perspective the future is bright; any problems can be viewed as temporary and resolvable with the application of the knowledge currently and potentially available. From the second perspective, the picture is of food supplies as precarious, or potentially so, and of a food system which cannot be sustained without continued exploitation of some Third World food producers.

One way of accommodating such contradictory analyses is offered by Goodman and Redclift (1991). Focusing on food supply, they argue that the development of the modern food system and its current operation can be seen as the outcome of a series of changes which they sum up as Western societies' attempt at 'refashioning nature'. Their argument is complex and recognizes the importance of taking into account all kinds of changes, not necessarily all closely connected with food in the first instance, and of drawing upon the materials provided by the literatures on agricultural development, technology, food policy and diet. Their argument is designed to encourage the reader to consider the ideological and economic framework within which the food supply is located. The processes of change they identify are, they argue, part of a process which changed not only how we think and behave towards food but also how we see the world and our own place in relation to nature.

Using such a framework of interconnected structures, it is not always easy to disentangle causes and effects. However, Goodman and Redclift group the changes under several major strands. The first identifies the social processes associated with the household which have accompanied the increasing commoditization of food, which they summarize as 'food into freezers; women into factories' (Goodman and Redclift 1991:1). They focus on British experience during the twentieth century and note the coincidence of the diversification of household consumption with the movement of more women into paid employment. They also note the production of consumer goods for the home, for example, cookers, refrigerators and other 'white goods', which, in turn, is linked with a switch towards a greater emphasis on processed food products. However, these processes have not been taken to their extremes: neither women's work nor food are fully commoditized. The 'naturalness' of food and the work of women in their homes remain valued. None the less, it can be seen that the modern food system represents a new construction of social and economic divisions in the public domain of paid employment and the private domain of the household. Women's increasing involvement in the labour market has inevitable implications for the gendered division of labour in the home and particularly for the gendered division of labour in relation to food work (purchasing, preparation and presentation).

A further strand in the changes which have contributed to the modern food system is the transformation of food production itself. The modern food system requires reliable and stable supplies of food and conditions of social stability in which to bring about increases in production. These have been achieved by what Goodman and Redclift term a 'social contract' (Goodman and Redclift 1991:xiv) between farmers and government in the West which facilitated the integration of agriculture and industrial activities, increasing the investment in, and scale of, farming. Such processes, they argue, reduced resistance to the implications of refashioning nature on the farm. The industrialization of farming, along with the drive to control nature in controlling agricultural output, began with farm mechanization and the use of agri-chemicals and is continuing currently with the use of revolutionary advances in plant and animal genetics. The latter are being developed for commercial gain by private corporations which are in competition with each other and are thus 'refashioning nature according to the logic of the market place' (Goodman and Redclift, 1991:xvi).

Here there is the recognition that not all will benefit from such processes and that there are contradictions as well as evidence of progress in the modern food system. The South appears to have benefited from cheap food policies designed to accelerate industrialization whilst, at the same time, having its peasant agriculture and self-provisioning weakened and a dependence on imported food established. In other words, the South is caught up in the contradictions of the modern food system. The West itself is also becoming aware of the costs of this system, for example, the loss of sustainability and the destructive effects of some modern agriculture. Alternative models for refashioning nature have emerged, providing a counter-culture opposed to the scale of industrialized agriculture and to its established practices. Opposition focuses on production processes (for example, protests about the use of pesticides and factory farming) as well as on the quality of food (for example, concerns about the use of food additives and a perceived loss of 'naturalness'). The entire analysis indicates that the concept of 'refashioning nature' may be the central one for interpreting the processes which have produced the modern food system. However, the evidence indicates also that this refashioning is an extremely difficult task and that control of the process is precarious and controversial.

The issue of control also emerges as a key feature of the argument of Tansey and Worsley (1995) who focus on the development of the modern food system since the Second World War. Although the book is intended to be a guide to the entire food system, discussion concentrates on 'the rich, industrialized world where the global food system is being developed and promoted' (Tansey and Worsley 1995:1). For these authors, the notion of a food system implies links between three different processes: the biological (including the production of food); the economic and political (in particular, the power and control exerted over the components of the food system); the social and cultural (especially those factors which shape the ways in which people select and use food). The links are not always necessarily easy to examine and the authors identify part of their task as drawing the reader's attention to events and developments which can have unanticipated consequences for the range of food available as well as its quality and quantity. Indeed, the book is aimed at alerting 'ordinary citizens', as well as students and professionals, to the balance of power between consumer and producer and to the ways in which this might relate to the practicalities of food safety and its availability for various social groups.

The authors provide a wide range of material from official and other surveys to inform the reader about the biological and ecological basis of food

production, the structures and processes associated with what they term the 'key actors', such as farmers, distributors and consumers. They emphasize the ways in which science, technology, information and management, as well as the legal framework, can be used to control the production and distribution of food. They argue that the outcome of such interrelationships in the food system is a triumph, in that more people than ever are being fed and, in the industrialized and some developing countries, famine and scarcity no longer occur. However, the system also provides challenges in that some countries still experience malnutrition, or even famine, and long-term sustainability on a worldwide basis is in doubt. The authors identify six major changes that are likely to have an impact on the food system: increasing longevity (with its consequent strain on the ecosystem); increasing urbanization (which will extend the food chain); globalization of the food market (with large companies controlling a larger share and being independent of national boundaries); increasing technological (including biotechnological) change; changes in attitudes and values (consequent upon any shifts in power); and the decline in the traditional 'housekeeping' role of women as they participate more in the labour market and convenience foods are readily available. The authors conclude that if we wish to avoid the development of a system shaped only by the workings of the commercial market, then it is necessary to have clear food policy goals. The authors make clear their own preference for a food system which has the characteristics of being sustainable, secure, safe, sufficient, nutritious and equitable, and aimed at achieving 'a well-fed future for all' (Tansey and Worsley 1995:232).

OVERVIEW

In this chapter we have sought to map the major contrasts between the traditional and modern food systems, with particular emphasis placed upon the dramatically increased scale and the extensive delocalization of the productive process. Using Britain as our case study, we have employed an historical perspective to outline the key developments in the emergence of the modern food system, with particular reference to the way that industrialization has transformed the nature of agricultural production and ensured the security of food supplies in the developed countries through the application of sophisticated scientific and technological knowledge.

However, at an international level, we have noted the way in which the globalized modern food system provides benefits for some countries by imposing costs on others, with the disadvantaged South seen as subordinated to the privileged North. The evolution of the modern food system, it has been argued, is also closely associated not only with industrialization itself but with far-reaching changes in the nature of the labour market and the division of labour within the household. Such structural changes appear, themselves, to be linked to some of the most deep-seated features of Western culture, particularly in relation to the right and ability of human beings to refashion and exploit the natural world. However, currently we are experiencing controversy and reappraisal in relation to these deeply rooted ideas in the form of the environmentalist challenges to established ideas.

SOCIOLOGICAL PERSPECTIVES ON FOOD AND EATING

In the previous chapter we examined the complex set of transformations which gave rise to the modern food system, a system whose characteristic features distinguish it from earlier modes of producing and distributing food in crucial ways. In a sense, the main object of analysis of this book is the modern food system itself, in terms of its multiplicity of aspects, dimensions and relationships. What is more, just as this system emerged out of far-reaching changes, the system itself is subject to continuing change. Thus, we will also be required to try to make sense of these changes, in terms of their causes and their directions. However, alongside change there is also continuity and stability in certain aspects of the system, and the bases of these features also demand attention and explanation.

THE CONCEPT OF THE HUMAN FOOD SYSTEM

Up to this point we have used the concept of the human food system in a general rather than a specific sense. At this stage it is worthwhile attempting to make more explicit its particular features, linkages and relationships. Of course, at its most basic, the modern human food system can be conceptualized as an immensely complicated set of biological relationships between human beings and symbiotically linked domesticated plants and animals, not forgetting the myriads of micro-organisms upon which the system depends and the hosts of pests and parasites which colonize it at all its tropic levels (see e.g., Jeffers 1980). However, for the purposes of this book, the primary focus is not on the biological but on the social and cultural dimensions of the system. As a starting-point we can take the basic scheme put forward by Goody (1982:37). In Goody's view, providing and transforming food can be conceptualized in terms of five main processes, each process representing a distinct phase and taking place in a characteristic location, as shown in Table 3.1.

Thus the process of 'growing' food (including the rearing of animals) equals the 'production' phase, and is located on farms. The processes of allocating and storing food are identified as the 'distribution' phase, located in, for example, granaries and markets. Cooking, the preparation phase, takes place in the

THE SOCIAL DIMENSIONS OF THE FOOD SYSTEM

Processes	Phases	Locus
Growing	Production	Farm
Allocating/storing	Distribution	Market/granary
Cooking	Preparation	Kitchen
Eating	Consumption	Table
Clearing up	Disposal	Scullery

Table 3.1 The features of the food system

Source: Adapted from Goody (1982)

kitchen, and eating, the consumption phase, takes place at the table. The fifth process, clearing up (which, Goody. rightly points out, is often overlooked) represents the disposal phase, located in what he rather quaintly refers to as the 'scullery'. In fact, Goody's scheme is rather rudimentary, and clearly omits many of the crucial linkages in the modern food system. Yet it does draw our

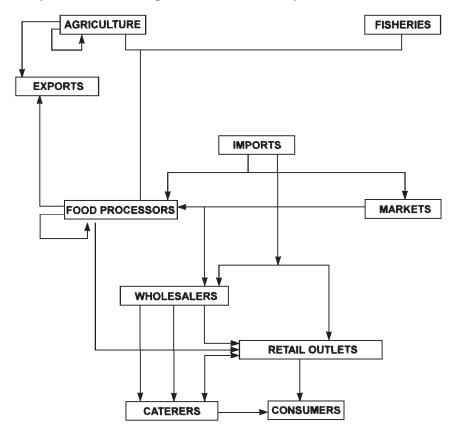


Figure 3.1 A model of the food system Source: Adapted from Freckleton, Gurr, Richardson, Rolls and Walker (1989)

attention to all the basic processes involved, and it does allow us to begin to conceptualize how we might formulate sociological questions about each of the five phases which make up the system's underlying sequence.

A much more elaborate model of the contemporary food system is offered by Freckleton, Gurr, Richardson, Rolls and Walker (1989), who employ the biological term 'food chain' to refer to their scheme, although the scheme itself is an explicit description of the human, social framework of the system.

As can be seen from Figure 3.1, these authors detail the inputs into the system provided by agriculture (and by fisheries, which still exploit stocks of undomesticated animals) and include the fact that in any 'local' system there are outflows (exports) and inflows (imports). The central role played by food processors is referred to, that is, manufacturing organizations who obtain 'raw' food items from the primary producers (usually through specialist markets) and transform them into marketable products. The model also highlights the role played by wholesalers, who supply products from food processors, or items from specialist markets, to food retailers or to caterers of various kinds, who supply their products direct to the consumer. (For a model describing the food system in terms of factors affecting supply and demand potential see Pierce 1990:7.)

Examining the multiplicity of flows and linkages in this model, it becomes evident that sociologists (and indeed social scientists in general) can pose a host of fascinating questions about the ways in which each of the components is organized, the ways in which the linkages between the components are actually articulated and the ways in which the system is monitored and regulated (usually by the state). However, even though the whole system is, in principle, susceptible to sociological analysis, there has been a notable tendency to concentrate attention on the consumption end. In effect, in the expanding literature on the sociology of food and eating the practices, preferences, choices, concerns and prejudices of consumers appear to have been allocated priority, although, of course, the beliefs and actions of the food consumer are located by sociologists within broader cultural, ideological and structural frameworks. The production, processing and distribution elements of the system have received, relatively speaking, a good deal less attention. In a sense, this is a curious state of affairs, given that, historically, mainstream sociology has always placed a strong emphasis on the analysis of the processes of production and on the idea that work and work roles play a crucial part in creating individual identity and in locating the individual in the wider social order. It is only comparatively recently that there has been something of a swing away from this productioncentred approach towards a greater concern with the dynamics of consumption (Bocock 1993).

In a way, the sociology of food and eating has anticipated this trend, and the contents of this book, of necessity, reflect these priorities. However, there is literature, albeit somewhat fragmentary, on the productive processes of the system, both in domestic and commercial settings, and this literature will be drawn upon to provide context and background. Given the relatively recent

arrival of food and eating as objects of analysis within sociology, there are still significant gaps in our knowledge of the human food system. The topics in this book have explicitly been chosen to provide the reader with an introduction to those areas where substantial sociological insights are available.

FROM THE NUTRITIONAL TO THE CULTURAL

In biological and behavioural terms humans can be classed as *omnivores* since they obtain their required nutrients from both animal and plant sources, and do not exhibit the kinds of physiological specializations which identify the dedicated herbivore or the confirmed carnivore. Nutrients can be defined as those chemical components of foods which contribute to one or more of the following vital bodily processes:

- 1 the production of energy;
- 2 the growth and repair of body tissue;
- 3 the regulation and control of energy production and tissue generation.

There are five basic groups of nutrients which we require to fulfil the above functions:

- *carbohydrates* which are primarily sources of energy;
- *fats* which are also, among other things, important energy sources;
- *proteins* which are the sources of the amino acids required for tissue growth, but which can also play a role in the other two functions listed above;
- *minerals* which are inorganic substances which contribute towards tissue growth (e.g., in bones and teeth) and the regulation of bodily processes;
- *vitamins* which constitute a very broad group of substances which function to facilitate the reactions required for the body's nutritional chemistry.

In a sense, water might also be classed as a nutrient, in that this essential compound plays many roles in the human body, e.g., in the breakdown of food into its constituent nutrients (through hydrolysis) and in the transport of those nutrients in the blood. (For introductory discussions of human nutrition, see e.g., Brownsell, Griffith and Jones 1989; Birch, Cameron and Spencer 1986. For a useful reference work see Anderson 1993.)

What is particularly striking about human beings, in nutritional terms, is the sheer diversity of the sources from which they can, and do, obtain the nutrients required to keep the body in existence and to fuel its day-to-day activities. Any attempt to list the whole range of plant and animal products that currently contribute to, or have in the past contributed to, the human diet would be a task of such enormity that it certainly cannot be attempted here. What is the case, however, is that this truly impressive nutritional versatility, probably unequalled by any other omnivore, has been a vital factor in the evolutionary success of our species. *Homo sapiens* has successfully colonized virtually every available habitat type and, along with our domesticated symbionts, we have established effective dominance over a high proportion of the land surface of the earth. None of this would have been feasible for a species with specialized feeding requirements.

However, being an omnivore does involve certain risks in addition to conveying the advantages associated with flexibility and versatility. Investigating and sampling new substances may lead to the discovery of valuable new food resources, and the present diversity of human eating patterns is the result of trial and error exercised over countless generations. But, inevitably, trial and error, as well as providing positive outcomes, can also lead to bad experiences, for example as a result of encountering unpalatable or even dangerously toxic or contaminated items. Thus, we are forced to confront what has been termed the 'omnivore's paradox', the tension between *neophilia*, the drive to seek out novel food items, and *neophobia*, the fear that novel items may be harmful (Rozin 1976; Fischler 1980). Thus, omnivores must successfully balance curiosity and caution, and this is as true for humans as for any other omnivorous animal. This tension is one of several deep-seated conflicts at the very foundation of human eating patterns, conflicts to which we will return in due course.

Of course, for humans, eating is not simply an activity aimed at obtaining required nutrients. There is clearly much more to it than that. This becomes all too obvious when we consider the fact that all cultures are highly selective in what they actually define as food, that is, as items acceptable for human consumption. In fact, Falk (1991) argues that one of the most fundamental distinctions made by human beings is that between *edible* and *inedible*, closely related to more abstract binary oppositions such as us and them, same and other, inside and outside, good and bad, culture and nature. Something edible is something which may be safely taken into the body. However, the cultural sense of inedibility/edibility is not simply a function of some wisdom of the body based upon metabolic processes and nutritional efficiency (Falk 1991:55). Indeed, any given culture will typically reject as unacceptable a whole range of potentially nutritious items or substances while often including other items of dubious nutritional value, and even items with toxic or irritant properties. For example, the mainstream culinary cultures of the United States and the United Kingdom rule out horses, goats and dogs from the range of mammalian species suitable for inclusion in the human diet, whereas in other cultural contexts all these species have been, or are now, eaten with relish. (Religious beliefs may also play a role in the exclusion of certain items from the diet, obvious examples being the avoidance of pork prescribed by Judaism and Islam, and the avoidance of beef prescribed by Hinduism. We will return to such avoidances in a later chapter.) Conversely, Anglo-American cuisine incorporates large quantities of nutritionally suspect substances like refined sugar, and substances which are actually valued for their irritant properties, like pepper and mustard.

Indeed, when we eat, we are not merely consuming nutrients, we are also consuming gustatory (i.e., taste-related) experiences and, in a very real sense, we are also 'consuming' *meanings* and *symbols*. Every aliment in any given human diet carries a symbolic charge along with its bundle of nutrients. Thus, our view of a particular food item is shaped as much by what that item means to us as by how it tastes or by its ability to satisfy the body's nutritional needs (although, of course, the latter two features may get themselves incorporated into the aliment's charge of meanings). In fact, the symbolic dimensions of the foods we eat are of such central importance to us that in extreme instances we might even envisage starving rather than eat technically eatable substances that our culture defines as prohibited. Perhaps the most dramatic example of this is the near universal taboo on the consumption of human flesh. Instances of the violation of this taboo, e.g., in extreme situations of food deprivation, are regarded with a mixture of abhorrence and morbid curiosity.

Thus, it is no exaggeration to say that when humans eat, they eat with the mind as much as with the mouth. Indeed, the symbolic potential of food and eating is virtually limitless, and food items and food consumption events can be imbued with meanings of great significance and surpassing subtlety, according to the occasion and the context. Particular foods and food combinations, in particular cultures, can be associated with festivity and celebration, with piety, religious observance and sacred ritual, and with the rites of passage which mark crucial status transitions in the life cycle. What is more, gifts of food can be employed as rewards or as demonstrations of affection or approval. In Western cultures confectionery has a particular role to play in this context. Closely connected with this idea of the association between food and reward, is the association between certain foods and hedonism. Some foods may carry powerful meanings which go beyond the actual gustatory satisfaction they offer, being charged with overtones of luxury and self-indulgence. However, it is at this point that the darker side of food symbolism may come to the fore. Luxury and self-indulgence may generate guilt as well as pleasure. Thus, foods such as chocolate may develop ambivalent symbolic charges related to pleasure but also to anxieties concerning the health-related implications of their consumption. Indeed, in a more extreme sense, in specific cultural and historical contexts, particular food items may come to bear a potent negative symbolic charge, carrying meanings associated with the dangers of disease, immorality or ritual pollution. Of course, the reverse is also the case, in so far as other food items may develop associations with health, moral rectitude and spiritual purity. (Some of these issues will be explored further in later chapters.)

Food exchanges between individuals can be used to symbolize their mutual interdependence and reciprocity, whereas the routine provision of food for another, without reciprocity, can express one's dominance over a subordinate. In a domestic context, the preparation and serving of food for a family can express care and concern although, more subtly, the discharging of the responsibility to prepare food for others may also be seen as an expression of the server's effective subordination to the household's provider or 'breadwinner'. Indeed, in more general terms, food represents a powerful symbolic resource for

the expression of patterns of social differentiation. If we consider the underlying dimensions of social differentiation which sociologists seek to analyse and understand (class, gender, age and ethnicity), it is clear that food can, and frequently does, play a crucial role in symbolizing and demonstrating social distinctions. Thus, specific foods become associated with a high social class location, with high status or with socially superior aesthetic tastes. Conversely, other foods may symbolize a low social class position, low status or the condition of poverty (economic or aesthetic). There is also no doubt that in many cultures (including modern Western settings) some foods can carry a distinctively masculine or feminine charge. Frequently, this gender charge is centred upon conceptions of strength, with 'strong' foods symbolizing masculinity and the needs of men, and 'weak' foods seen as appropriate to feminine needs and inclinations. Conceptions of this sort may also be implicated in age-related food symbolism. Strong, adult foods are often seen as unsuitable for young children. Similarly, particular foods or food combinations come to be seen as especially well-suited to children's needs and tastes, and these can take on an 'infantile' identity or association. At the opposite end of the age scale, a similar process may occur, with some foods being seen as especially appropriate for the elderly. These associations may also be linked with conceptualizations concerning differences in the appropriate diets of the healthy and the infirm. Of course, the role of food and food preparation conventions in symbolizing ethnic differences is also significant, given the fact that these conventions are such central features of cultural distinctiveness, and can retain their potency among minority groups for several generations after their physical separation from the parent culture.

In the chapters that follow, the theme of food symbolism will occur again and again, and many of the aspects of such symbolism mentioned above will be discussed in more detail in the context of actual empirical studies in which they occur as salient features. However, significant as the idea is that food can be used to *express* social differentiation, it is important not to lose sight of the fact that the food options and choices of specific categories or groups also *reflect* the inequalities inherent in such differentiation. The diet of the poor reflects the economic disadvantages with which they have to cope; the diet of children reflects (to some extent) their subordinate position *vis-à-vis* the adults who wield authority over them.

FOOD, IDENTITY AND SOCIALIZATION

So powerful is the symbolic potential of food that Fischler (1988) argues that it is absolutely central to our sense of identity. However, it is not only true that the eating patterns of a given group assert its collective identity, its position in a wider hierarchy, its organization, etc.. Fischler also points out that food is central to *individual identity*. The crucial process here is that of 'incorporation', the act which involves food crossing the barrier between the 'outside' world and the 'inside' world of the body. But the process, as Fischler points out, is not only conceived as a physiological one. We do not simply think in terms of the incorporation of chemical nutrients into the physical fabric of the body, but also in terms of our beliefs and our collective representations. For example, a widespread feature of human culture is the idea that the absorption of a given food, particularly when occurring repeatedly, can have the effect of transferring certain symbolic properties of that food into the very being of the eater. Fischler cites as a positive example the idea that red meat, with its high blood content, confers strength. (Later in the book we will examine beliefs which are very different from this view.) As a negative example, he cites the belief among French eaters that consuming turnips induces 'spinelessness' or, literally, 'turnip blood' (Fischler 1988:279–80). Thus, for Fischler, the German aphorism *man ist was man isst* (you are what you eat) has both biological and symbolic dimensions. What is more, not only are the properties of food seen as being incorporated into the eater, but, by a symmetrical process, the very absorption of given foods is seen as incorporating the eater into a culinary system and into the group which practises it.

Both in terms of the formation of individual identity and the transmission of culture from generation to generation, the process of socialization is of central importance, that is, the process through which we internalize the norms and values of society, and learn now to perform the social roles in which we find ourselves. Socialization begins in infancy through the primary agencies of the family and the school, but is not confined to childhood, and represents a continuous process throughout the life cycle, with many other agencies taking a hand. What is more, socialization is not merely a passive process. The individual is also active in socializing himself or herself, and we should beware of accepting an 'oversocialized' view of the human individual, since there is always leeway for a degree of choice, deviance or innovation, and there may be conflicting pressures from different agencies. The socialization of an individual into the foodways of the culture into which he or she has been born effectively begins at weaning. At this stage the infant is encouraged to sample what is, at first, a relatively narrow range of solid foods. This range is progressively widened as the child is introduced to more of the food items and preparations regarded as suitable for the young. Crucially, at these early stages, the child will be taught, and will learn by experience, how to distinguish between foods and non-foods. Young children typically place a variety of objects in the mouth in order to use its elaborate sensory apparatus to investigate their physical properties. Children may also attempt to eat substances which are not actually eatable, and to drink liquids which are not actually potable. Even a small sample of parents could provide an interesting inventory of such substances, ranging from relatively harmless ones like garden soil, to highly toxic ones like domestic bleach.

Thus, a crucial feature of nutritional socialization involves learning how to reduce the risk of introducing hazardous substances into the body, although such hazards may be symbolic as well as physiological. Thus, equally importantly from a sociological point of view, the child must learn how to recognize *food* from among a plethora of potentially edible items with which he or she may be

surrounded. As we have already noted, in all cultures, whatever the form of subsistence upon which they are based, humans exploit for food only a relatively small proportion of the available plant and animal species around them. However, in Western society, for example, young children, while unsupervised, may sample such perfectly eatable items as earthworms or pet food, and find them good. The horrified reactions of parents, siblings or peers, nevertheless, may soon convince them that such delicacies are, most emphatically, not appropriate for human consumption. In other words, a central part of learning to be human involves learning what humans, as opposed to non-humans, eat.

A whole range of strategies and verbal devices may be employed by parents to exert control over the child's eating patterns and to encourage, cajole or coerce him or her into the consumption of what is seen as a suitable diet (Widdowson 1981). These strategies may include the offer of rewards if the child consumes what the parents regard as desirable foods and the threat or application of punishments if such foods are persistently refused. Indeed, these threats may be accompanied by the invocation of supernatural agencies who are portrayed as ready to intervene to reinforce parental authority in the face of an offspring's persistent nutritional defiance. A particularly graphic example of such a device is provided by Widdowson, who describes the character of the Crust Man, a figure in Newfoundland folklore. Portrayed as taking the form of a large, ugly man, he was said to patrol the community ensuring that children ate their bread crusts. Those who refused to do so were likely to be carried off in the night by this awesome being!

As the individual's nutritional socialization proceeds, in Western cultures an ever-widening range of agencies, including advertisers, the mass media in general, various professional groups, state institutions and ideological or religious movements, can come to play a role. The individual goes on to learn not only how to distinguish foods from non-foods (fit only for animals or foreigners), but how to recognize appropriate preparation techniques, appropriate combinations of food items, and the conventions which govern where and when one eats, and with whom. Furthermore, socialization involves the familiarization of the individual with the food categorization system of his or her culture. Thus, Jelliffe (1967) describes a range of general categories which underlie the food classification schemes of most cultures. These categories are: *cultural superfoods*, the main staples of the society in question; prestige foods, whose consumption is limited to special occasions or to high-status groups; *body-image* foods, which are seen as directly promoting health and bodily well-being; sympathetic magic foods, which are believed to have desirable properties which can be acquired by those who eat them; and, finally, physiologic group foods, which are seen as suitable for specific categories of individuals defined, for example, in terms of gender, age and bodily condition related to health, pregnancy, etc. (For a discussion of this, and other food classification schemes, see Fieldhouse 1986:45-54.)

As such conventions and categories are mastered, the satisfaction of the body's nutritional requirements is given its shape as a complex *social* activity, as opposed

to a mere set of internally driven behavioural responses to the need for nutrients. In this way, as Mennell (1985:20–1) points out, the physiological and psychological phenomenon of *hunger* is transformed into the sociological phenomenon of *appetite*. However, appetite, preferences and food symbolism are not necessarily static entities, fixed once and for all in the mind of the individual by the socialization process. Individuals may undergo significant changes in their socially formulated appetites or may experience important transformations in the meanings which they attach to specific food items or, indeed, to the whole process of eating. Thus, in a sense, an individual can be seen as having what can be termed a 'nutritional career'. This career is closely related to the life cycle, as the individual moves through childhood, adulthood and old age, and his or her nutritional practices and preferences change according to changing bodily needs and cultural expectations. In addition, individuals may deliberately initiate changes in their dietary patterns, for a whole range of reasons which they may or may not be capable of comprehending and articulating.

Indeed, modern Western societies can be seen as providing particularly suitable conditions for nutritional careers which commonly include substantial changes. While the nutritional culture of such societies may be characterized by relative stability, continuity and conservatism in some areas of diet (e.g., in relation to cultural superfoods), there is typically a willingness, often an eagerness, to promote and accept change in other areas (say, in relation to bodyimage foods and physiologic group foods). Indeed, in highly developed, affluent societies the appetite for gustatory and nutritional novelty is actively encouraged (often by commercial interests) and food-related 'sensation-seeking' activities are seen as a normal and accepted part of society's nutritional practices. What is more, in such settings, many agencies (including the state, professional bodies and pressure groups) may deliberately seek to modify the public's food consumption patterns either generally or in relation to particular target groups in the population. Thus, individuals may be undergoing sporadic episodes of resocialization in respect of food choices, practices and beliefs. Such a state of flux has far-reaching implications for many of the topics discussed in this book, and the theme of change will recur frequently in subsequent chapters.

THEORIZING THE FOOD SYSTEM

The question now arises as to what theoretical resources have been brought to bear by sociologists in order to analyse food systems in terms of their symbolic properties and in terms of the intricate webs of social relationships and social processes which articulate them. In this section we wish to offer a broad overview of the various approaches which have been employed. Of course, any scheme for classifying these approaches should be seen simply as an heuristic device. It can only be offered as a summarizing framework to give the reader a sense of the broad picture, a sense of the main theoretical lines which have been pursued by sociologists in the area of food and eating, and can make no claim to be an authoritative description

of reality *per se*. What is more, it is important to bear in mind a point made by Goody (1982:8) concerning the very nature of sociological theories themselves. He draws a clear contrast between theoretical innovations in the natural sciences, which may well produce revolutionary paradigm shifts (Kuhn 1964), and theoretical innovations in sociology (and its sister discipline, social anthropology). In sociology, such innovations are not the cues for the total reorientation of the discipline's research activities and intellectual efforts. Rather, they indicate shifts of emphasis between possibilities which are always present in the act of sociological analysis. Such possibilities may be conceived of in terms of binary oppositions, for example: a focus on the subjective world of the social actor versus a holistic focus on social structure; a focus on qualitative versus quantitative methods; a focus on synchronic versus diachronic analysis; a focus on surface structure versus a focus on deep structure, and so on. All this implies that changes in sociological theory are, in effect, 'repetitive', involving cycles of changing emphasis in relation to the underlying, recurring themes of the discipline. Thus, when we examine a specific area of sociological analysis and research like food and eating we might logically expect it to reflect the changing fashionability of the approaches. Furthermore, particular studies will also reflect these changes, although we should not be surprised to discover that such studies may actually be quite difficult to classify according to any broad scheme, given that they may involve the hybridization of two or more approaches.

Goody's (1982) own classificatory scheme identifies three main approaches: the *functional*, the *structural* and the *cultural*. Having discussed these three, he then goes on to examine approaches which introduce historical and comparative data, although he does not actually provide these approaches with their own distinctive label. Writing somewhat later, Mennell, Murcott and Van Otterloo (1992) put forward a very similar scheme, suggesting that the three main headings under which studies of food and eating can be conveniently classified are functionalism, structuralism and developmentalism (although the authors do point out that many studies in this area have been empiricist in style or largely policy-oriented, and hence difficult to classify in terms of theoretical approach). Combining these two schemes would provide us with a four-category classification of approaches: functional, structural, cultural and developmental (the latter heading actually being implicit in Goody's own discussion). However, the cultural will be omitted as a separate heading, as Goody's argument does not actually establish the need for this as a category in itself, since it is a concept so fundamental to the other three approaches. We can now examine each of these in turn, analysing its underlying logic and the kinds of questions it poses, and looking at representative examples of its use.

I The functionalist approach

Functionalist perspectives have exercised a powerful formative influence on sociology and on its sister discipline social anthropology. Functionalism is based upon an analogy between a society and an organic system, like a living body.

Just as a body is seen as made up of a set of specialized organs, each playing its own unique and indispensable role in the maintenance and continuity of the living system, society is seen as made up of a set of features and institutions which make their own contribution to the cohesion and continuity of the social system. Thus, society is seen in holistic terms and as having emergent properties which spring from the complex interrelationships and interdependency of its component parts. Functionalist analysis consists essentially of examining particular institutions with a view to describing their functional significance. For example, the institution of marriage might be analysed in order to understand its contribution to the long-term viability and continuity of a given social formation. Functionalist theory makes an important distinction between the manifest function of some feature (i.e., the function explicitly recognized by members of the society in question) and that feature's latent function (i.e., a function that a feature may fulfil, but which may not be recognized or admitted by society's members). Functionalist theory also recognizes that a social system may exhibit dysfunctional features which disrupt that system and lead to states which are analogous to pathology in a living body, i.e., to 'social pathology'. Some of the leading figures in sociology have made contributions of central importance to the development of functionalist perspectives, for example, Davis (1966), Durkheim (1984), Merton (1957) and Parsons (1951).

However, the whole functionalist approach has attracted a barrage of criticism. It has been accused, for example, of being an essentially static view of human social organization, overemphasizing stability and integration, and poorly equipped to explain the presence of conflict and change in social systems. What is more, the approach has also been criticized for failing to account causally for the origins of particular institutions or features in society, assuming that describing a particular institution's alleged role or effects is, in itself, an adequate explanation for its presence. Perhaps even more problematic is the assumption that we can specify the functional needs of a social system in the same way that we might specify the physiological needs of a living body. Given that social systems have the ability to undergo far-reaching structural changes, the notion of a set of immutable and unavoidable functional needs is somewhat implausible.

As a result of such criticisms, functionalism is now out of fashion within the discipline of sociology, although certain aspects of the critique may have been overstated (for example, functionalist perspectives are not totally incapable of coming to terms with conflict and change in a social system). However, functionalist interpretations remain at the core of much sociological analysis, albeit in an implicit form.

It is possible to conceive of a range of questions which could be asked about food and eating from a broadly functionalist perspective. For example:

• How are the food production, distribution and consumption subsystems organized and how do they contribute to the continuity of the social system as a functioning whole? (In posing such questions, the organic analogy upon

which functionalism is based is very much to the fore, in that society might be viewed as analogous to an enormous superorganism, feeding itself and distributing nutrients around its 'body'.)

- What are the social (i.e., non-nutritional) functions of patterns of food allocation and consumption? For example, how do allocation and consumption conventions act to express and reinforce the social relationships upon which the stability of the whole system is supposed to depend? One expression of such an issue might be the idea that food-related practices may reinforce gender divisions, such divisions being seen as functional for the system in that they could be regarded as forming the basis of the conventional nuclear family, the institution which organizes reproduction and primary socialization.
- Can we identify, in food systems, dysfunctional features, alongside the kinds of latent functions discussed above? How do such dysfunctional elements arise? What are their consequences for the social system as a whole? (In this connection, for example, we might analyse eating patterns which appear adversely to affect the health of the population, or the mechanisms which generate disruptive food-related anxieties and scares.)

Significantly, perhaps, those studies which can most clearly be identified as adopting a functionalist approach to food and eating are to be found within social anthropology. More specifically, they are to be found within the British school of social anthropology, a branch of the discipline which, in its formative years, was dedicated to the functionalist, holistic analysis of traditional social systems. Thus, one of the founders of this school, Bronislaw Malinowski, provided a highly detailed ethnographic account of food production and allocation systems in the Trobriand Islands, and of the complex patterns of belief and social reciprocity which articulated these systems (Malinowski 1935). One of Malinowski's own students, Audrey Richards, set out to analyse, from a functionalist perspective, the ways in which the production, the preparation and particularly the consumption of food among the Bantu were linked to the life cycle, to group structures and to the social linkages which constituted them (Richards 1932). In a later study of the Bemba (Richards 1939), she attempted to place the nutritional culture of a traditional people into its broader economic setting. A recurring theme in Richard's study was the symbolic significance of food and of nutritional practices, a symbolism which served to express, for example, vital ties of kinship, obligation and reciprocity.

The functional significance of food and foodways was also highlighted by social anthropologists writing more general monographs on traditional peoples. For example, in his discussion of the Andaman Islanders, Radcliffe-Brown (1922) had sought to demonstrate the way in which food-related rituals and taboos were used, not only to impress upon the young the social value of food but also as devices for dramatizing the collective sentiments of the community, hence facilitating the individual's socialization. What is more, the co-operative

production of food, and its sharing within the community, were activities which served to emphasize a sense of mutual obligation and interdependence, and hence to reinforce the integration of Andaman society (Radcliffe-Brown 1922:270–1). In what is undoubtedly one of the classic texts of the British school of social anthropology, Evans-Pritchard (1967) set out to document the political and ecological dimensions of Nuer society. He described in detail the relationship between kinship systems and spatial organization, and demonstrated the extent to which the food system of this pastoralist people was based upon, in his memorable phrase, a form of 'symbiosis with cattle'. In a sense, in a study like Evans-Pritchard's, the functional linkages in a food system are far more visible than in a modern system, where such linkages do not have the same immediate proximity to everyday life. However, for the Nuer, the realities and exigencies of food production, and the seasonal migrations they entail, are integral features of every individual's experience.

The studies discussed above were carried out several decades ago under the aegis of a theoretical approach which has more recently been relegated to the margins of sociology. However, functionalist ideas have proved quite resilient, either as explicit neo-functionalist arguments or as an implicit set of assumptions. As we will see later in this book, functionalist or quasi-functionalist perspectives lie behind some of the questions which we continue to ask about the non-nutritional role of food in society and in everyday life. These questions may not be framed in terms of what might be called 'grand theory' functionalism, but they do attest to the continuing significance of this organic analogy, albeit in a partially concealed form.

II The structuralist approach

Structuralist analyses of social phenomena differ from the functionalist approach in a particularly important respect. Whereas functionalism seeks to theorize the ways in which the various components of the system interrelate with each other to form a coherent whole, structuralism claims to look below these 'surface' linkages into the 'deep structures' which are alleged to underpin them. Thus, structuralism claims to analyse the very structure of human thought, even of the mind itself (Goody 1982:17). Of greatest interest to the present discussion is the structuralism of the French anthropologist Lévi-Strauss (1963, 1966a, 1970). Lévi-Strauss, unlike the functionalists, is not primarily concerned with producing holistic descriptions of particular traditional societies. Rather, he sets out to examine a wide range of anthropological material and ethnographic data (notably in relation to myth) on the assumption that the examination of these surface features can lead to the recognition of universal, underlying patterns. These patterns are the deep structures, structures which represent the unvarying foundations of the enormous diversity of surface cultural forms which we can observe. There is assumed to be an affinity between the deep structures of the human mind and the deep structures of human society. Just as functionalism is

based upon an analogy between society and a living organism, so structuralism also rests on an analogy. In this instance, the analogy is a linguistic one, with cultural surface features seen as generated in the same way that everyday speech is seen as produced by an underlying system of rules (Saussure 1960).

Thus, the questions posed about food and eating from a structuralist perspective have a different emphasis as compared with those posed from a functionalist viewpoint. Rather than focusing upon the practicalities and the social processes involved in producing, allocating and consuming food, the structuralist gaze is directed towards the rules and conventions that govern the ways in which food items are classified, prepared and combined with each other. The assumption is that these surface rules of cuisine are themselves manifestations of deeper, underlying structures. These rules are almost like a language which, if we can decipher it, will tell us much about the organization of the human mind and human society.

Lévi-Strauss uses this analogy directly by referring to the constituent elements of cuisine as 'gustemes', deriving this term from the linguistic concept of the phoneme. His argument is that such gustemes can be analysed in terms of certain binary oppositions. These are endogenous/exogenous (local versus exotic), central/peripheral (staple versus garnish or accompaniment) and marked/ not marked (strong flavour versus bland flavour). He actually sets out to analyse the differences between English and French cuisine using this scheme, suggesting that in English cooking the endogenous/exogenous and central/peripheral distinctions are highly pertinent, whereas the marked/not marked opposition is not. In contrast, in French cuisine, the endogenous/exogenous and central/ peripheral oppositions are not so pertinent, whereas the marked/not marked opposition is emphasized (Lévi-Strauss 1963).

However, certainly the best known and most widely quoted example of Lévi-Strauss's structuralist approach to cuisine is his analysis of the transformations involved in the actual cooking of food. Cooking is seen as a crucial operation, given that Lévi-Strauss argues that a universal feature of human thought involves linking the distinction between raw ingredients and cooked food with the fundamental distinction between nature and culture (Lévi-Strauss 1966b). Thus, in the sphere of eating, cooking is what transforms nature (raw ingredients) into culture (acceptable food for humans).

Lévi-Strauss formulates these ideas in terms of his so-called 'culinary triangle' (Figure 3.2), which lays out in diagrammatic form the transitions between nature and culture which are associated with food.

Thus, raw food, at the apex of the triangle, becomes cooked food through a cultural transformation. However, cooked food may be reclaimed by nature through the natural transformation of rotting. Of course, raw (fresh) food can itself be transformed from one natural state into another natural state through the process of rotting, as the triangle indicates. Lévi-Strauss takes the position that the transformational operations of cooking can be seen as a kind of

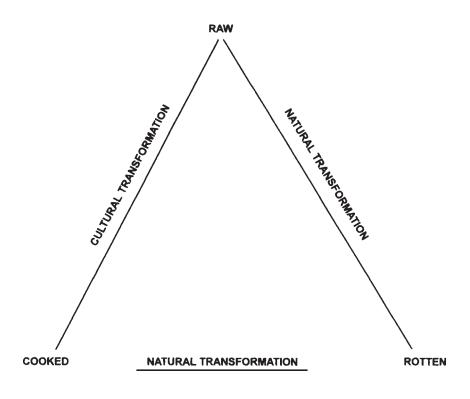


Figure 3.2 The culinary triangle *Source:* Adapted from Lévi-Strauss (1966b)

language, in the same way that he regards marriage regulations and kinship systems as a kind of language for establishing and regulating linkages and communication between social groups in traditional societies (Goody 1982:21).

Developing the basic culinary triangle, Lévi-Strauss then puts forward a more elaborate triangle of recipes, arguing, for example, that roasting is a cooking technique which is closer to the 'raw' apex (since it is seen by him as producing relatively little change in meat, for example). On the other hand, he sees smoking as a technique as closer to culture, since it transforms meat into a durable commodity. He asserts that boiling, which is mediated by water, produces results which are closer to the 'rotten' corner of the basic triangle. As Lévi-Strauss elaborates his arguments, the justifications for his assertions appear to become ever more idiosyncratic and even fanciful. This has led some authors to raise doubts about the actual analytical and heuristic usefulness of such a scheme. For example, Mennell (1985:9) points out that when Lévi-Strauss attempts to explain the foodways of European societies, his celebrated triangles are of comparatively little use and, in effect, he falls back on common-sense arguments. What is more, Goody (1982:31) suggests that there is a certain circularity in arguing that by analysing surface structures (like culinary practices) we can deduce the deep structures of the mind or of society, and that these deep structures are what 'generate' the surface effects we observe.

Another social anthropologist, Mary Douglas, also has close links with the structuralist approach to food and eating, but in an important sense her concerns are less arcane and less obscure than those of Lévi-Strauss, and more clearly rooted in a less exotic, more familiar everyday world. She bases her analysis on the structuralist idea that food can be treated as a code, and the messages that it encodes are messages about social events and about social relations like 'hierarchy, inclusion and exclusion, boundaries and transactions across boundaries' (Douglas 1975:61). Douglas employs the scheme devised by Halliday (1961) who puts forward a framework of categories for the description of eating. The uppermost category is the daily menu, below this is the meal, below this is the course, below this the helping and at the base of the structure is the mouthful, which he regards as the equivalent of the gastronomic morpheme. He then goes on to show how these categories can be elaborated in terms of primary and secondary structures so that a complete description of all the elements of a daily menu could be produced using a grammatical format. In fact, Halliday's purpose in offering such a scheme was to cast light on the problems of grammatical categorization, but Douglas takes up the basic idea and applies it to the analysis of the eating patterns of her own family. In so doing, she is able to provide a fascinating insight into the way in which the same structure appears to underly most meals in English cuisine, and the ways in which this structure repeats itself over a whole range of meal occasions, from the most mundane to the most festive. (In a later chapter we will examine Douglas's analysis of family meal structures and their broader social significance in much more detail.) Certainly, the strength of Douglas's use of structuralist perspectives is that she never loses sight of the fact that, while food may be seen as a metaphor, a symbol or a vehicle of communication, it is, above all, a life-giving substance, and a meal is a physical as well as a social event (Douglas 1984).

In any discussion of the structuralist approach to food and eating reference must also be made to the work of the French author, Roland Barthes. Barthes (1979) firmly locates himself within the structuralist framework, as his terminology clearly testifies. For him, an item of food constitutes an item of information. All foods are seen as signs in a system of communication. Thus, in theory, the conceptual units for describing food can be used to construct 'syntaxes' (or 'menus') and 'styles' (or 'diets') in a semantic rather than an empirical fashion. Hence, it becomes possible to ask to what these food significations refer. Looking at food advertising as an example, Barthes identifies one theme in which specific foods are used to signify continuity with tradition and the past. A second major theme embodies the distinction between masculinity and femininity, and involves an element of sublimated sexuality. A third theme revolves around the concept of health, in the rather specific sense of 'conditioning' the body via appropriate foods with associations like 'energy', 'alertness' or 'relaxation' (Barthes 1979:171). For Barthes, in the developed countries there has emerged a nutritional consciousness which is 'mythically directed' towards adapting human beings to the modern world, and at the same time an increasingly diverse range of behaviours is expressed through food (for example, work, sport, effort, leisure and celebration). Mennell (1985) is critical of Barthes' lack of any systematic historical perspective and of his tendency to draw upon the resources of his own common-sense views of historical knowledge. However, despite these criticisms, the food-related themes Barthes identifies are striking ones (and will recur at various points in this book), even though he cannot actually deliver a fully elaborated 'grammar of food'.

As a perspective, structuralism has been subjected to numerous critical attacks and reappraisals. While this is not the place to discuss this critique in any detail, some of the criticisms which have been levelled at the application of these ideas to food-related issues do need to be reiterated and made explicit at this point. Certainly, by focusing attention on the idea of food as communication, structuralism effectively rules out the analysis of the crucial interconnections which articulate the human food system as a whole. The links between food production and consumption and the wider economic order tend to fade from view, as does the consideration of the significance of the hierarchical organization of human societies and any potential influences of biological or climatological factors (Goody 1982:28-9). What is more, the structuralist analysis of foodways and food consumption patterns has had little to say about the origins of such patterns, that is, about the specific social and historical conditions which give rise to them. However, despite these shortcomings, the structuralist approach, with its use of a linguistic metaphor, has succeeded in highlighting some key themes. These themes, as we will see, continue to inform the sociological analysis of food and eating. This is despite the fact that structuralism (like functionalism), in its various guises and phases, has now largely passed into unfashionability, and also that the grandiose promise of unlocking the underlying grammar of food has remained largely unfulfilled.

Perhaps the most telling criticism of the structuralist analysis of food is highlighted by Mennell (1985:13–14). He refers to the point made by Elias (1978a) that structuralism is based upon an assumption fundamental to Western thought, namely, the idea that underlying the surface changes of the everyday world there are deep-seated relationships which are themselves unchanging. The tendency to allocate overriding significance to such hypothetical underlying entities is referred to by Elias as 'process-reduction'. In fact, Mennell implies, this process-reduction assumption seriously undermines attempts to get to grips with the nature and origins of the significant changes under way in human food systems. It is for this reason that he lays such emphasis on what he terms the 'developmental' approach, in which the analysis of change is placed centre stage.

III The developmental approach

The developmental approach to which Mennell (1985) refers directly, and to which Goody (1982:33-7) refers in a more indirect fashion, does not really

represent an explicit perspective and a coherent body of theory in the same sense as functionalism and structuralism do. Rather, it is something of a residual category into which can be placed a range of approaches which exhibit some common features and preoccupations. The most fundamental of these common features is the assumption that any worthwhile attempt to understand contemporary cultural forms or patterns of social relations must take into account the ways in which these are related to past forms. Thus, social change becomes a primary focus, in terms of its directions, its processes and its origins. Once change is given primacy in this fashion, the presence of conflicts and contradictions in social systems may also become a much more important strand in sociological analysis.

Mennell's own principal contribution to the sociology of food, a comparative study of eating and taste in England and France (Mennell 1985), fits very neatly into the developmental category. This study draws its theoretical underpinnings from the work of Elias (1978b, 1982), whose broad developmental theory ranged from the processes of state formation to the formation of individual personality and conduct. One of the central contentions of Elias's work was the view that an extensive and protracted civilizing process has been at work in Western societies for several centuries. One of the notable effects of this process has been a progressive shift from the exercise of external constraints upon individuals towards the development of internalized constraints which, in effect, individuals exercise upon themselves. This switch from external to internal constraints affects many areas of social life, including eating. It leads to what Mennell (1985:20-39) terms the 'civilizing of appetite', a concept which has considerable explanatory power in relation to nutrition-related phenomena as diverse as anorexia nervosa and vegetarianism. In fact, Mennell's work represents an ambitious attempt to apply Elias's figurational or sociogenic approach to understanding the contrasts and similarities of two developing systems of cuisine. How 'figurations', or sets of social, cultural, economic or political arrangements, change over time in the context of the ebb and flow of competing ideas and interests is the key question. Mennell's study is arguably one of the best and most fully worked out examples of the developmental approach, and his ideas will be examined in more depth in Chapter 4.

Goody, too, can be located unequivocally in the developmentalist camp. His major study of food and eating (Goody 1982) focuses much of its attention on the cuisine and foodways of two ethnic groups in northern Ghana. However, Goody's book is not simply a narrowly conceived anthropological monograph. He makes a concerted attempt to analyse the changes going on in the groups he studies in terms of the development of what is, in effect, an increasingly globalized food system. Thus, he argues, for example, that the African peoples he studied have not given up their traditional cuisine. However, just as they now employ the English language in areas like politics, religion and education (as a result of the impact of colonialism), they also use English cooking techniques and conventions in certain formal contexts (Goody 1982:184). Significant changes in a particular set of foodways

are shown to be the result of processes of change which are literally occurring on a global scale. Thus, an important part of Goody's analysis is an examination of the development of what he terms 'industrial food', with all the complexities of processing, preservation (through techniques like canning and freezing), mechanized distribution and large-scale retailing. Indeed, the global perspective which forms a background to Goody's analysis provides the central theme of the fascinating study by Mintz of the crucial role of sugar in the nutritional practices and preferences of the Western industrial working class. Mintz (1985) sets out to demonstrate how dramatic rises in sugar consumption were linked to political and economic processes acting at a global level. Mintz's convincing and comprehensive analysis will be discussed further in Chapter 11.

A particularly significant contribution to the sociological and social anthropological analysis of food and eating has been made by Harris (1986). Harris's approach, which he describes as a form of cultural materialism, is not easy to classify under the three broad headings, although Mennell, Murcott and Van Otterloo (1992) opt to locate him under the developmental umbrella, if only because his stance is assertively anti-structuralist. Harris is highly critical of the notion that the symbolic dimensions of food and eating are the overriding ones and that these dimensions can be analysed independently of the nutritional, ecological and economic realities of human life. Harris's own study consists of a series of essays in which he looks at a number of food prohibitions or taboos which appear to have an essentially symbolic, moral or religious basis (e.g., the prohibition on beef associated with Hinduism, the prohibition on pork associated with Judaism and Islam). He sets out to demonstrate that such ideas, and the nutritional practices derived from them, may well have a strong practical logic behind them, a logic which springs out of a society's attempts to adapt to its physical environment and exploit available resources effectively. Mennell and his co-authors see this line of thinking as consistent with the developmental approach, in so far as Harris is seeking to describe the specific conditions and processes which have given rise to a particular feature of a food system or a nutritional culture. However, it is probably fair to say that Harris's form of explanation also has marked affinities with the functionalist approach discussed earlier. We will return to examine some of Harris's distinctive ideas in more detail in Chapter 9.

Mennell, Murcott and Van Otterloo (1992) place the work of the French sociologist Claude Fischler in the structuralist category, while noting that his position is decidedly critical of the limitations of structuralism and shows significant linkages with the developmental approach. Certainly, from the point of view of the present book, it is the developmental aspects of Fischler's concerns that are of particular interest. A crucial thesis put forward by Fischler is the idea that the traditional rules, norms and meanings which structure human food intake (which he labels collectively as the rules of 'gastronomy', the word being used in its literal sense) are increasingly being subjected to 'disaggregation' (Fischler 1980:947). This disaggregation involves a breakdown of these long-established rules, and this crisis in gastronomy leads to a state that Fischler terms 'gastro-anomy' (a concept closely linked with Durkheim's concept of anomie). Fischler suggests that this situation arises out of a proliferation of contradictory and inconsistent pressures acting upon the contemporary food consumer (e.g., from the food industry, advertising and the state). What is more, the uncertainties and anxieties created by gastro-anomy and the expansion of agroindustry and industrialized food production are seen as generating disturbances in those processes through which culinary culture helps to create and sustain the individual's very identity (Fischler 1988:288–90). Fischler's acute and sometimes disturbing analysis will be spelled out in more detail in Chapter 7, when we will examine the interrelated phenomena of food risks, food anxieties and food scares.

The picture of the cultural dimensions of the modern food system painted by Fischler, is, in some senses, a decidedly pessimistic one. However, he does point out that there are likely to be individual and collective attempts to restore order to eating practices and food meanings. Thus, individuals may adopt dietary regimes (weight-loss diets, vegetarianism, etc.) in an attempt to restore some 'normative logic' into their eating (Fischler 1988:290-1). This idea leads on to the work of the present authors, whose theoretical orientation can also be located beneath the broad umbrella of the developmental approach. The starting point of this analysis is the concept of the aliment, that is, any basic item recognized as edible within a given nutritional culture. The term 'aliment' is employed in preference to the term 'gusteme' which is used by Lévi-Strauss, since it is a more general notion and does not carry the structuralist implications of the gusteme concept (Beardsworth and Keil 1992a:287-9). Hence, the alimentary totality of a society is made up of the whole range of aliments available during a particular time period. At this point the central concept of the 'menu' can be introduced. This term is used in a more abstract and general sense than its employment in everyday speech. It refers to those sets of principles which guide the selection of aliments from the available totality. Clearly, these menu principles can take a multiplicity of forms, and a range of examples can serve to illustrate the possibilities. Thus, traditional menus draw their recommendations and rules of food choice and combination from customary practice. Such customary practices, and their supporting beliefs, are built up over many generations and derive their authority and their legitimacy from their long-established status. The prescriptions and prohibitions of traditional menus have a taken-for-granted nature for those socialized into their acceptance, so taken for granted that the rules appear natural and immutable. Violations of these rules are likely to induce consternation, contempt or disgust, as are the rules of other cultures, which, if encountered, may be seen as barbarous or perverse.

In contrast, *rational menus* involve selection criteria which are designed explicitly to achieve some specified goal. These goals may include weight loss, weight gain, improvement of physical or mental performance, the avoidance of particular diseases or the generalized promotion of good health. Such rational menus are commonly based upon scientific or quasi-scientific principles and often involve the elements of deliberate measurement and calculation. Closely related to rational menus, we might identify *convenience menus*, where the overriding goal is the minimization of the time and effort required for acquiring, preparing and presenting food. Another sub-type of the rational menu group is represented by *economy menus* where the prime consideration is to keep food costs within a strict budget. In a similar vein, a whole group of *hedonistic menus* can be identified, based on the goal of maximizing gustatory pleasure. In contrast to these types of menu, a group that can be termed *moral menus* can be identified, where the predominant food selection criteria are derived from ethical considerations (related, for example, to political or ecological issues, or to issues relating to animal welfare or animal rights).

In any given society, we might expect to observe a degree of *menu differentiation*, that is, different categories of individuals within the population (defined in terms of gender, age, class, caste, etc.) would be expected or compelled to make characteristically different choices from the aliments made available within a given menu. The developmental thrust of this whole scheme becomes clear when we note that in traditional societies, characterized by relatively low rates of social change, there may be, in effect, one traditional master menu, which coincides with the boundaries of the alimentary totality. In contrast, in modern and modernizing societies, with more rapid rates of social change, the exercise of choice between a whole range of contrasting and competing menu principles becomes increasingly possible. Thus, individuals will find it ever more feasible to construct their own personal *diets* by making more or less deliberate choices between alternative menus, possibly adjusting their menu choices to suit their mood, economic circumstances or the setting in which the eating event is taking place. This situation can be described as one of *menu pluralism*, that is, a situation in which many alternative schemes to structure food choice and eating patterns are on offer. This pluralism is, in an important sense, a product of the very processes which have combined to create the modern food system with its globalization of food supply, its industrialization of production and distribution. As we have seen, Fischler sees these processes as leading to a breakdown in the rules of gastronomy and a rise in gastro-anomy, with all its negative consequences. He does, however, hold out the possibility that these effects are being countered. Indeed, it may well be that the uncertainties of gastro-anomy are but symptoms of the strains involved in the emergence of a new, more open, flexible and pluralistic nutritional order (Beardsworth and Keil 1992b). These issues will re-emerge several times later in this book, particularly in Chapters 7, 9 and 10.

This vision of menu pluralism can be seen as having some connections with the concept of postmodernity which has gained considerable ground in sociology and other related disciplines within the last decade or so. As it has come to be used in sociology, this term refers to a phase in the development of capitalism where, it is argued, the location of individuals in the social order, and the formation of personal identity, are less and less a matter of class position and work roles. Instead, an ever-increasing emphasis is placed upon consumption patterns as ways of demonstrating an individual's position and expressing

personality and individuality (Bocock 1993:77-9). Thus, it is clear that, within a setting of menu pluralism, the dietary choices made by each person within the context of an increasing variety of menu principles on offer become ever more important devices for establishing a sense of personal identity and for expressing personal distinctiveness. However, we need to exercise some caution in applying the broad concept of the ideology of consumerism (whether in its 'massconsumption' or its 'postmodern' form) to the activity of eating. For example, Baudrillard (1988) takes up the idea that 'wants' are unlimited, an idea deeply rooted in modern Western thought. He argues, in effect, that there are no limits to consumption, since in modern and postmodern societies consumption is essentially the consumption of signs and symbols. It does not literally involve 'devouring' and absorbing the objects themselves. In effect, we consume with the mind, and the mind is potentially insatiable. This argument may sound convincing for goods and services like cars, video machines, audio equipment, domestic appliances, clothes, holidays, entertainment, etc. However, it is only partially applicable to food items. While we have already argued very strongly that the symbolic dimensions of food and eating are crucial for the sociologist, the fact remains, of course, that when an individual eats, he or she consumes not only the symbolic ingredients of that item but also its physical components and nutrients. These nutrients can and do produce actual physiological satiety (through ingestion and absorption) in a way that other commodities cannot. Hence, there are always physical limits on the socially constructed demands of appetite. Even if a particular food item (oysters, for example) were seen as conferring high social status and a strong sense of self worth, an individual could eat these only in limited quantities and with limited frequency before the body itself exercised the sanctions of nausea or even physical expulsion. Thus, while it may be important to understand the changes taking place in the broader areas of consumption and consumerist ideology, we must always bear in mind the unique features of eating.

OVERVIEW

In this chapter we have begun to consider food and eating at a number of different levels: initially at the system level, as a complex framework of productive and distributional relationships, and subsequently at the cultural level, as a highly elaborate corpus of ideas, symbols and meanings. The personal level has also been introduced, as issues concerning nutritional socialization and the significance of food symbolism for personal identity have been raised.

As has already been emphasized, any attempt to provide a tidy classification of sociological approaches to food and eating is bound to lead to a somewhat arbitrary outcome. However, the exercise is worthwhile, if only because it highlights certain conclusions which are worth bearing in mind. While we have, so far, placed a deserved emphasis on the symbolic dimensions of food and eating, the relative lack of success of the structuralist approach in delivering

convincing explanations of food-related practices and beliefs in purely symbolic terms should give pause for thought. We clearly also need to consider the linkages and interrelationships between the various components of food systems, and the ways in which these are articulated by actual social and economic relationships. What is more, we must also consider the connections between the food system and other subsystems of society (e.g., domestic, political, medical, hierarchical, etc.). However, a static view of these connections is not sufficient in itself. The emphasis given in this chapter to developmental approaches reflects the importance of trying to describe and explain the ways in which the features of the food systems of contemporary Western societies are themselves the products of long-term processes of social change. Of course, current processes of change, as well as those which occurred in the past, also demand our attention. The present stage of development of the sociology of food and eating means that there are still many gaps in our understanding. The chapters that follow have been designed to provide the reader with an overview of those areas where substantial bodies of knowledge do exist.

While the focus of this chapter, and indeed of the whole book, is upon sociological perspectives, this does not imply that the contributions of related disciplines will be ignored. We have already drawn upon the ideas of sociology's sister discipline of social anthropology, and in subsequent chapters findings and insights from outside sociology will be borrowed quite explicitly where these can be put to a sociological purpose. The work of psychologists, nutritional anthropologists and economic and social historians can be mined to enrich the sociological analysis of food-related issues. Feminist perspectives in various forms have also made significant contributions to the development of our understanding of certain key questions in the area of food and eating, and such perspectives will figure prominently in Chapter 8 and will also put in an appearance in Chapters 5, 9 and 10. The whole gamut of methods will be encountered: the exploitation of historical sources and secondary data, surveys, semi-structured interviews and participant observation. In short, most of the familiar weapons in the armoury of the social scientist will appear, plus, on occasions, specialized techniques like the dietary diary.

Each topic is of intrinsic interest in itself, but our hope is that the whole will prove to be more than sum of its parts. As we proceed through diverse subject matter and varied sources, the intention will be to draw out the underlying foundations of continuity and the significant currents of change which coexist in contemporary food systems.

Part II

THE SOCIAL ORGANIZATION OF EATING

FOOD, FAMILY AND COMMUNITY

In this chapter, the emphasis is upon the significance of food and eating within the private sphere of the family. Of course, adopting such a perspective does not imply that the private sphere is some kind of hermetically sealed microcosm that can be examined in isolation. The domestic world of the family is inextricably linked to the structures of the wider social system, and this is no less true of eating than of any other aspect of family life. In a sense, the sociological analysis of the family is pervaded by two apparently opposing themes. On the one hand, the family is seen in essentially positive terms, as an intimate, supportive institution. It is seen, at one level, as contributing to the continuity and stability of society as a whole, and at another level as providing the individual with a secure refuge from a demanding world. On the other hand, the family has been viewed in more sinister terms, as a locus of conflict, oppression and even overt violence, with the power differences between men and women, and parents and children, seen as particularly important. Both of these views will be reflected in the material discussed in this chapter, although we might sensibly regard them as two sides of the same coin, rather than mutually exclusive claims to absolute truth. Whatever the viewpoint adopted, however, there can be no doubting the family's continuing importance as a unit of consumption and the powerful formative influences it continues to assert over its members.

Before our discussion proceeds, a simple but basic terminological point is worth making. The terms 'family' and 'household' are not synonymous. The nuclear family (parents and children) may or may not make up a household (which is a group of people sharing accommodation and, to varying degrees, pooling their resources). The intact nuclear family is only one type of household, and is characteristic of a particular stage of the life cycle. There are, of course, many other types of household, and nuclear families may be part of wider extended family systems. These rather obvious distinctions do have important implications for the issues raised in this chapter, as we examine the ways in which food can be used to mark and forge links across family boundaries, the ways in which food is implicated in differentiation within families and between families, and the long-term processes of change in domestic foodways which appear to be under way.

MARKING THE BOUNDARIES OF THE FAMILY

In the section dealing with structuralist approaches in Chapter 3 we have already encountered the work of Mary Douglas, who has suggested that foodways can be seen as a kind of language encoding patterns of social relations, particularly those connected with social boundaries and with processes of inclusion and exclusion (Douglas 1975). We can now look at Douglas's ideas in rather more detail. In order to examine this food language and its messages she adopts the somewhat unusual methodological strategy of analysing the food-related ideas, categories and practices in use in her own home. Her first point is to argue that there is a crucial distinction between *drinks* and *meals*. Meals are sequenced through the day and their elements are linked together in predetermined combinations and successions of courses. Drinks, on the other hand, are not so highly organized. Douglas then goes on to describe the key features of meals as consumed within her own family:

- Meals require a table with a seating order, and entail the restriction of movement. Thus, a meal 'frames the gathering' and effectively rules out certain simultaneous activities.
- Meals incorporate significant contrasts like hot/cold, bland/spiced and liquid (or semi-liquid)/solid.
- Meals incorporate a broad range of nutrient sources (cereals, vegetables, animal proteins and fats, etc.).

(Douglas 1975:65-6)

Douglas also observes that these meals have a characteristic 'tripartite' structure, consisting of one 'stressed' or main element accompanied by two 'unstressed' or supporting elements. She describes this structure with the simple algebraic expression A+2B. What is more, she sees meals as arranged in a hierarchy according to their importance and symbolic significance. For her family, at the bottom of this hierarchy is the routine weekday lunch, with just one course. This single course (A) itself exhibits the tripartite structure a+2b. Further up the hierarchy is the Sunday lunch, consisting of two substantial courses (main and dessert). Such a meal is described as 2A, with each A having the a+2b structure. At the top of the hierarchy for her family come celebratory meals (Christmas, birthdays, etc.). Here the whole meal can be described as A+2B, with a main course and two supporting courses. Each of the three courses is, as usual, structured in terms of a+2b.

In effect, Douglas is arguing that this repeating A+2B pattern means that every meal carries within it something of the structure and meaning of all other meals. What is more, participation in this repetitive, structured sequence of meals is one of the key ways of expressing and experiencing family membership. The sharing of meals is drawing the boundaries of the family's symbolic and emotional existence, and only certain very specific categories of non-family are permitted to cross these boundaries. In contrast, drinks can be shared much more widely. As Douglas herself puts it:

Drinks are for strangers, acquaintances, workmen and family. Meals are for family, close friends, honoured guests.

(Douglas 1975:66)

Of course, Douglas's analysis does have its limitations. It refers to the practices of just one upper-middle-class English family and so we must be very cautious about attempting to generalize its arguments. A study based on participant observation of four English industrial working-class families (Nicod 1980) found that the four families in question each had rather different ways of drawing the boundaries of the family unit in nutritional terms. Looking at three staple food items (potato, bread and biscuit), the relationship between intimacy and the foods shared varied considerably from family to family. These findings suggest that while families do draw boundaries with food; there is considerable leeway for each to establish its own ways of expressing inclusion and exclusion. Moreover, as Lalonde (1992) points out, Douglas's structuralist analysis, by its very nature, is concerned primarily with describing the structure of the meal-as-object. However, he reminds us that it is not simply the meal's *structure* which expresses its symbolic significance. The meal-as-event (as he calls it) is a lived experience which draws its meanings from a complex array of sensory and cognitive factors, factors which a structuralist account tends to neglect.

Of course, while food consumption patterns can be seen as highlighting the boundaries of the nuclear family, food and eating can also act as linkages between the nuclear family and the extended family and, indeed, between the nuclear family and the wider community. The use of food to articulate such linkages is neatly demonstrated by an intensive study of two Italian-American families in an industrial suburb of Philadelphia (Theopano and Curtis 1991). Through the use of participant observation techniques the researchers were able to uncover the ways in which elements of Italian and American cuisine were combined in this close-knit community, which they referred to by the pseudonym 'Maryton'. Their findings make it very clear that women bear the main responsibility for sustaining domestic and social life and maintaining social networks. This is borne out by the fact that, although over 80 per cent of the women observed were in full- or part-time employment, they essentially held 'jobs' rather than pursued 'careers', and their main preoccupations were still marriage, maternity and domestic responsibilities. The authors set out to show the ways in which the bonds of family and community are expressed through food exchange by focusing attention on two particular women, whom they refer to as 'Marcella' and 'Anne'.

Marcella's social life revolves around an extensive network of relatives and friends. She exchanges food and hospitality with, for example, her two sisters and her brother (and his wife), with her three daughters and with certain intimate friends. The authors describe a series of exchange events, including a buffet dinner for thirty people, the invitation of her daughter's fiancé to dinner, the shared preparation of dishes with her sisters and, on Easter Sunday, the serving of breakfast

THE SOCIAL ORGANIZATION OF EATING

to daughters, grandson, daughter's fiancé and the serving of dinner to nine people. Anne's social network is described as more limited than Marcella's, with a strong emphasis on ties with her two sisters, her two sons (one married) and her one daughter. She is also a close friend of Marcella. Examples of food exchanges documented include participating in a celebratory meal at her cousin's home, taking dinner at her daughter-in-law's home, eating out (dinner) with Marcella and inviting twelve people to her own home for Sunday dinner, including her son and his family, two friends (Marcella and Andrea) and her daughter's boyfriend (plus the two participating and observing researchers, with one spouse and one child).

The authors describe the various forms of exchange which are being employed in such settings:

- the exchange of hospitality (inviting guests and being invited);
- the sharing of non-mealtime eating (snacks, etc.);
- the exchange of raw foodstuffs or cooked dishes (e.g., desserts);
- payment for services with food, often in the form of the 'specialities' of the giver;
- co-operative provisioning and preparation of family dinners, celebratory meals, etc.

The reciprocity involved in these exchanges varies according to whether the relationship is symmetrical (between social equals and members of the same generation) or asymmetrical (where there are differences in status or generation) and according to the relationship's level of intimacy. It is also affected by the nature of the occasion, i.e., whether it is a 'recurrent' event (festivals, birthdays, etc.) or a 'milestone' event (weddings, graduations, etc.). According to the combination of these factors, the expectation may be for immediate reciprocity, long-term reciprocity or there may actually be no expectation of reciprocity at all (see Figure 4.1).

The sheer volume of food exchange taking place in such close-knit communities is illustrated by the fact that, in the course of the two-month period of observation,

CATEGORY OF RELATIONSHIP	CATEGORY OF OCCASION		
	Recurrent	Milestone	
High intimacy symmetrical asymmetrical	immediate no expectation	immediate long duration	
Low intimacy symmetrical asymmetrical	immediate immediate	long duration no expectation	

High intimacy = immediate/extendedfamily, friendship network (frequent contact) *Low intimacy* = workmates, friendship network (infrequent contact)

> Figure 4.1 Expectations for reciprocity Source: Adapted from Theopano and Curtis (1991)

guests were present at food events on more than 100 occasions in Marcella's household. Over the same period, Anne participated in sixteen food exchanges and had guests for thirty food events. All this took place within a system of cuisine that was far from rigid, since what the authors term 'menu negotiation' produced variation from family to family and from year to year. Thus, even in a community with a relatively distinctive cultural identity, reciprocity based on food exchange does not necessarily rely entirely upon the persistence of a conservative, ethnically marked cuisine. Even in the face of change and variability food exchange can play a crucial articulating role. As the authors themselves put it:

Through the food system, women express and maintain their social positions in the community...Exchanging food in Maryton is a token of social bonding and integral to all social interaction.

(Theopano and Curtis 1991:171)

FOOD AND DIFFERENTIATION WITHIN THE FAMILY

The quotation which rounded off the preceding section emphasizes the positive aspects of women's relationships to food provision and food exchange in domestic settings. There is, however, a more pessimistic view of such relationships, which suggests that gender differentiation within the family in respect of food preparation responsibilities and food consumption patterns can work to the disadvantage of women. Indeed, it has been argued that in traditional societies there may exist significant nutritional inequalities related to gender (and to age). An example of such inequality is provided by a study of the foodways of the traditional peasant family in rural France by Delphy (1979). Men, the author points out, customarily held a privileged position in relation to scarce food resources, this applying particularly to male heads of households. Thus, butcher's meat, a relatively rare item on this traditional menu, was largely reserved for men or, if it was shared, men were allocated the choice cuts. Indeed, traditional peasant culture characterized adult men as 'needing' such meat in a direct, physiological sense. In contrast women (plus the young and the elderly) were not seen as having this need in the same way. What is more, men were typically seen as requiring larger quantities of food than women, and one of the ways in which this idea was justified was in terms of differences in energy expenditure. However, as Delphy demonstrates, this notion did not rest on realistic calculations of energy expended in different types of work but was, rather, related to the gendered nature of particular tasks. Thus, carrying water (a task for women) was defined as 'light work', whereas carrying manure (a task for men) was classed as 'heavy work'. Interestingly, such attitudes were also applied to alcohol consumption. Red wine was seen as making men strong, whereas a woman who drank this beverage in quantity would be regarded with contempt (hence the saying, femme de vin, femme de rien).

These inequalities were woven into the very fabric of the rural culture. Thus, the young were socialized into internalizing a whole range of food prohibitions and deprivations, such socialization being backed up by a range of repressive measures and sanctions. Indeed, it was a widespread cultural assumption that a chronic feeling of hunger was normal for children and adolescents. Similarly, women were socialized into accepting the idea that they should consume only meagre portions of the dishes they prepared, and into accepting that they had a duty to provide the best food for others. Delphy contends that differentiation of this sort may have produced significant nutritional deficiencies (especially of protein) in the diets of the elderly and the very young, with consequent implications for general health. The impact on adult women may have been compounded by the added burdens of pregnancy, and heightened rates of infant and maternal mortality in rural areas appeared to support this contention (Delphy 1979:223).

The picture painted by Delphy is a bleak one, although she emphasizes that the conditions she is analysing are specific to a particular historical period and a specific cultural and economic setting. However, the question inevitably arises as to whether such inequalities might be observed in more contemporary settings. Some significant insights into this issue are provided by a comprehensive study of food and families carried out in the north of England (Charles and Kerr 1988; Kerr and Charles 1986). The research project in question was based upon a survey involving 200 women with pre-school children, and employed semistructured interviews and entailed the completion of detailed food and drink diaries for a two-week period. The study's aim was to examine a range of issues relating to food practices, but most importantly to examine nutritional differentiation within the family based on gender and age. As might be expected in this type of household (most were intact nuclear families with both parents, and all had young children) the women had the main responsibility for buying, preparing and serving food. Indeed, after the arrival of their first child, many had given up work to devote their time to domestic tasks, and cooking skills, for example, were seen as crucial by these respondents.

A central finding of Charles and Kerr's study is the importance of the concept of the 'proper meal'. The proper meal, based upon freshly cooked meat supported by potatoes and vegetables, was construed as fundamental to the identity of the family and to its well-being. Indeed, the authors argue, the provision of proper meals (in their everyday or more elaborate festive forms) was viewed by respondents as a key indicator of a 'proper family'. This underlying symbolic significance of the proper meal (readily described in terms of Douglas's A+2Bformula) appeared to hold across social class divisions in the sample. Significantly, in terms of our earlier discussion of Delphy's arguments, Charles and Kerr's respondents reported that men's tastes and preferences took priority over those of women and children. The provision of proper meals, in line with the relatively conservative tastes of the husband, was seen by wives as a way of showing affection, and as a device for retaining the husband as a breadwinner and keeping him working. Thus, these wives were portraying themselves as food servers, 'refuelling' an active male breadwinner (even though many of the men were in occupations which did not demand high levels of physical exertion) to whom they were subordinate and on whom they were economically dependent. The authors conclude that such women are, in effect, in a position of responsibility without authority in relation to food, given their husbands' economic dominance and priority of preference. What is more, they conclude that the men in these households actually did eat what the authors define as 'high-status' foods more frequently than women (and children) and they also consumed alcohol more frequently. They argue that these differences reflect the essentially patriarchal structure of the nuclear family, and their findings appear to support the view that the gender- and age-based nutritional inequalities characteristic of many traditional rural settings may find echoes in the contemporary urban milieu.

In Table 4.1 some of their most interesting results are laid out. The data shown consist of the average frequency of consumption of selected food items over the two-week period covered by the dietary diaries. The researchers did not actually ask to have recorded the quantities of food consumed, only frequencies,

Item	Women	Men	Children
High-status meat	4.5	4.9	3.1
Medium-status meat	6.8	9.0	5.3
Low-status meat	5.1	6.8	5.2
Whole fish	1.7	1.9	0.9
Low-status fish	1.6	1.5	1.7
Eggs	4.4	5.1	3.5
Cheese	5.6	5.8	3.8
Green leafy vegetables (cooked)	2.9	2.8	2.1
Other vegetables (cooked)	7.9	8.2	6.8
Fresh fruit	5.9	5.2	7.3
Potatoes (boiled/roast)	6.4	6.6	6.3
Chips	7.0	7.0	7.0
Bread	19.0	21.6	17.4
Breakfast cereal	5.2	5.3	10.4
Cakes	6.7	7.3	4.9
Biscuits	8.0	6.4	11.3
Puddings	7.0	7.0	9.3
Sweets	3.5	2.6	8.1
Soft drinks	2.7	2.0	22.5
Baked beans, etc.	1.9	2.0	2.9
Milk	6.0	6.3	21.5
Tea/coffee	58.0	54.3	13.4
Alcohol	2.7	4.4	0.2

Table 4.1 Average frequency of consumption of selected items over a two-week period

Source: Adapted from Charles and Kerr (1988)

hence these results may somewhat understate differences, as men are claimed to consume larger portions.

One immediately striking finding is that men do indeed eat meat more often than do women and children. This applies to 'high-status' meat (which the authors define as red meat in joints, chops, etc.), 'medium-status' meat (white meat like chicken) and 'low-status' meat (e.g., processed products like sausages and hamburgers). What is more, children eat medium- and low-status meat more frequently than high-status meat and adults eat medium-status food like cheese and eggs more often than do children. Children eat fresh fruit (which the authors classify as a low-status food) more often than do adults, and women and children eat biscuits (low status) more frequently than do men. Not surprisingly, children are reported as consuming sweets and soft drinks far more frequently than adults, and the same also applies to milk. The various differences visible in this table are taken by the authors to be reflections of the status and power hierarchy within the patriarchal nuclear family, with men at the top, women in the middle and children at the bottom.

While this conclusion may be basically plausible, we should note a number of reservations. For example, the women frequently reported that they found it difficult to get children to eat 'proper meals', hence children's consumption of 'low-status' foods may actually be a reflection of their own tastes. What is more, children's more frequent consumption of such items as fresh fruit and milk, which the authors do not see as high-status items, would conventionally be construed as conferring a nutritional advantage. The male/female differences in meat consumption also appear somewhat marginal, and may be partly accounted for by the reported practice of giving men leftover cold meat in sandwiches. Further, the whole picture is complicated by the decidedly ambivalent attitudes to food reported by the study's women respondents. Concern with slimness and body image was frequently mentioned, coupled with attempts to restrict food intake (no less than 34 per cent of respondents were actually dieting at the time of the study). The authors note that for many women:

the questions on dieting seemed to release a flood of dissatisfaction and guilt, not only with their bodies and their weight but with their whole social situation.

(Charles and Kerr 1988:143)

Charles and Kerr suggest that, in a sense, for women food is 'the enemy'. This concern with the desire to restrict food intake in the face of a readily available supply is a very different predicament from the potential threat of malnutrition for women described by Delphy. (We will return to these complex and contentious issues in Chapter 8.)

A later study carried out in Manchester (Warde and Hetherington 1994) based upon questionnaires returned by 323 households, produced results broadly similar to those of Charles and Kerr, but with some important differences. The

Task	Man (%)	Woman (%)	Other (%)	Shared (%)	\mathcal{N}
Cake baking	5	61	31	4	243
Jam making	6	63	28	3	68
Cooking meals	11	79	5	5	271
Bread making	9	57	27	7	89
Preparing packed lunches	13	64	20	3	234
Main shopping	14	54	2	30	272
Doing the dishes	23	46	20	10	274
Take-away meals	42	21	26	10	242
Beer or wine making	64	12	11	14	94
Cooked barbecue	59	9	22	11	153

Table 4.2 Persons last doing specific food-related tasks in households containing a couple

Source: Adapted from Warde and Hetherington (1994)

gender division of labour in respect of food-related tasks comes out clearly in Warde and Hetherington's findings, which document which person or persons last performed specific tasks (see Table 4.2).

As might be expected, women predominate in the key activity of preparing meals, whereas men predominate in more marginal areas of foodwork like collecting take-away meals, beer or wine making and barbecue cooking. Significantly, however, in 30 per cent of households containing a couple, main shopping was a shared activity. What is more, Warde and Hetherington's results highlight a limitation of Charles and Kerr's study which has been pointed out by a number of commentators (Beardsworth and Keil 1990; Prout 1991). Because Charles and Kerr deliberately chose to look at households with at least one preschool child, the focus is very much upon one particular stage of the life course. On the other hand, the households in Warde and Hetherington's study were rather more 'mature', and 81 per cent of the women in the sample were in paid employment, compared to 40 per cent in Charles and Kerr's study. Warde and Hetherington note that the woman's being in full-time employment was the most important factor in inducing men to cook family meals. Thus, they argue, Charles and Kerr's findings cannot necessarily be generalized as applicable to all adult men, since the very nature of their study design tended to exclude those men (with wives in full-time employment) who were most likely to be involved in food preparation (Warde and Hetherington 1994:765). What is more, a class factor appeared to be at work here. For example, in households where the woman was in a salaried occupation or self-employed, the man was more likely to have cooked the last family meal. In contrast, in households where both partners were working class, there were no cases where the man had cooked the last meal. (These issues of social class will be discussed in more detail later in this chapter.)

The wider international applicability of the conclusions drawn by Charles and Kerr and Warde and Hetherington in relation to families in England is indicated

THE SOCIAL ORGANIZATION OF EATING

by the fact that similar studies in the USA (DeVault 1991) and Sweden (Ekström 1991) appear to have produced broadly similar findings. DeVault's study was based upon interviews in thirty households located within the city or suburbs of Chicago, selected to ensure ethnic and social diversity. She interviewed the individual who bore the main responsibility for what she terms 'feeding work' within the family. Unsurprisingly, the overwhelming majority of these were women, 50 per cent of whom also worked outside the home. What emerges very clearly from the interview material is the primary role which women continue to play in the planning, provision and preparation of meals, and the extent to which this role is perceived as an onerous one. Fascinatingly, she notes that a concept analogous to Charles and Kerr's notion of the proper meal also exists here (although the nature and content of such meals, as we might expect, shows significant cultural variations). In effect, DeVault argues, women's work of feeding the family, of creating and staging the family-meal-as-event, can be seen as counteracting the centrifugal forces which push apart the activities of the individual family members, each with his or her own schedules, commitments, interests and priorities. In this sense, she maintains feeding literally *produces* 'family'. However, this work of socially constructing the family through feeding is largely invisible, so much so that women respondents often appeared to experience some difficulty in explaining their taken-for-granted deference to their husband's tastes and preferences. In fact, DeVault sees women's apparent autonomy in the organization and execution of domestic routines as masking the fact that they are essentially making choices to please and accommodate others, and suggests that these responsibilities effectively contribute to their oppression.

Ekström's analysis of food provision and cooking in Sweden provides a useful quantitative insight into the extent to which these tasks continue to be associated with women in contemporary urban settings. Her study was based on a simple random sample of 348 families with children, and employed the usual datagathering devices (a questionnaire and a food diary, supplemented by qualitative interviews with selected respondents) The results of the study are presented under four headings (Ekström 1991:151):

- planning meals;
- shopping for food;
- the preparation of breakfast;
- the preparation of dinner.

The results for the 292 families in the sample where both parents were present are clear cut, as can be seen in Table 4.3.

In relation to the activity of planning, the categories 'mother alone' and 'both, mother most part' clearly predominate. It is very rare for fathers to take much responsibility in this area. There appears to be underparticipation in the activity of shopping, although the modal category is the joint one, in which mothers take main responsibility. The provision of breakfast shows some interesting diversity, fathers clearly taking responsibility more frequently. In a significant number of

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Agent(s)	Planning %	Shopping %	Breakfast %	Dinner %
Mother alone	44	16	34	59
Father alone	1	1	13	2
Both, mother most part	34	49	0	0
Both, father most part	2	6	0	0
Adults	8	16	24	29
Adults and child	10	9	5	5
Child/children	0	0	1	0
Each individual		-	14	0
Others	1	2	8	5
Total (N = 292)	100	99	99	100

Table 4.3 The division of labour in two-parent families

Source: Adapted from Ekström (1991)

households (24 per cent) breakfast is the generalized responsibility of all the adults in the household and in 14 per cent individuals cater for themselves. For the main meal of the day (dinner) 59 per cent of households rely entirely on the mother, with individual fathers figuring very rarely. However, interestingly, in 29 per cent of cases responsibility for this meal is shared among all the adults in the household. What is more, a familiar picture emerges from Ekströms's qualitative interviews, with women placing a strong emphasis on pleasing their husband and providing a good service in relation to food preparation and presentation, an emphasis which they see as a feature of a mutual but unconscious contract between couples based on the explicit or implicit subordination of women.

Perhaps one of the neatest demonstrations of this process of subordination through the imposition of culinary and nutritional responsibilities on women is provided by Murcott's influential analysis of the significance of the 'cooked dinner' in a community in South Wales (Murcott 1982). Murcott's research consisted of unstructured taperecorded interviews with thirty-seven expectant mothers between the ages of 16 and 40, and her aim was to document what she terms 'folk models' and the 'properties of domestic eating' (Murcott 1982:678). The finding which dominates her results is the central importance of the 'cooked dinner' for her respondents. This dish was seen as the centrepiece, indeed, the defining feature, of a 'proper meal', and its provision on a regular basis (say three to four times a week) was seen as vital for the health and welfare of family members, and therefore as one of a woman's most crucial obligations. The features of the cooked dinner, as an expression of the traditional menu of British culinary culture, can readily be specified in detail:

- Its focal point, or stressed element, must consist of the flesh of a warmblooded animal (beef, lamb, pork, chicken, turkey at Christmas). Ideally, the meat should be fresh not frozen.
- The preferred method of cooking this meat is roasting or grilling.
- Potatoes must be served (boiled, mashed or roasted).

- Vegetables must be served. If there is only one vegetable, ideally this should be green). Again, these should be fresh.
- The components of the dish must be arranged in neat piles on a single plate.
- The components must be moistened and co-ordinated with gravy, but not submerged or disguised by it.
- Portions must be large.
- The dish must be eaten with knife and fork.

Such dishes clearly take a highly conventionalized form, offering little scope for innovation, and were seen by respondents as geared to their husband's tastes and perceived nutritional needs. In other words, it is the husband's preferences which dictate the choices made within this rigid culinary framework. What is more, the elaborate nature of this dish requires the attention of the cook over relatively long periods of time, in terms of preparing as well as actually cooking the ingredients. The fresh ingredients themselves demand regular shopping and cannot be bought in advance and stored for long periods. The cooking techniques and skills employed are those passed on from mother to daughter over several generations, emphasizing the continuity of women's domestic obligations. On the basis of these features, Murcott argues that the cooked dinner has important social (as opposed to purely nutritional) functions. In effect, the provision of a cooked dinner for her family demonstrates that a wife has been spending her time in an activity appropriate to her status and gender. The extended time commitment and the protracted labour involved can be seen as devices for tying the wife into the domestic setting, enforcing and expressing her femininity and her domesticity. Thus, the cooked dinner is seen as exerting a form of control (Murcott 1983:88) as well as constituting a symbol of the inequality which segregates the gender roles of wife and husband.

There is a good deal of evidence to suggest that, in some family settings, the failure of a wife to fulfil her husband's expectations concerning the carrying out of domestic tasks may lead to violent retaliation. Ellis (1983) draws upon her own research into violent families (and that of other authors like Dobash and Dobash (1980)) to demonstrate that physical attacks by husbands on their wives are frequently triggered by some aspect of a husband's dissatisfaction with his wife's culinary performance. Ellis cites the expectation in British working-class households that a wife should have a hot meal ready for her husband as soon as he returns from work. Case material examples are cited where failure to provide this meal provoked an attack. In even more extreme instances, violent men might expect a meal to be provided at any time when they arrived in the household (even if this were unexpectedly in the early hours of the morning after a drinking bout). Physical force (or the direct threat of it) might then be used to compel the wife's compliance. Similarly, when men's expectations concerning the quality of cooked meals or the range of food choice were not fulfilled, violence might well be the result. It is Ellis's contention that the tendency to see such phenomena as indicating that violence can be provoked by 'trivial'

incidents is somewhat misguided. The fundamental significance of food preparation and serving obligations for female gender roles means that noncompliance may be regarded as a particularly serious dereliction of female 'duty'. In certain households, actual physical assaults, of varying levels of seriousness, may be the habitual response, although Ellis sees this food-related violence as simply the most explicit manifestation of a more general pattern of patriarchal domination.

Significantly, the study of divorce and remarriage carried out by Burgoyne and Clarke (1983) with forty remarried couples in Sheffield found that tensions in marriage frequently centred upon food and mealtimes. For example, the Sunday dinner, supposedly a focus of family integration and harmony, could become the occasion for the more or less overt expression of intra-familial conflicts and interpersonal jealousies. What is more, where women were perceived by their spouse as having failed in their wifely duties with respect to the provision of meals, the authors came across evidence of violent responses by husbands similar to the incidents described by Ellis (Burgoyne and Clarke 1983:154-5). However, the authors also provide some fascinating evidence concerning the responses of divorced fathers who were allocated custody of their children. In some cases, such men (who were somewhat over-represented in this study) went to considerable lengths to maintain conventional eating patterns in order to sustain a sense of domestic security and continuity for their children, even to the extent of taking on the preparation of Sunday dinners (Burgoyne and Clarke 1983:157-8). In describing the process of finding a replacement partner, respondents noted the difficulties that could be involved in establishing new and mutually acceptable domestic arrangements with respect to food preparation and mealtimes, describing in some detail the problems of adapting and accommodating to each other's established habits and preferences. Certainly, the emphasis placed on food by these respondents demonstrates a number of important points. Not only are food and food-related domestic arrangements central features of family functioning, they may also play a crucial role in family breakdown. What is more, attempts by divorced individuals to reconstitute the family through remarriage may be dependent on the successful re-establishment of a domestic food provision routine acceptable to the various parties concerned. Food may, therefore, play a role in the continuity, the breakdown and the reconstitution of the nuclear family.

The evidence we have been discussing appears to paint a fairly consistent picture. Within the family women are seen as essentially subordinate to men and are required to assume responsibility for preparing and serving food while actually exercising relatively little control over the underlying patterns of provisioning and food selection, in which areas men's tastes and preferences are the authoritative ones. Such perspectives lead McIntosh and Zey (1989) to adopt a highly critical approach towards earlier views of women's relationships to food and the family which suggested that women wield considerable power in this area. For example, it has long been assumed that women act as 'gatekeepers', controlling the flow of goods (food in particular) into the household and controlling the channels through which food reaches the table. However, McIntosh and Zey cite a range of studies (e.g., Burt and Hertzler 1978) which support the contention that, within families, the father's tastes take precedence. They also demonstrate that this precedence is usually linked to the husband's economic predominance within the household; the higher his earnings, in general, the greater his power (McIntosh and Zey 1989:323). Raising doubts about the gatekeeper model which, as the authors point out, has long been relied upon by nutritionists and those concerned with nutritional policy, has a number of implications beyond purely sociological ones. For example, targeting nutritional education information at women in order to engineer what are seen as health-promoting dietary changes within families could be largely ineffectual in the light of what may be women's relative powerlessness in this area.

The studies which we have examined in this section are predominantly guided by feminist perspectives on the complex interactions between food, gender and domestic life. Two basic themes run through such perspectives: firstly, the idea that women's food-related roles in effect *express* and *reflect* their subordination and, secondly, the idea that the food-related obligations and duties imposed upon women actually serve to *enforce* their subordination. This enforcement is seen as being achieved through the fact that responsibility for domestic 'feeding work' is deeply embedded within the core of the whole concept of femininity, through the socialization of women into the acceptance of such obligations as natural and through the sanctioning of women who fail or refuse to fulfil these obligations. When the processes we have been examining are formulated in this way, the affinity between such views and functionalist forms of explanation becomes apparent, in that one of the 'functions' of gendered feeding work is seen as the maintenance of patriarchal family configurations.

The consistency of the results of the various studies across national and cultural boundaries is striking (although, in fairness, it should be noted that this may be due in part to some of the shared theoretical perspectives and expectations of the researchers). There is, however, one important limitation common to most of these studies which should be recognized. With the exceptions of Burgoyne and Clarke (1983) and Warde and Hetherington (1994), they rely almost exclusively upon adult female respondents. Men's ideas, viewpoints and accounts are rarely, if ever, heard at first hand, and where they do figure they are often reported at second hand by women. The same can also be said of children's accounts and preferences. Whether the picture which emerges would have been significantly different if men's and children's ideas had been given equal weight is an open question, and one which could be resolved only by suitably designed empirical research. Of course, the emphasis on women's accounts is not determined solely by theoretical and ideological factors; it also emerges out of practical considerations. The empirical studies from which our insights are derived by and large focus their attention on the individual in the household who bears the main responsibility for feeding work. This

understandable methodological strategy necessarily generates predominantly female response groups.

FOOD AND DIFFERENTIATION BY SOCIAL CLASS

Having considered the ways in which food-related differentiation operates within families, attention can now be turned to differences and inequalities which separate individuals, families and households along the broader lines of social class. We do not need to look too far back into Europe's historical past, for example, to find instances where class-based nutritional inequalities were literally a matter of life and death. Disastrous famines (often resulting from crop failures) continued to occur in Europe well into the eighteenth century (Mennell 1985:24-7). An individual's risk of dying of starvation or of experiencing protracted hunger and damaging malnutrition was very much a function of his or her position in the economic and social hierarchy. As late as the latter part of the nineteenth century, the poor in England, for example, subsisted on a chronically inadequate diet, as classic studies of poverty like that of Rowntree (1901) clearly demonstrate. The consequences of such deprivations included endemic deficiency diseases like rickets, high urban infant mortality rates and poor levels of physical development in those who survived to maturity (Burnett 1989:61). Clearly, in developed Western societies at least, the economic inequalities of social class no longer generate nutritional inequalities in such extreme forms, although they may now have subtler and less dramatic manifestations. Of greater relevance and interest for the contemporary sociologist are the cultural, economic and ideological differences between social class groupings in relation to food, and the ways in which these differences produce characteristic patterns of food preference and facilitate or constrain food choice.

A useful starting-point for the discussion of such differences can be found in the work of Bourdieu (1984). Bourdieu sets out to analyse the ways in which upper- and lower-class tastes are generated and reproduced in relation to the realities of social class in contemporary France, although his analysis is not confined to food, covering areas as diverse as art, literature, cinema, dress, interior decoration and hairstyles. Bourdieu stresses the competitive dimension of taste, seeking to demonstrate the ways in which conceptions of taste, and actual consumption practices, are used to create and sustain distinctions between social classes and to maintain the elevated status of those groups at the upper levels of the class hierarchy. However, Bourdieu sees eating and drinking as one of the few areas where working-class ideas challenge what he terms the 'new ethic of sobriety and slimness' (Bourdieu 1984:179). The tastes in food of highstatus individuals like professionals and senior executives tend towards 'the light, the refined and the delicate', which serves to set them apart from popular, working-class tastes for the 'heavy, the fat and the coarse' (Bourdieu 1984:185). The middle and upper classes, largely freed from economic constraints on food consumption, actually come to lay increasing stress upon slimness and refined

eating, and become increasingly censorious of coarseness and fatness. Middleclass groups like teachers, rich in what Bourdieu terms 'cultural capital' if not in economic capital, are seen as maintaining distinctiveness by cultivating tastes for exotic and foreign foods. In contrast, members of the working class put a greater emphasis on indulgence, spend a higher proportion of their income on food, and consume larger quantities of bread, and fat-rich foods like pork, milk and cheese.

Bourdieu sees these differences in dietary preference as also related to differences in each class's perception of the body and of the effects of food on the body. Of central significance in this respect is the working-class emphasis on the importance of the strength of the male body, hence an emphasis on cheap and nutritious food to build and fuel such a physique. This stands in sharp contrast to what Bourdieu regards as the professional classes' emphasis on tasty, health-promoting, light and non-fattening foods. These ideas are closely bound up with working-class conceptions of masculinity in relation to the actual act of eating. Men are seen as larger, needing more food and as eating in gulps and mouthfuls, and hence foods which require picking and nibbling (e.g., fish) are seen as unmanly, as essentially feminine and suited to the needs and inclinations of women (Bourdieu 1984:190–2).

Of course, differences in eating patterns related to social class are not static, they change over time. Such changes may be driven by cultural processes, as higher social groupings develop new tastes and preferences in order to maintain their distinctiveness from the strata below them, but they are also a function of fundamental political and economic changes. A useful case study of class-based nutritional change is provided by Nelson (1993), who examines long-term trends in British diet over the period 1860 to 1980. Nelson bases his analysis on household data drawn from budget surveys. While he acknowledges the limitations of such data, he is able to outline the broad features of the changes in class differentials which have been under way. For example, he demonstrates that in the latter part of the nineteenth century the dietary differences between the highest and the lowest strata in Britain were extreme ones, with the poorest in the population living barely above subsistence level on a meagre diet of bread, potatoes and limited amounts of fats (usually butter or dripping), and small amounts of meat (usually pork or bacon). These low-income diets were low in energy, protein, fat, calcium and vitamins A and C, but high in carbohydrate and fibre. In contrast, the diets of families in the middle and upper ranges of the class structure contained more eggs, fish, meat, sugar and fat and were richer in calcium and vitamins (Nelson 1993:103-4).

However, the twentieth century has seen a scries of significant shifts in this overall picture. Government food policies during the First World War produced some temporary narrowing of class differentials in nutrition, and during the 1920s and the 1930s there was a gradual narrowing of differences. However, the most dramatic changes occurred during the Second World War, when government rationing policies, which were introduced in response to food shortages, effectively lowered the intake of many food items among upper-income groups and increased the intakes of lower-income groups, producing striking convergences. What is more, after the Second World War and the end of rationing, this narrowing of class differentials was maintained, due largely to rising real incomes and to the state's welfare policies. Indeed, not only were narrowed differentials maintained but, in the case of certain foodstuffs, there was actually an inversion of the previous relationship, with items once consumed in greater quantities by higher-income groups now being consumed at higher rates by lower-income groups and vice versa.

These changes can be illustrated by looking at specific examples. In the case of bread, flour and grains, consumption of this group of foodstuffs has been in chronic decline in lower-income families throughout the twentieth century (except for a brief rise during the years of the First World War). In higher-income groups consumption actually rose, but then began to decline in the 1930s. In 1980 the high-income group in Nelson's data consumed approximately 2 lb per person per week, and the low-income group approximately 2.5 lb. The figures for 1900 were approximately 3.3 lb and 5.6 lb, respectively. In 1860, middleclass families consumed mainly white bread, whereas lower income groups ate mainly brown or wholemeal. However, due to innovations in milling, by 1900 cheap white bread had become a working-class staple. Since 1970, the amounts of brown and wholemeal bread consumed have once more increased, but with an inverted class relationship. In 1980 the highest of Nelson's income groups ate 6.85 oz per person per week, compared with 4.25 oz per person in the lowest group (Nelson 1993:105–6).

Meat and meat products show a dramatic convergence pattern. In 1900 the high-income group as defined by Nelson consumed an estimated 54 oz of meat and meat products per person per week, as compared to a figure of 20 oz for the low-income group. But by the early 1940s these two figures were virtually identical at around 25-6 oz per week. After the Second World War both increased, but hardly diverged, to give 1980 figures of roughly 42 oz (highincome group) and 38 ounces (low-income group) per person per week. Fish and eggs show the same convergence of inequalities in consumption, to the point where an inversion occurred for both foodstuffs in the 1960s and 1970s, with consumption in the low-income group overtaking that in the high-income groups. Convergence from a position of inequality of consumption also occurred in the 1940s in the case of fats and of sugar, syrup, treacle and jam. By the 1960s low-income group consumption of sugar, syrup, treacle and jam actually exceeded that of the high-income group, and by the 1970s the low-income group had overtaken the high-income group in fat consumption. These shifts are clearly reflected in Nelson's data for overall average per capita energy intake. In 1900 the energy intake for the high-income group is estimated by Nelson to have been around 2,750 kilocalories per person per day, substantially higher than the low-income group at around 1,650 kilocalories. Virtual convergence was achieved in the 1940s, and the 1980 data show both groups at just over 2,000

kilocalories, with the low-income group's figure actually marginally the higher of the two. Thus, the evidence presented by Nelson (which also covers nutrients like vitamins and minerals) appears to suggest that gross nutritional inequalities between classes in developed economies like the UK have been largely removed, although some especially vulnerable groups or individuals may still experience nutritional deprivation.

However, while overall convergence can be demonstrated in terms of broad estimates of nutrient intake, the question inevitably arises as to whether there remain significant ideological and cultural differences between classes in relation to food, as Bourdieu's analysis would predict. To throw some light upon this issue we can turn to the work carried out by Calnan and Cant (1990), which consisted of an exploratory qualitative study based upon households made up of married couples or couples living as married, with at least one partner in paid employment. Their response group consisted of twenty-one households which can be termed 'middle class' (drawn from what the authors refer to as social classes I & II) and sixteen households which can be termed 'working class' (drawn from what the authors refer to as social classes IV and V). Households were sampled on the basis of a community survey carried out in a local district in southeast England. The study does indicate that there are a number of underlying similarities between middle-class and working-class families with respect to food and eating. For example, the two groups appeared to have similar shopping patterns and, in both classes, women were primarily responsible for food shopping and cooking. What is more, it was largely upon wives that the responsibility for 'healthy eating' appeared to fall, although the authors note that women in both class groups faced considerable difficulties in introducing 'healthier' foods into the household, due to resistance from other family members (Calnan and Cant 1990:59).

However, some significant differences between the two groups did emerge. For example, in connection with views concerning healthy eating, far more middle-class than working-class women had purchased 'healthy diet' items, such as margarine high in polyunsaturated fats, wholemeal bread and semi-skimmed or skimmed milk, in the week before the interview. What is more, when respondents were encouraged to discuss the issue of the link between diet and health, working-class women tended to refer to the specific health problems of particular members of their family. On the other hand, middle-class women were more likely to refer to a more generalized form of health knowledge consisting of ideas drawn from sources like books and the medical press. Interestingly, however, concern with weight loss, dieting and calorie counting was mentioned more frequently by working-class than middle-class women.

As might be expected when comparing two groups in significantly different positions in the socioeconomic hierarchy, there are clear contrasts in food-related spending patterns. For example, the middle-class families spent a markedly lower proportion of their disposable income on food (an average of 20 per cent) than did working-class families. The latter spent, on average, 30 per cent of their

disposable income on food, a disposable income which was itself on average only about 60 per cent of the middle-class figure. While all the working-class women reported careful budgeting of food expenditure (with some flexibility for treats or money shortages), this was not the case for the middle-class women. In general, they did not work on the basis of a fixed food budget, and felt that if they overspent they could readily have access to further funds. Interestingly, however, although working-class women appeared to be more price conscious, neither group was particularly enthusiastic about the practice of 'shopping around' to take advantage of bargain food prices, as this was seen as excessively time-consuming. Not surprisingly, the price consciousness and strict budgets of working-class women meant that they put a greater emphasis on cost as a factor affecting food choice than did the middle-class respondents, who tended to stress food quality as the main selection criterion. Some striking differences emerged when respondents were asked what foods they would like to purchase but could not actually afford. Working-class women tended to mention 'highstatus' meat (red meat in the form of joints, steak, etc.), whereas middle-class women were more likely to mention what they regarded as luxury items, including exotic foods and elaborate prepared dishes.

There also appeared to be an important difference between the two groups in relation to the processes of food choice and food-related decision-making. Calnan and Cant's results suggest that the middle-class husbands were much more directly involved in food selection and food purchasing decisions than were the husbands in the working-class group. In the middle-class families this was more likely to be a joint process, whereas in working-class families the husband's influence was more indirect, it being more or less tacitly assumed that the wife was responsible for buying food and preparing meals which suited her partner's tastes. Attitudes to cooking also exhibited a significant class-related difference, despite the fact that in both groups it was seen as essentially women's work, with men usually involved in cooking only in specific circumstances (e.g., at the weekend or when the wife was ill), rather than taking it on as a routine responsibility. In fact, working-class women were much more likely to express the view that cooking was an important skill for a woman to possess. Among the middle-class women this view was much more rarely expressed, even by respondents who rated themselves as good cooks.

Calnan and Cant's study (1990), despite its admittedly small scale and its essentially qualitative nature, does strongly suggest that in urban communities in contemporary developed societies class continues to exert an important influence upon patterns of eating and upon nutritional beliefs and practices. The proportion of income spent on food, the financial management of food expenditure, attitudes to 'healthy eating' options, the nature of household decision-making and views on women's feeding work skills are all apparently sensitive to variations in social class. Broadly speaking, the working-class families in the sample seem to have remained closer to what might be regarded as 'traditional' or relatively long-standing ideas concerning the linkages between food, health, status and gender.

Consideration of class-based differences in nutritional attitudes and practices inevitably raises a further question. How do those at the bottom of the socioeconomic hierarchy of contemporary society fare? What are the effects on these beliefs and practices when choices and possibilities are tightly constrained by poverty? A number of studies, British and American, are available to provide us with some direct empirical evidence on the implications of low income for food choices and eating patterns. For example, Charles and Kerr, whose major study of food and families has already been discussed above, in the course of their main survey, came across seventeen families who were living on state benefit and whose incomes were, by contemporary British standards, very low. The authors subjected this sub-sample to detailed scrutiny and published these results in a separate paper (Charles and Kerr 1986a). Of these seventeen lowincome households (all of which contained at least one pre-school child, given the design of the main study), ten were headed by a female single parent, six were made up of women living with an unemployed male partner and one was headed by a woman whose husband was in prison at the time of the interview. On average, these families were spending approximately one-third of all the income coming into the household on food (a figure marginally higher than the 30 per cent estimate made by Calnan and Cant (1990) for the food expenditure of their working-class response group). Although, in a sense, food expenditure was seen as a protected, priority area, with economies being made first in such areas of expenditure as heating and clothing, respondents reported reductions in the consumption of items such as fresh fruit, take-away meals, milk and desserts.

However, the area of economy and reduced consumption which was most frequently mentioned, and which appeared to generate most concern for these women, was meat. This was a specific form of meat: the joints, steaks and chops which qualify as the centre-piece of a 'proper meal'. Alternatives like mince, liver and belly pork had been taken up, but these were seen as less desirable substitutes. Like the rest of the sample, these low-income respondents subscribed strongly to what appears to be one of the cornerstones of the dominant British food ideology, the idea that the 'proper meal' represents the foundation of sound nutrition for the family. Hence, a strong sense of deprivation was reported by respondents who could not provide 'proper meals' on the regular basis they deemed necessary. Significantly, however, where a male partner was present in the household, there was a much higher frequency of proper meals (or 'cooked dinners' in Murcott's terminology). This was the case, even though it might well mean that as a result less money was available for food items like fresh fruit, milk and cereals. Charles and Kerr report that women saw the presence of a man as creating a 'proper family', and hence the need for 'proper meals'. In fact, the authors argue, in nutritional terms, women tended to privilege men at their own and their children's expense (Charles and Kerr 1986a:245). Overall, because of their low income, these families found it extremely difficult to maintain

adherence to the dominant food ideology's insistence on the proper meal. In a very real sense, they found themselves in a position where 'they could not live up to the social and cultural standards which are an accepted part of family life within British Society' (Charles and Kerr 1986a:427). Thus, it becomes clear that the food-related penalties of living on a low income in contemporary developed economies are as much a question of social and cultural deprivations as nutritional ones.

Quite clearly, the insights offered by Charles and Kerr are based upon a relatively small group of low-income respondents who happened to come to the researchers' attention in the course of a larger-scale, more general study. However, information concerning the food-related ideas and choices of low-income families is also available from such studies as that conducted by Dobson, Beardsworth, Keil and Walker (1994), which take such issues as the main focus of attention. Dobson and her co-workers carried out a qualitative analysis of the nutritional practices and ideas of a group of forty-eight low-income families, using a combination of individual interviews, expenditure diaries, food consumption diaries and, where feasible, combined family interviews. Their response group was made up of a mix of families with children. Some were families which had just begun to receive state benefits (income support). Some were families who were long-term recipients of such benefits (that is, had been in receipt of income support for more than twelve months) and others were low-income families who were not receiving such benefits. The study itself was carried out in a large industrial city in the British Midlands.

One of the study's main findings was that the families who had been living on state benefit for longer periods had effectively adapted their expenditure patterns and lifestyles to their restricted circumstances, and were less likely to experience financial crises than new benefit recipients. What is more, food expenditure proved to be one of the few areas where many of these families had any elasticity or flexibility in their budget. In some weeks their already minimal expenditure on food would be reduced in order to meet a pressing bill or some unanticipated expense. Coping with financial adversity was achieved through extremely strict budgeting, which was carried out largely by women, who also were mainly responsible for food shopping and preparation in all these families (as one might expect). What is more, these women adopted a number of strategies to deal with the problem of their limited resources. For example, the researchers noted that the less money a family had to spend on food, the more frequent was food shopping. Thus, in extreme cases, food shopping was carried out on a daily basis, on the principle that, if more than one day's supply of food was in the house, the extra was likely to be eaten, creating a shortage on subsequent days. Food shopping patterns were also heavily biased towards local discount stores, as opposed to the more desirable large supermarkets with their wider range of more prestigious food products. In addition, many women reported using the strategy of doing the food shopping alone, in order to keep strict control of expenditure and to avoid arguments over what should be bought

and impulse purchases by other family members. Processed and frozen food products were often bought, as these were calculated to be cheaper overall than preparing dishes from fresh ingredients.

Also strategically significant was the maintenance of relatively conservative eating patterns. The logic behind this stance was a simple but compelling one: women often would not risk trying to introduce unfamiliar foods or dishes into their family's diet (either for health reasons or as an economy measure), since if the novel item was rejected, this would involve a substantial element of wastage which could seriously disrupt an extremely tight food budget. Interestingly, DeVault's Chicago study also noted this reluctance on the part of poor families to experiment with unfamiliar food items. This arose out of a fear that the results would be unpalatable and hence lead to unacceptable wastage, although in this instance reference was being made to dubious bargain items of suspect quality (DeVault 1991:178–9). Coupled with this nutritional conservatism was a form of enforced commensality that many families adopted, since they could not afford to cater for the differing tastes and divergent needs of individual family members. Having the whole family eat the same meal at the same time was an important economy measure in itself.

The relatively conservative approach to eating indicated above, however, has wider implications than its function as a means of avoiding waste. It was clear from the interview material presented by Dobson and her colleagues that for these families it was of paramount importance to maintain conventional eating patterns as far as possible. By and large, they were not willing to introduce farreaching changes into their diets in a radical attempt to obtain sufficient nutrients at a drastically reduced cost. As we have argued elsewhere (Beardsworth and Keil 1993b) even though it is feasible to derive all one's nutritional requirements from an extremely simple, low-cost diet, to subsist on such a diet would involve being, in effect, a kind of nutritional deviant, a violator of basic Western cultural assumptions about the contents and combinations that go to make up orthodox meals. For these low-income families, the effort expended in order to maintain conventional eating patterns was worthwhile, in so far as it helped them to maintain a sense that they were still in touch with the mainstream of consumer culture. This desire manifested itself most clearly in relation to children. For example, although they could rarely if ever afford to provide food for others outside the family (e.g., by inviting guests), many mothers sought to avoid their children's becoming isolated from their peers by being unable to accept and reciprocate invitations to eat at friends' homes. Thus, special planning and savings would be undertaken so that invited friends could be offered a conventional array of snack foods and branded products. In one particularly poignant case, a mother described how she usually poured low-cost cola into a Coca-Cola bottle before serving this to her son's friends, to avoid his being teased by his brand-conscious young guests. In a similar vein, mothers regarded it as important that their children should be able to take conventional snacks and packed lunches to school, in order to avoid the public stigma of poverty.

The food-related deprivations suffered by these families were primarily those associated with a lack of access to preferred, higher-status foods. What is more, particular strains were imposed upon women, whose task it was to cope and to adapt, and to try to protect other family members from the consequences of economic privation. For women, food shopping became a tiring and demoralizing chore, and large amounts of time were spent seeking competitively priced items. The very act of food shopping appeared to serve as a constant reminder of their poverty, of the desired items they could not afford. Shopping, one of the key leisure activities of consumer culture, could not be enjoyed but only endured. Similarly, many women reported that the constant worry over food budgeting and economizing actually meant that they derived little pleasure from eating. For the family as a whole, having to eat together could be a source of tension and a reminder that the household did not have the resources to provide the individual choice and flexibility that are seen as becoming the norm in more affluent households. However, in a sense, these families are examples of relatively successful adaptations to the constraints of feeding a household on a very restricted budget, and it was not uncommon for respondents to express some pride in their ability successfully to manage the feeding of the family in such circumstances. Indeed Sharman (1991:180) notes a similar pride in feeding and nurturing the family in deprived conditions in her study of low-income households in a large city in the northeastern United States, based upon the analysis of life histories.

The above discussion of the impact of low income on food consumption and nutritional practice is essentially based on data derived from families located in urban households. There is a temptation to assume that low-income families in rural settings, families with close connections to the processes of food production, might be in a relatively advantageous position, possibly benefiting from direct access to agricultural produce of various kinds. However, as an image of the position of agricultural workers and their families in a modern, developed society, this may be a somewhat misleading picture. Indeed, Newby (1983) demonstrates that in certain circumstances such families may actually be at a disadvantage compared with their urban counterparts. Newby's study is based upon participant observation carried out while living with a farmworker's family in Suffolk, in eastern England. What Newby is able to show is that farmworkers employed by large commercialized food production units are just as effectively alienated from the fruits of their labour as is the typical factory worker. This family had no privileged access to produce and its situation was very far from anything like self-sufficiency. Despite the fact that the family did grow some vegetables and kept two goats for milking, its actual eating patterns were essentially the same as those of an equivalent low-income urban family. There was the same repetitive and conservative pattern of food consumption, the same obligatory commensality, the same gender division of labour and the same assumption that adult men require larger portions (an assumption more obviously appropriate in this setting, given the nature of farmworkers' energy expenditure).

In other words, there was nothing distinctly rural about this diet (Newby 1983:33).

However, what was distinctly rural about this family's predicament was the cost penalty it bore in relation to food purchasing. The nearest shops were in a town 2 miles away and since the family could not afford to run a car, these had to be reached by bicycle, apart from a monthly 'stocking-up' visit, when bus transport was used. Food prices in this small town were significantly higher than those in large supermarkets. However, the nearest of these was in Ipswich, and reaching it by bus involved so time-consuming and expensive a journey that the family was unable to take advantage of the lower prices. The family was thus aware of a puzzling contradiction. Although their 'breadwinner' was deeply involved on a day-to-day basis in the production of food, the family actually paid considerably more for their food than did the urban dweller, who lived far removed from the toils and vicissitudes of agriculture. In fact, Newby's respondents admitted that they were baffled by this contradiction, which the author explains with reference to the fact that they could see only the two ends of the commercial food chain at first hand (initial production and eventual retailing of processed and packaged food items). What they could not see, and therefore could not comprehend, was the monolithic and increasingly vertically integrated structure of modern agri-business. As we have already noted when considering the making of the modern food system, the manufacturing, distribution and retailing of food have been increasingly concentrated into the hands of a relatively small number of very large firms. Since the aggregate added value of these processes greatly exceeds that generated by production itself, these firms have achieved a high level of dominance in a marketplace which emphasizes diversity of choice, convenience and attractive packaging. In such a marketplace, low-income families, rural as well as urban, find themselves marginalized, often clinging tenuously to the mainstream of nutritional culture.

OVERVIEW

With the diverse material discussed in this chapter we have sought to demonstrate the complex ways in which nutritional activities and family life interact. Thus, while eating patterns reflect family processes, at the same time, family relationships and family boundaries are expressed and reinforced by the day-to-day routines of provisioning, preparation and consumption. Similarly, the division of labour with respect to feeding work reflects gender inequalities and male dominance within the family. At the same time, the obligations imposed upon, and by and large accepted by, women to take primary responsibility for such work have been seen as serving to perpetuate their effective subordination, a subordination which has been characterized by some of the writers whose work we have considered as having fundamentally oppressive or even violent undertones.

Clearly, food choices and eating patterns are influenced by broader social class inequalities, with those at the lower end of the socioeconomic hierarchy struggling with financial deprivations and experiencing severely restricted access to the wide range of food items and dietary options on offer to the rest of the population. However, as we have seen from the ideas of writers like Bourdieu, nutritional differences between social classes are not only reflections or manifestations of their economic and cultural inequalities. Such differences, in the form of refined tastes and cultivated preferences, become vehicles for maintaining the distinctions between the layers of the social hierarchy. What is more, these distinctions are reproduced from generation to generation as the processes of nutritional socialization shape the individual's exposure to and experience of the dishes, food items and food ideologies characteristic of his or her location in the wider social order.

Some of the limitations of the studies discussed in this chapter have already been mentioned, for example, the strong tendency on the part of investigators to rely heavily (and often exclusively) on the evidence provided by women respondents when attempting to build up a picture of food-related beliefs and activities within the family setting. In many instances, this tendency reflects an explicit intention to give priority to women's views and women's experiences, on the grounds that in the past these have been all too often neglected by social scientists. Furthermore, since it is a consistently observed fact of life that women bear most of the responsibility for feeding work in the domestic sphere, in terms of economy of effort it clearly makes sense for the researcher to use women as informants. Yet there is a distinct possibility that significant bias can be introduced in this fashion, when conclusions are drawn and generalizations put forward concerning the dynamics of an entire household on the basis of the accounts of just one of its members. The accounts of husbands or partners, and of younger and older children, must become the focus of increased research attention if our view of food and the family is to become a more rounded and complete one.

When sociological attention is being focused on eating in the private domain (as opposed to eating out in the public domain), there is a widespread assumption that this essentially involves examining the dynamics of the nuclear family, conventionally composed of parents and their children. The bulk of the research carried out in this area is founded on this assumption, and this in turn is reflected in the contents of this chapter. However, this basic assumption is one whose relevance to future research in this area needs to be subjected to critical questioning. The nuclear family represents specific phases in the life cycle of any given individual. Admittedly, these phases are of crucial importance (for example, he or she will be undergoing primary socialization and also may be responsible for the primary socialization of his or her offspring). However, many other household types exist. For example, households containing a single person, households made up of an adult couple (married or not, different sex or same sex), households made up of a nuclear family plus other relatives, households made up of extended kinship groups and households made up of groups of individuals not related by kinship at all. In fact, there are numerous possible combinations, and each combination is likely to exhibit a variety of food

selection, preparation and consumption patterns which may cut across conventional assumptions concerning gender differentiation and class differentiation, for example. Thus, in households consisting of an adult couple, both of whom are in full-time employment, might we expect traditional assumptions concerning the gendered nature of feeding work to be less binding and less closely adhered to? In households consisting of unrelated adults (students, for example) we might ask how shopping, cooking and eating are organized—whether collectively or individually—and how such groups negotiate their feeding arrangements and their household division of labour.

It also needs to be recognized that the distribution of household types has been changing consistently in recent decades. Thus, in the UK in 1979, 31 per cent of all households consisted of the classic nuclear family, that is, a married couple with dependent children (Thomas, Goddard, Hickman and Hunter 1994:21). Overall, in that year, 49 per cent of the total population of the UK lived in such households. However, by 1992, such households had declined to 24 per cent of the total, and contained only 40 per cent of the population. In contrast, single-person households over the same period rose from 23 per cent (containing 9 per cent of the population) to 27 per cent (containing 11 per cent of the population). Other household types also showing increases over this period are those containing a lone parent with dependent children and those containing couples with no children. The picture is a similar one in the USA. Between 1980 and 1992 the proportion of households made up of married couples with children under 18 declined from 31 per cent to 26 per cent, to a point where they contained just 41 per cent of the total population (a figure virtually identical to that in the UK). Over the same time period, the number of households made up of lone women with children under 18 went up by 29 per cent, and those consisting of lone men with children under 18 rose by 108 per cent. Single male households rose by 41 per cent, and single female households by 29 per cent (U.S. Bureau of the Census 1993). These far-reaching shifts in household composition seem to represent underlying trends which are likely to persist. The implication must be that if we wish to develop a more complete sociological insight into domestic nutritional activities, the whole spectrum of household types will need the attention of researchers.

Even within the nuclear family household itself changes are clearly under way. The increasing involvement of women in the labour market has resulted in a steady increase in the demand for, and the supply of, convenience foods. The use of such products, the components of what we have already termed the 'convenience menu', has the potential to produce fundamental alterations in the nature of feeding work within the family, especially when linked to innovations in food manufacturing and food preparation (the increasing domestic use of microwave ovens being an obvious example of the latter). Such possible changes include a shift towards a more co-operative and less gender-differentiated mode of allocating feeding work, and towards much more personalized patterns of eating, where individual family members increasingly make their own idiosyncratic food choices and time their eating to co-ordinate with their own personal schedules and priorities. If such possibilities really do represent the future development of eating within the domestic sphere, then the eclipse of more traditional notions of commensality and the symbolic significance of proper meals could be seen as holding the promise of lightening what has been seen as the oppressive burden of feeding responsibilities borne by women. What is more, such changes would also imply the gradual breakdown of the allegedly conservative influence of the dominance of the husband's tastes within the setting of the family. This, in turn, would imply an enhancement of the permeability of the boundary between the family and the outside world, which would render it increasingly susceptible to the influences of such agencies as advertisers, health educators and food propagandists of various kinds.

Of course, the above discussion is, of necessity, a somewhat speculative one. Future developments will depend upon the outcome of the complex interplay of two opposing sets of forces. On the one hand, there is the braking effect of customary food ideologies and long-established nutritional practices which can command habitual, almost taken-for-granted obedience. On the other hand, there are the change-inducing effects of underlying demographic, economic and cultural trends. Describing and explaining this interplay, and monitoring its outcomes, will represent a major task for sociologists working in this area over the next few decades.

The restaurant is the tank in the warfare of cookery because it has always been a major instrument for smashing old eating habits. Take-away food is the guerrilla of cooking.

(Zeldin 1983:147).

Such dramatic assertions raise expectations that the analysis of some, if not all, kinds of eating out will present major contrasts with the patterns of eating at home considered in the previous chapter. For the most part, studies of the household emphasize the important contribution of patterns of food preparation and serving in maintaining traditions, particularly stability of food choice, in setting reassuring boundaries between members of the household and others, and providing a means of social communication and identity and a constant reaffirmation of the existing divisions of labour and power hierarchies within the family. However, before it is possible to make any assessments as to whether eating away from home is different from eating at home, and the extent to which Zeldin's assertions are justified, it is necessary to consider information about a series of relevant issues. For example, it is important to clarify what is meant by 'eating out', how and why opportunities for eating away from home emerged, became established, were organized and staffed and, perhaps the most intriguing issue, what we know of how such opportunities are used, perceived and experienced by consumers.

From the point of view of the late twentieth century, it is easy to imagine all the activities which might take us away from home, and which might entail our being compelled or choosing to find something to eat. We could consume anything ranging from a snack to a full meal, and it could be eaten with friends or family in their homes. However, even if we did not have any social contacts, we could still eat. In most situations in our society, access to a wide range of food would be readily available, providing, of course, that we were able to afford it. It is the kind of food made available for money, from commercial outlets such as shops, take-aways, fast-food and other restaurants, that has been identified as a twentieth-century 'revolution' in our eating habits (Gabriel 1988:7). The identification of these commercial food outlets also draws our

attention to the fact that the food sold is eaten in public rather than in private and that it is likely to be eaten alongside, but not with, strangers.

Comparisons with the past suggest that there are differences of degree as well as of kind in the balance between public and private eating. It would not be possible to argue that there was no market for food outside the home before modern times, but it was a relatively undeveloped market and most food would have been provided within a framework of social obligation rather than as a commercial transaction. In all the social anthropological and historical accounts of traditional societies there is strong emphasis on the importance of hospitality. Such hospitality would be extended to travellers (many societies had particularly strong culturally defined obligations to welcome strangers). Neighbours too, often identified in terms of lineage and kinship, would be invited to share food, often on the occasions of feasts. Some of the meals recorded in the anthropological literature were spectacularly generous, involving the preparation of foods which took time and were scarce and therefore valuable. One of the most dramatic and well-recorded examples is the 'potlatch' held by American Indians who lived along the northwestern Pacific coast from Oregon to Southern Alaska. The potlatch host not only provided a feast for other members of the group but also gifts of food and other goods which were distributed to the visitors when the feast was over. Indeed, gifts and feasts were often closely interconnected and indicated the ways in which the welcome to neighbour and stranger was embedded in a framework of social relationships. The potlatch was a regular occurrence and, without any formal or explicit calculation, there would be an approximately equal balance of gifts and feasts between those involved. In other words, the feast locked members of the society into a pattern of reciprocal obligations. Social anthropologists have identified the latent and manifest functions of such obligations, amongst them the sharing of current food surpluses (particularly of perishable foods) and the provision of a virtual guarantee that they, in turn, would benefit from feasts with others when their own supplies were short (Farb and Armelagos 1980:176-90). The network of social relationships within which such feasts were set brought many social and economic benefits, but ruled out as totally inappropriate any calculation or payment at the time when they occurred. Of course, the importance of food as a means of expressing social solidarity continues to be recognized in modern societies. 'Sharing food is held to signify "togetherness", an equivalence among a group that defines and reaffirms insiders as socially similar' (Mennell, Murcott and Van Otterloo 1992:115). The bond created by eating and drinking together operates in a wide range of social contexts. There are formal dinners, even feasts, to mark political agreements and, linking private lives with the transition to new social statuses, there are wedding 'breakfasts' and celebrations which involve food for birthdays and other occasions of symbolic significance. As in traditional societies, there is no explicit calculation of cost or notion of payment, but there is a recognition of reciprocal obligation.

EATING WITH OTHERS: THE DEVELOPMENT OF TABLE MANNERS

The evidence of the continued importance of kinship connections when away from home suggests that the first experience of eating away from home was likely to have been as the guest of others in their homes. Visser (1993) turns her attention to the 'rituals of dinner' and focuses on how we eat and why we eat as we do. She argues that, given all the effort of acquiring food, eating it should be the easiest part but we 'cloak the proceedings with a system of rules about places and times to eat, specific equipment, decoration, sequence, limitations of movement, bodily propriety' which are not a biological necessity but a 'carefully cultured phenomenon' (Visser 1993:ix). Paying particular attention to the European and American tradition, she analyses current and historical material to consider why rules were established and how rules are taught. She draws attention to the ways in which table manners force us into ever stricter control of our bodies and the implements for serving and eating food, and illustrates the process by discussing all the stages associated with eating out at the invitation of others in their home. Visser's underlying theme is to argue that such controls are necessary because eating together, and sharing such a valuable resource as food, is potentially dangerous. Violence could erupt at any time and table manners are social agreements devised to defuse such a possibility. Just as weapons are not brought to meals in traditional societies, modern societies have rules about cutting and the style and placement of knives which reassure us, at however deep a level, that we are in safe company. However, at the same time, it is recognized that table etiquette relies on both training and knowledge so that table manners may be used to serve a class system and to reinforce snobbery. Visser acknowledges and documents the fact that the presentation of food and associated table manners change, and gives as an example the shift, which began in the eighteenth century and was virtually completed by the end of the nineteenth, the change from service à la française to service à la russe. The social consequences of this shift were considerable. Service à la française was a meal pattern which involved two servings of a large range of food (before and after the 'remove'). Such display was a feast for the eyes of guests as well as nourishment, and good manners demanded that they helped themselves and others (by directing servants) to any of the dishes on display. She suggests that this pattern, where the guest must be active in choosing, remains in buffet meals and in airline food (Visser 1993:197). Service à la russe was a meal pattern which involved a succession of dishes with lots of courses. Guests are helpless and passive and are always served. In contrast with the earlier pattern of selection, the same food is offered to all. There is less display of food and more emphasis on the equipment for service-platters, place settings and table decorations. Visser's account makes it quite clear that each pattern had important consequences for the behaviour of hosts and guests.

The direction of such changes was examined by Elias (1978a), one of the first to attempt to analyse the social significance of something as 'everyday' as table manners. Elias sees the history of manners as part of the 'civilizing process'. Central to the study is the identification of modes of behaviour considered typical of Western 'civilized' man in the twentieth century. If such a person could be transported to the past, say to the fourteenth century, it is certain that he would recognize the prevailing behaviour as quite different and more unrestrained than our own. He might find it repulsive or attractive, but would definitely notice a difference. Elias sets out to investigate what changed and how the change occured or, in Elias's terms, how Western Europe became 'civilized'. Elias makes a specific study of the transformation of behaviour in relation to manners through the study of texts (beginning with that of Erasmus in the fifteenth century, which was dedicated to the son of a prince) written for the instruction of high-born boys on 'outward bodily propriety'. The guidelines are highly specific: for example, do not stare at others and take care over dress. Readers are also advised to wipe their noses, to use clean knives for food, not to make belching or other noises, not to slurp food, to consider others, and so on. Facial expressions are argued to be the expression of the inner person and should be controlled to indicate appropriate attitudes. Changes in the focus of such texts indicate 'gradual civilization' through changes in feelings of shame and delicacy as society demands and prohibits different manners. There is a move from unrestrained and spontaneous behaviour towards socially instilled displeasure and fear. We become increasingly self-conscious and less impulsive, always concerned about how we appear to others. Elias argues that these changes reflect broader changes in the links between society and the individual, together with a process of distancing between adults, and between adults and children. In psychological terms, Elias argues that these changes indicate the formation of the superego. Explanations of the historical changes which encouraged the development of such civility towards others, and the civilizing process itself, are, Elias argues, associated with state formation and centralization as well as with the state's monopolization of force which began in the fourteenth century and continues into the twentieth.

The important lesson to be learned from these writers for the analysis of eating out is that the changes they describe continue to the present day to influence our table manners and behaviour with others. We learn to handle cutlery and other equipment, together with ways of being considerate to others, which vary according to whether we are hosts or guests. We have moved from the situation where food is not a topic of conversation because we eat food appropriate to status and respectability to a context where food is always a topic of conversation as we seek to select that which displays taste, respectability, knowledge and a 'search for marginal differentiation' (Mennell, Murcott and Van Otterloo 1992:4). We learn to control the way we sit, talk and eat at table. In addition, just as in the times described by Elias and Visser, if we are uncertain about how to conduct ourselves, we can consult books on social etiquette.

THE BEGINNINGS OF COMMERCIAL PROVISION OF EATING FACILITIES

In the context of well-established patterns of mutual obligation which persist even in the most modern societies, the question arises as to why it was necessary for a market in the provision of food to arise. Part of the answer appears to lie in the process of modernization itself, in particular, the gradual breakdown of the importance of kinship and social obligations based on status ascription, combined with the process of urbanization. When individuals and groups, no longer tied to their local regions, were free to travel throughout large geographical areas or to be away from their homes in an urbanized context and when there was, as a consequence, no longer any guarantee of being able to link with kin, we see the beginnings of eating out on a commercial rather than a reciprocal basis. There are examples from widely different societies and historical periods. The Romans, for example, had a highly developed system for selling food and drink on a commercial basis in their cities. There were also hostelries along the roads of the empire to provide food and lodging for any traveller who could afford the charges. In another imperial setting, China, the earliest records show there were inns providing both food and accommodation for travellers, often officials on imperial business, as well as stalls selling food to those who worked away from home in the larger towns and cities. There are even records, from the T'ang dynasty which reigned over the Chinese empire from AD 618 to 907, of the existence of restaurants offering meals as part of the enjoyment of leisure rather than as mere necessity (Farb and Armelagos 1980:232). The records also show that in many societies there were food sellers of every sort, who set up on the occasions of markets and fairs or wherever large numbers of people gathered. All these are 'modern' in the sense that they catered for all who could pay (and operated in a cash economy) rather than for those who had some call on the resources of their kin, however distant, when away from home. For most people, however they did not form a major part of the experience of eating.

Apart from the sales of food at markets and fairs and the sale of ale at inns, commercial eating out in Europe developed relatively slowly. Until the end of the feudal period, a high proportion of the population was tied to the land and had no opportunity to travel. Travel for the sake of it was rare and those who did travel, often on official business of one kind or another, were able to claim hospitality from the kin of their masters at their manors, or they stayed at inns. Other travellers, such as pilgrims, were provided for by the religious houses on the routes to shrines and other centres of worship. It is interesting to note that although there was a Christian duty to be charitable, such charity was aimed at the poor, so that staying at religious houses was not necessarily at no cost. Pilgrims were supposed to be self-supporting and to make contributions for their keep. Except for members of the nobility, who might be offered more privacy, both food and accommodation at these religious houses were very simple and offered little choice. With minor variations, all shared the food

available that season or from store. Merchants and others who needed to move from place to place often stayed at religious houses too, and some houses, located in important centres of pilgrimage or trade, eventually separated the care of travellers from their day-to-day activities by establishing inns run on commercial lines. Indeed, Medlik (1961) goes so far as to argue that the dissolution of the monasteries in England in 1539 set in train changes which encouraged more rapid development in the range and quality of provision, in that it was part of the break-up of the feudal system and encouraged movement to the towns.

With the breakdown of feudalism and the growth of towns, many more were free to travel either locally or over large distances. Such changes precipitated the development of existing provision and the establishment of new types. Whilst the grandest travellers still looked to their kin to house and feed them on their journeys, those without such contacts would stay with local households willing to take lodgers overnight, or in inns. In both cases, travellers would share whatever food and accommodation were available. Inns and lodging houses increased in number and size as demand rose. However, it was in the cities that entirely new opportunities for eating away from home for pleasure, as much as necessity, developed. One of the earlier examples which is relatively welldocumented is the establishment of the coffee house in the seventeenth century. Coffee had been introduced to Europe in the early seventeenth century but took some time to become popular. However, according to Visser, 'The birth of cafés in the late seventeenth century in Europe was one of the prerequisites for the growth of modern city life' (Visser 1993:123). Their contribution, she argues, was in providing a non-hierarchical, or even anti-hierarchical, location for meeting and discussion where those present could not be 'placed' in a social sense. In both Paris and London special coffee shops opened near theatres as places for conversation (Leclant 1979). However, they developed in each society in rather different ways. In France, the café continued as one of the most popular locations for food and drink and continued to be open to all, whereas in England the coffee house became associated with work as well as leisure, a place where men could drink coffee, read newspapers (at that time too expensive for individual purchase) and transact some kinds of business. For example, Lloyds coffee house was where insurers met, particularly those involved in marine insurance, and the organization of Lloyds 'names' remains to the present day. In England, particular coffee houses became so exclusive that they eventually became gentlemen's clubs. The term 'café' was also used and, to some extent, paralleled the development in France as a place open to all levels of society. However, there were exceptions, for example, very grand establishments such as the Café Royal were frequented by the very rich and, at the other end of the social scale, cafés attracted the working classes (and became more likely to serve tea than coffee). Interestingly, the term 'coffee house' was used by the temperance movement in the second half of the nineteeth century for the eating places provided for the working classes as an alternative to public houses where alcohol was sold (Harrison 1971). Possibly because they tried to 'improve' as well as feed their

customers, they were not very successful and did not last much beyond the 1890s. However, the new style coffee houses did something which public houses of the time rarely did: provide a wide range of food, from full meals to what we would now call snacks. Girouard (1984) argues that, as a consequence, they reinforced the pattern of eating out amongst the working class and contributed to the success of cafés, which were 'straightforward, unambitious and useful' and did not try to improve their customers. He also argues that they precipitated change in public houses which, in the face of such competition, were forced to provide food as well as drink. Some, like their twentieth-century counterparts, even started to serve coffee (Girouard 1984:205–6).

The provision of commercial facilities for eating out accelerated during the nineteenth century. Freeman (1989) provides a vivid historical account of the Victorians and their food. She describes the food sold at markets and at fairs and by street-sellers. For example, in London, street-sellers sold food to take home or eat on the spot: hot eels, pea soup, fried fish, pickled whelks, nuts, apples, cakes, potatoes, roast chestnuts and, later, ice-cream. Cows were kept in St James's Park and milked to order. Fresh food in season, for example, fruit, was brought in from the countryside. However, more formal eating out did not develop to any great extent until well into Victoria's reign, largely because

[since] eating out was looked on as a matter of necessity rather than pleasure, most establishments were utility rather than luxurious, and fashionable restaurants in the modern sense did not exist–fashionable dining being a matter of eating in (in the sense of in private houses) rather than out. (Freeman 1989:179)

In addition, opportunities for eating out were radically different for men compared with women. Middle- and upper-class men could dine at their clubs, which were the nearest equivalent to restaurants, or at a handful of relatively high-class taverns. Freeman (1989) gives examples of one at Greenwich which specialized in serving fish and one in the City which was so famous for its turtle soup that customers could visit the basement and view the live turtles before eating. Taverns were noisy places, where waiters called out what was on offer and shouted the orders to the kitchen. It was not acceptable for ladies of standing to visit such places; the only public places where they could dine respectably were at inns and hotels, and even then they probably followed the custom, which earlier had been the rule for both sexes, of taking their meals in private rooms. For the growing middle classes working in the cities, the cheapest eating places were initially the coffee houses, which were perceived as 'worthy and conservative' (Freeman 1989:273) eating places for those whose work kept them from home. Coffee houses offered some of the earliest 'takeaways' in that people at work could send out to a local coffee shop for food to be delivered to them. The development of railways and linked suburban housing meant that commuters were able to travel considerable distances to work. The distance

travelled, and the time workers spent away from home, gave yet further impetus to the development of places to eat lunch at all social levels and all prices.

Change and expansion also came with the development of the tourist as well as the commuter trade. Larger and smarter hotels were built, often associated with and near railway stations. Simmons (1984), in his study of the development of the Victorian hotel, argues that the new London hotels built in the 1850s and later were quite different from the inns of earlier periods for several reasons. Firstly, they offered choice and a fixed tariff of prices. Even more importantly for their subsequent development, they offered opportunities for respectable women to dine in public and be seen in the public parts of the hotel (in ways which had always been available to men) rather than in the 'purdah of privatesitting rooms' (Simmons 1984:10). Indeed, he comments that 'Hitherto the whole world of inns and hotels, still more of eating-rooms, in London had been a man's world' (Simmons 1984:9). Interestingly, these new hotels, in London and elsewhere, checked rather than encouraged the development of independent restaurants, because guests were expected to eat in the hotel as well as to stay there. Particular hotels became associated with famous chefs (for example, Escoffier and the Savoy hotel) and reinforced them as centres for prestigious eating out. Such hotels also prevented the development of the type of hotel already common in the rest of Europe, offering just rooms or rooms with breakfast only. It was argued that, since the English insisted on elaborate cooked breakfasts, hotels must employ kitchens and staff and these could only be profitable if they were used to prepare other meals, too (Simmons 1984:20).

Mennell, Murcott and Van Otterloo (1992:81–3) argue that the restaurant as a social institution was, to some degree, a product of the French Revolution. Eating places open to the public existed in Paris before the Revolution. However, the social upheaval and its consequences for the collapse of the French aristocracy increased the availability of skilled professional cooks, who had formerly worked only for specific aristocratic houses. They opened dining rooms where they continued to prepare food to the highest standards (haute cuisine), this time for those who could pay. At its most elaborate, these chefs produced food of a range and quality which would have been impossible in private homes without a great deal of money to spend on ingredients and a large kitchen staff. However, Aron (1975) documents the development of a range of restaurants to suit all levels of expenditure. The restaurants which gave the middle and upper classes some insight into the quality and style of aristocratic dining are viewed by Mennell (1985) as part of a process of the democratization of luxury and an attack on privilege, with the restaurateur as someone who made accessible to the lower orders secrets from superior classes. Since 'Britain forgot how to cook at the time of the Enclosures and the Industrial Revolution' (Driver 1980:170), it was French cuisine which set the standard all over the Western world, though Driver (1983:89) adds the rider that the preference might have been as much for its expense and exclusiveness as for its taste. The social groups who were willing to

pay for *haute cuisine*, Driver argues, were also the people who bought various guides to good food when eating out.

Driver emphasizes that styles of public eating vary and restaurants flourish for a range of reasons. In France, the public restaurant was a by-product of the Revolution; in mid twentieth-century Britain, of imperial decline' (Driver 1980:178). Driver writes about the rise of immigrant cuisines as the 'collision of food worlds' (1980:73) and suggests that they can be considered as either a triumph or a tragedy: as a triumph because they offered cooks and eaters access to many major culinary civilizations (Chinese, Indian and Middle Eastern, and later Italian), and as a tragedy because of the contempt which could be shown between 'native and newcomer'. Driver makes the comment that interest in these new cuisines did not initially arise from foreign travel (it is sometimes argued that many British people abroad insist on traditional foods), but from the opportunity to eat cheaply in ethnic restaurants (which also offer informality and extended opening hours). Such ethnic restaurants, together with other types which also offer informal modes of dining (for example, vegetarian), can provide a 'tentacle of taste, extended laterally to global foodways that lie outside the British tradition' (Driver 1980:176).

Mennell (1985) argues that these changes carried with them a shift in the balance of power in favour of chefs and against the paying customer. Some chefs achieved fame and fortune not only through their restaurants but through their writing on cooking and cuisine. Often these books became regarded as the classic statements on French cookery and guides for subsequent training of new chefs. Examples are Careme and Escoffier in nineteenth-century France and Soyer, whose career was mostly spent in England but who was French-trained. Mennell also argues that these chefs shaped the menus and practice of the twentieth century, which rested on a wide range of ingredients, a large kitchen with a high degree of specialization and a standard of presentation which would be virtually impossible for the amateur cook. In due course, there were reactions to the dominance of this model of the restaurant, for example, the enthusiasm for country recipes and provincial styles of presentation. In the twentieth century, perhaps the most spectacular challenge came from nouvelle cuisine, associated with the name of Paul Bocuse. The emphasis on fresh ingredients (determined by what was available at market that day), the minimum of cooking and awareness of health considerations, made for meals which could not be planned in advance or produced on a large scale. Significantly, the practitioners of *nouvelle cuisine* were mostly chef-proprietors who created dishes in a highly individualistic manner. Wood (1991) describes the development of the nouvelle cuisine restaurant in terms of the 'shock of the new' and argues that this cuisine is a type of cooking of increased refinement, where the 'producer' continues to dominate. However, the fact that there are barriers to routinizing and incorporating *nouvelle* cuisine suggests that it is not the last word in the refinement of taste. For Wood, nouvelle cuisine:

is a social construct rather than a culinary one, reflecting the narrow concerns of, and changes within, the middle-class. Nouvelle cuisine is the fish and chips, hamburger, pizza and pancake of the middle-classes. It may become an integral part of the culinary scene but it will always be on the periphery of 'serious' food and eating, remaining far more interesting for its sociological, rather than gastronomic, significance.

(Wood 1991:337)

The nineteenth century is associated with the development of one of the most popular street foods: fish and chips. Walton (1992) provides a detailed account of the trade's economic, social and political relevance. Walton acknowledges that little is known of the origins of the fish and chips, which became established in the form we know today before the end of the last century. Ironically, Walton concludes that this 'great and quintessentially British institution' (Walton 1992:1) probably arose from ethnic diversity, when Jewish migrants to the East End of London fried the fish left over from fresh fish vending, for sale in the street to eat immediately or take home. Walton also argues that fish and chips, whether eaten in the street or taken home, was initially and continues to be, for the most part, food for the working classes. Buying fish and chips to eat out was always seen as rather 'common'; it had little appeal to the middle classes because of the smells, dubious hygiene and rough behaviour said to be associated with it. Walton also suggests that this may be part of the reason why the industry was neglected by historians. He shows that the growth of fish and chip retail outlets, particularly as they emerged from their down-market, backstreet origins to respectable locations with improved hygiene and strict controls on their operations, stimulated considerable capital investment. Such expansion introduced sophisticated technology and became an important component of the national fish trade and the demand for potatoes. There is also evidence to suggest that fish and chips was an important element in the regular diet of a large proportion of working-class families and that there was a constant debate amongst those concerned with the nutritional standards of the poor as to whether the dish was a healthy contribution to working-class diets, or part of secondary poverty induced by incompetent use of limited resources. The supporters of fish and chips, who included some medical practitioners, argued that the dish offered good food value at low cost. As part of the food eaten at home, it was one of the earliest convenience foods for working wives: easily accessible, highly palatable and time-saving. In addition, the food did not demand investment in expensive domestic technology. Not all working-class people considered it respectable to eat fish and chips in the street from newspaper, although the dish was a popular street food for people coming out of cinemas and public houses. In the 1940s researchers for the Mass Observation organization noted that sales of fish and chips fluctuated with the closing times of pubs (Mass Observation 1987).

Walton (1992) also draws attention to the social functions of the fish and chip shops. They were centres of gossip and sociability and, in contrast to many of

their higher-status equivalents, welcomed women and children. In the interwar period, when many shops were refurbished, they were associated with warmth and comfort. They were also associated with courting, particularly for adolescents, where calling for fish and chips marked the end of an evening out. The lack of general appeal to the middle classes is highlighted by accounts of the exception: Harry Ramsden's. Harry Ramsden built his fish and chip 'palace' in the Yorkshire countryside in the 1930s, complete with seating for 200 in a restaurant which was carpeted and lit by chandeliers. He succeed in attracting large numbers of the middle classes who could afford to travel to his restaurant by car. However, his success rested on having the custom of both the 'upmarket' trade and the regular daily orders from the local mill workers. As incomes rose, other restaurants, for example those in department stores, hoped to attract the skilled working classes to their stores and to the experience of eating out in restaurants. To complaints from the independent fish fryers, who resented the competition, the stores' restaurants began to do this by including the ever popular fish and chips on their menus. Fish and chips also became available in works canteens.

Studies from the United States argue that there the development of commercial facilities for eating away from home was similar but more rapid than in the UK. The essentially rural character of much of the country meant that commercial developments were concentrated in the cities and on the coast. For example, Pillsbury (1990:13) asserts that 'Most colonial Americans never dined in a restaurant even once'. Their experience of eating away from home would have been at noncommercial social gatherings or in the homes of others at weddings and funerals. Travel for pleasure was rare and was seen as the prerogative of the very rich; travel for business would involve staying at taverns, inns or boarding houses where facilities were basic and there was little or no choice of food or accommodation. There were restaurants (specializing in selling food for consumption on the premises) at the beginning of the nineteenth century and it was these, together with the coffee houses already established in the larger cities, which expanded to meet the demands of the 'mercantile age'. For Pillsbury, it was the industrial revolution of the late nineteenth century that brought about 'a new set of operational assumptions and parameters' (1990:33) to meet the demands of the growing urban centres with their 'unparalleled need to feed the multi-shift factory workers at all times of the day and night' (1990:37). The boarding houses and taverns, with their fixed times of eating, were insufficiently flexible and the need was met by street vendors and then by 'diners' (wagons where patrons could sit whilst eating) which became more and more sophisticated in their design and provisions. From the 1870s onwards, demand was met by 'new restaurants for a factory age' (Pillsbury 1990:48) which included lunchrooms, cafeterias and diners, often supplied with quality foodstuffs by the fast and efficient railways.

It was at this time that the hamburger became part of the basic menu offered (with the first reference to a 'hamburger steak' as early as 1834, although the first hamburger sandwich was recorded much later in 1916). The first quarter of the twentieth century saw the rapid growth of all kinds of catering and the

establishment of chains, both regional and national, and the development of franchising. Eating away from home from choice during leisure time became popular amongst the middle and working classes at this period, particularly when car ownership became more widespread. The 'drive-in' concept was developed in the 1920s and along with all catering outlets in residential neighbourhoods (where they were associated with pleasure rather than work). 'These new stores targeted the discretionary food dollar, not the work dollar. They represented pleasure not a necessary evil' (Pillsbury 1990:77). Pillsbury attempts to make sense of a situation where the choice of eating out facilities was so great that 'chaos rules our palate' (1990:3) by drawing a distinction between body food (to fuel the body) and soul food (to serve the inner person). Each is a matter of time, money and intent and, in the late twentieth century, it is possible to have the choice. 'The restaurant is simply a place where, for a fee, one may dine away from home; a modest concept which has taken on literally thousands of expressions in the world around us' (Pillsbury 1990:225). In sum, he sees the restaurant as a mirror of its society. This echoes the concluding comments of Farb and Armelagos (1980:266), who noted that, in responding to the new rituals of eating based on automobiles, television, technology and efficiency (which cut across previous religious affiliations, ethnic loyalties and class allegiances), we make choices which are cultural statements, and that our eating patterns are reflections of contemporary social formations.

Levenstein (1988) identifies a special factor in the expansion of commercial facilities for eating out in the United States: the prohibition on the public sale of alcohol in 1920. This destroyed the ascendancy of French cuisine in the higheststatus restaurants (because it was virtually impossible to cook many of the dishes without wine or to enjoy them without an accompanying wine). It also undermined such restaurants economically, in that many of them had relied on the profits from their alcohol sales to subsidize the provision of high-quality food. However, the catering industry expanded at other levels, providing for the growing numbers of men and women of the middle classes who worked and ate a midday meal away from home. The new lunchrooms, tearooms and selfservice cafeterias provided low-cost food served quickly. They also offered respectable places for women workers and shoppers to eat, something which had not been available in the era of the dominance of restaurants and hotels. Women's food preferences for light snacks and salads also shaped the menus offered to workers, whilst American rather than French cuisine featured in the restaurants more geared to the leisure trade. Levenstein (1988:192) argues that these changes had a considerable impact on the pattern of employment in that 'most food preparation could be accomplished by unskilled, barely trained, cheap, male labor'.

The period of dramatic expansion, particularly of chains and franchise outlets, is documented by Carlioro (1994) in tracing the 'odyssey' of eating out over the seventy-five years up to 1994. Whilst many of the chains whose histories he describes are great business success stories and have become household names,

Carlioro also identifies the risks and uncertainties of the commercial sector of catering provision. Following the financial and organizational strategies of earlier successes does not necessarily guarantee further success. There is evidence of both spectacular failures and a continued enthusiasm on the part of new entrepreneurs for trying to meet the demands of a public whose willingness to spend cannot always be evaluated—entrepreneurs who may be faced with unexpected costs such as health care for their employees (Carlioro 1994:190). Although, as Carlioro points out, in spite of economic depression, world wars and the unpredictability of the dining public, the history of the restaurant industry in America is one of resilience and expansion.

'BEHIND THE SCENES': EMPLOYMENT IN THE CATERING INDUSTRY

In his study, Walton (1992) also addressed the issue of the fish and chip shop as a small business. The pattern varied over time, but Walton argues that owners were usually located at the margin of the lower middle and upper working classes, recruited from skilled and supervisory labour. The shop was sometimes a supplementary source of income where one or more wage earners worked outside the home. Typically, the shop was a small family business rather than part of a chain. Husband and wife often worked together with heavy dependence on child labour. In contrast to some of their more modern competitors, they remained small-scale, labour-intensive operations.

Clearly, the provision of food for those at work or at leisure makes work, and there has been a series of attempts to analyse the work of those 'behind the scenes' (Mennell, Murcott and Van Otterloo 1992:85). The literature available varies according to the work undertaken. For example, cooks and chefs as a group are under-researched although there is a range of literature about cooking and waiting occupations. Such literature varies in its focus from analyses of tensions within the kitchen from a management perspective (Whyte 1948) to the study of catering as an example of routine, semi-skilled work (Gabriel 1988). In addition, Wood (1992) reviews this and other literature in his study of the 'hospitality industry' of hotel and catering work. In contrast, and more recently, Adkins (1995) has discussed the special character of service work, particularly its gendered organization. There is also literature about food workers, particularly waiters, as part of the illegal economy (Mars 1982). All agree that many jobs in catering are stressful and poorly paid, with little training and low expectations amongst workers, and often with high turnover of staff. There is often little mutual understanding between cook, waiter and customer, which Driver (1980:153–5) puts down to the complacency of large commercial organizations which claim that they rarely receive complaints. Even the highest-status personnel, chefs and cooks, have a long training with relatively poor pay and see themselves as artists unappreciated by their patrons (Mennell, Murcott and Van Otterloo 1992).

Gabriel's (1988) study is an attempt to make up for some of the gaps in our knowledge about working lives in catering. The preface states that 10 per cent of British workers are catering employees and are part of the service sector, which accounts for 62 per cent of all jobs. Yet the area has been described as the 'stepchild of economic research' (Gabriel 1988:6). He argues that the expansion in catering jobs reflects changes in eating and drinking habits over the past twenty to thirty years in terms of what is eaten and where and how it is prepared. The central features of change are the growth of consumer interest in take-away meals, fast food, health food, ethnic restaurants, cafés, wine bars, and haute cuisine restaurants. In the past it has been acknowledged that these enterprises are, by their nature, labour-intensive. However, the trend is towards the industrialization of service and the substitution of labour by machinery and technology. Such changes have come through the availability of frozen foods and routinized production so that cooks become 'material handlers' and waiters become 'interface workers'. With fascinating prescience, Gabriel even writes (1988:4) of the 'McDonaldization of the Economy' but does not pursue the social consequences of such a process.

Gabriel's own field research covers a range of situations in which food is prepared: a traditional mass catering unit in a hospital, the modern frozen food unit in a community centre, a fast food chain, a traditional fish and chip restaurant, a kebab house and a gentlemen's club, using interviews to reveal the diversities and similarities of the working lives which are described. The chapter headings ('Home cooking for thousands', 'The cooking factory', 'The fun food machine', 'Craft cooking for gentlemen', 'The small independent restaurant or café: the price of independence') touch on the analysis of gendered work in the service sector, but the chief focus is indicated by the title of the concluding chapter, 'Conclusions: keeping the lid on', which emphasizes the similarities, not differences, between these workers and other workers. In the context of economic depression and fear of unemployment, these workers are argued to be trapped in jobs with poor pay, variable job satisfaction (with the cooks and private dining room workers having highest and the others very little) and little economic power as workers. These themes are echoed and developed by Wood (1992) in his account of work in hotels and catering. Drawing upon a considerable literature about the hospitality industry, he confirms the lack of empirical data but argues that there is sufficient in what exists to support the general agreement about the low level of rewards for work which is often both insecure and carried out in unpleasant conditions. Wood discusses the problems of high levels of labour turnover, the frequent lack of collective organization in regard to pay and conditions, de-skilling and the demand for flexibility from the work-force, and the lack of appreciation from the customer for services provided. In his concluding observations, Wood (1992:163 5) considers the possibility of a future where the exploitative relationships of work in hotels and catering will produce a hospitality industry in which most employees will work for a brief time only, as one phase in their movement towards a career in some other part of the economy.

Mars (1982) includes hotel workers amongst his potential 'cheats at work' in that they operate in a work setting which provides them with motives and opportunities for 'fiddling'. His analysis of 'covert reward systems' covers four job categories (designated 'hawks', 'donkeys', 'wolves' or 'vultures'), each with structural characteristics in common and broadly similar opportunities to rob, cheat, short-change and 'fiddle' in transactions with customers, employers, subordinates and the state. Waiters are placed amongst the vultures, in that they need the support of a group but act on their own 'at the feast'. They are linked to the common base, depending on support and information from colleagues, but still being competitive and acting in isolation. The waiter gets formal rewards (basic pay) with informal rewards ('free' meals, accommodation, tips) and potentially illegal 'alternative' rewards in the 'black economy', through access, for example, to pilfered food and opportunities to short-change customers.

Adkins (1995) raises more directly the links between the public and the private domains and the special character of service work. She focuses on the gendering of the contemporary labour market, in particular the processes through which power relations between men and women in employment are constituted, specifically in paid work in the service sector associated with leisure. The nature of service work is discussed and, in particular, how and in what way service work differs from other forms of wage-labour relations. Adkins argues that, unlike other kinds of work, service work cannot be understood in terms of economic rationality alone. She agrees that the imperatives of management are economic rationalization and standardization. However, some autonomy must be allowed to the service provider to ensure that the specific requirements or situations of customers can be accommodated. Such autonomy is not ad hoc but has the important social function of the maintenance of 'normal conditions' (Adkins 1995:6), since service work is not just fixed outcomes and rigid controls but also the (re)production of the social structure. The processes of mediation and normalizing are central to understanding the dynamics of service work, including employment relations. Where there is spatial and temporal proximity between production and consumption, services for customers/clients/guests have to be delivered in the same place and at the same time as produced. In other words, Adkins argues, in service work the quality of the social interaction between the provider and the consumer of the service becomes part of the product. As a consequence, the cultural expectations of consumers regarding service provision have particular significance in structuring the form of service delivery, and hence employment relations, because consumers are buying a particular kind of social experience. Thus, the social composition of 'frontline/ high-contact' workers becomes part of what is sold. Race, age, gender all become relevant in recruitment and employers intervene in areas of dress, speech, behaviour and training. In other words, it is recognized that service employment may involve carrying out what Adkins identifies as 'emotion work' in relation to customers. Even though it is difficult to get accurate data because service workers are often working in non-standard kinds of employment (for example, part-time,

casual or temporary), estimates support the view that frontline consumer service work is typically carried out by women. In 1991, 81 per cent of all employed women worked in service occupations and in 1990 70 per cent of the total hotel and catering work-force was female.

Adkins's field work was undertaken to explore the gendered dynamics of service employment in the context of a leisure park and amongst hotel and catering managers. Data were collected on the gendered structure of employment, the construction of work relations and the significance of sexuality. The analysis suggests that these service workers, particularly the women, were operating in a more complex framework than other workers (Adkins 1995:144). Far from existing outside the domain of employment, both family and sexual relations played a significant role in structuring gendered work relations within the labour market. In the case of management in hotel and catering, work relations (or relations of production) within the occupation were shown frequently to be organized by the patriarchal relations of the family. For example, husband and wife were hired as a 'team', yet the husband directly controlled the wife's occupational work, to the benefit of employers, even though the wife had no wage-labour agreement or contract. The wives worked under the marriage contract in a family mode of production, organized in a patriarchal way. In the leisure park, there was patriarchal structuring of waged-labour. To get a job, most women (regardless of occupation) were required to fulfil conditions which related to the production of an 'attractive' female work-force, which included expecting and dealing with forms of 'sexual objectification from men customers and men co-workers' (Adkins 1995:145). It is emphasized that only women had to carry out such 'sexual work' in order to have the opportunity to exchange labour in the marketplace. 'Men and women were constituted as different kinds of workers within these workplaces, even when they were located in the same jobs' (Adkins 1995:147). To be workers, women had to be 'attractive' and carry out forms of sexualized work, whereas men did not have to do this. Women not only had to take orders, serve food and drinks and clear tables, they also had to provide what Adkins sees as 'sexual services' for men, both customers and coworkers (for example, by smiling, looking flattered, entering into jokes, etc.). It is acknowledged that such interaction was not always unpleasant. However there were cases of dismissal where women had resisted conventional asumptions about their behaviour. Adkins' analysis challenges and invites a reinterpretation of a range of studies of restaurant work and of the selection and training of workers in various types of food outlets.

CONTEMPORARY PATTERNS OF EATING OUT

The USA is often used as an indicator of what is likely to become the pattern in the UK. McCarthy and Strauss (1992) report on a survey about the 'Tastes of America 1992'. After a drop in 1990, the amount spent per week on eating out continued to increase. However, although spending was up, the frequency of dining out had declined. 'Customers often see eating out as a treat—and, as the survey shows, they expect the service they receive to live up to that perception' (McCarthy and Strauss 1992:25). For example, 70 per cent were reported as eating at 'full service' restaurants to celebrate a special occasion. The survey polled 4,000 households and 2,502 responded. Almost all (98 per cent) had eaten out during the previous month. Typically, households ate out 9.42 times a week with adult males eating out 4.68 times a week on average, compared with 3.76 for an adult female and 4.16 for 'child/teen'. Married couples with two incomes and at least one child spent most per household, with singles under 30 spending the most per capita. Healthy eating, such as ordering salads, was often offset by also ordering french fries, although the evidence indicates an increase in orders for grilled rather than fried chicken.

Although not directly comparable with the American material, a useful overview of the pattern of eating out in the UK is provided by Payne and Payne (1993). Since the authors are writing for the business community, they are concerned to highlight the features of the market, consumer attitudes and the prospects for the 1990s. They emphasize the growth of the market, calculating that the consumer catering market (excluding institutional catering but including drinks consumed with meals) was worth $f_{16.6}$ billions in 1992, an increase of 69 per cent on the figure for 1986. Even taking into consideration the recession, they argue that the long-term trend is for real spending on eating out to increase (and for it to increase as a proportion of consumer spending overall). Compared with 109,471 in 1980, they identify 124,900 catering businesses in the UK in 1990. The great majority of these businesses (120,168) operated in the consumer catering sector and the number of actual outlets was around double that figure. Public houses were the most common type, with around 70,000 outlets (twothirds of them serving snacks and meals at the bar and 40 per cent having a restaurant). Change has occurred with franchising increasing in importance and a nationwide network of outlets being built up by catering chains. In addition, in-store restaurants have changed as shopping centres grow in number and with them food courts, offering a range of food from a number of counters.

Payne and Payne (1993) draw upon the National Food Survey to show that in 1990 the average number of meals taken outside the home totalled 195 per person, of which 100 were consumed at lunchtime. People with higher incomes, and Londoners, were the most likely to eat out. They also report on the Economist Intelligence Unit survey of consumer attitudes to and patterns of eating out of a sample of 1,000 people aged 16 and over (see Table 5.1)

A detailed analysis of the results showed that: people aged 55 and over and those in the 'DE' socioeconomic groups were considerably less likely than others to have eaten out in the previous 12 months. Pubs, hotels and fish and chip shops showed a broad-based popularity; other 'English' restaurants, Indian restaurants, French restaurants and roadside diners showed a strong male bias; ethnic restaurants were preferred by those in the younger age groups, while pizza houses, French restaurants and vegetarian restaurants displayed a strong

Type of outlet	Respondents (all adults) (%)
Pub	60
Hotel	31
Chinese	29
Roadside diner	28
Pizza	24
Indian	24
Fish and chip restaurant	23
Steakhouse	21
Other 'English' restaurant	16
American style	16
Italian	16
Wine bar	8
French	7
Greek	7
Vegetarian	4
Other	6
None of these/don't know	13

Table 5.1 Types of restaurant meals eaten during the last twelve months (1991)

Source: Adapted from Payne and Payne (1993:iii)

upmarket bias. Regional results varied greatly but Londoners were far less likely to have eaten in a pub and considerably more likely to have eaten in ethnic restaurants (Payne and Payne 1993:iii).

Respondents were also asked their main reasons for choosing a restaurant. In descending order of importance they were quality of food, value for money, range of menu, attentiveness of service, overall atmosphere, the welcoming of families, availability of parking and convenience of location. The first two factors were considerably more important than any other. For an ordinary meal most people aimed to spend less than $\pounds 10$ per head, for a special meal they would spend between $\pounds 10$ and $\pounds 40$.

On the basis of their study, Payne and Payne predict that there will be the further spread of systems catering (i.e., chains with a standardized menu and format), food courts and themed restaurants. Two significant factors– convenience and health–will also continue to be influential, with convenience expressed in terms of the growth in home delivery (and intense competition between suppliers) and the health influence reflected 'in an increased offering of salads, low fat food, vegetarian meals and, perhaps, fresh and healthy ingredients' (Payne and Payne 1993:iv). They also predict that ethnic food will become more popular, with more ethnic restaurants and an increase in non-ethnic restaurants offering some of the most popular ethnic dishes. Writing about Britain, Jones (1985) also predicts intense competition amongst fast food companies, with a small number of large operators continuing to dominate the sector. Farb and Armelagos (1980:197) argue that, on the one hand, national cuisines are basically conservative and that successful developments (for example,

the expansion of fast food outlets with limited menus which give the assurance of familiarity) support this view. On the other hand, they also recognize that new foods are constantly being added and suggest that national cuisines can be flexible in exploiting novel cultural and environmental resources.

SOCIOLOGICAL ANALYSES OF CONTEMPORARY EATING OUT

Wood (1992) draws attention to the fact that, typically, sociological concern has been on 'domestic dining' rather than on dining out, even though dining out is experienced and enjoyed by all except the poorest members of society. Drawing upon a range of studies, Wood estimates that there are about 231,750 'commercial catering outlets' in Britain (including hotels, restaurants, public houses, commercial travel catering, major fast food chains, cafés and take-aways, and club, leisure and entertainment catering). In addition, there are 72,610 outlets in non-commercial catering (including staff canteens, health care catering, education and public service catering). He alerts readers to the fact that the term 'eating out' can be misleading in that a substantial proportion (about two-thirds) of the meals served in the cafés and take-aways, which represent 18 per cent of meals served in the commercial sector, are consumed on a take-away basis and may well be eaten at home. He also draws attention to the fact that dining out as an ancillary activity (for example, food eaten when out shopping) may have a different symbolic significance from that of dining out as a leisure activity in itself. Wood identifies these issues as part of an agenda for sociological research. He also advocates the further exploration of the family and gender dimensions of food choice as experienced in the public domain.

Mazurkiewicz (1983) had already identified the relevance of gender and argued that not all food outlets are equally accessible to men and women, although more research is need to document these differences in detail. She focuses on women's access to and use of the facilities and services in the commercial sector of the hotel and catering industry in the context of reports concerned with the failure of this sector to cater for female customers, particularly female business travellers. In contrast to those who see the problem as one of inadequate marketing, Mazurkiewicz makes the case that there are social barriers to women's use of hotel and eating out facilities. Women's defined location in the private sphere of the home, their prescribed roles and expected behaviour patterns, and male domination and control of women in the public areas of life, combine to generate social barriers which exclude unaccompanied women from public places. These patterns are reinforced by the managerial strategies of hotels and public houses which respond to female customers in terms of such stereotypes.

Finkelstein (1989) offers an analysis of dining out as 'a sociology of modern manners'. The focus is on the 'ordinary'. Dining out, she argues, is very popular and it has been estimated that by the close of the twentieth century two-thirds of

all meals in the United States will be purchased and consumed outside the home. Finkelstein's study is an attempt to examine dining out for the presuppositions and concealed values it contains. The starting-point is the popularity of restaurants and the ways in which their use might reflect changing family patterns and, in particular, changes in the functions of the nuclear family. However, it is not possible to argue that restaurants are used because they save time during the working week, because restaurants are actually busier at weekends. Nor can it be argued to be a question of physiological pleasure from consumption because there is sometimes distress from overindulgence and also a willingness to eat junk foods when out. So there is a need to explain why people derive such pleasure from eating in the public domain. Clearly this is more complex than mere eating and represents a range of meaningful activity. Finkelstein suggests several possibilities: pleasure in the sense of occasion; an opportunity to demonstrate our knowledge of how to behave; participation in a form of entertainment and spectacle through visual images and imagined atmosphere. In sum, these are all aspects of 'bourgeois sensibility' of self-the opinions of others, the appearance of wealth and being in control. Dining out may be viewed as the convergence of the private and the personal with the public and social. There are even different restaurants for different moods (for example, McDonald's for family unity, a bistro for romance) as well as 'waves of style' in fashions of dining out (Finkelstein 1989:3).

However, Finkelstein argues against the popular view that dining out is an expression of individuality, choice, spontaneity and that we select restaurants for food and price in ways which demonstrate our discrimination and what we value and desire. On the contrary, dining out has the capacity to transform emotions into commodities which are made available to the individual as if they were consumer items. The styles of interaction encouraged in the restaurant produce an 'uncivilized sociality'; the restaurant makes dining out a mannered exercise, disciplined by customs in a framework of prefigured actions. We act in imitation of others, in accord with images, in response to fashions, out of habit, without need or thought for self-scrutiny. Far from being in control, we are relieved of the responsibility of shaping our relationships with others. For Finkelstein (1989:8), this provides an extension of Elias's analysis, in that, for her, civility refers to exchanges between individuals who are equally selfconscious and attentive to each other, who avoid power differentials, and do not mediate exchanges through status and prestige. Civility is not unthinking obedience to habit and custom but intentional exchange (even if it is sometimes difficult, conflictual, raucous). It is reflected in the degree of engagement required of those who interact. It follows that if people are being used to serve selfinterest, then there cannot be civility. For example, the business lunch is not the setting for civilized exchange, even if the hidden agenda is known; it is merely a pretence of cordiality.

Finkelstein comes to the thought-provoking conclusion that restaurants have structural characteristics which make the social exchange there inherently

uncivilized. There is artifice and pretence, diners are under close surveillance from waiters, they are guided through the menu so that the waiter is between food and eater, wine waiters subdue the diners and establish boundaries and hierarchies and assure diner discomfort. The restaurant owner greets and guides in ways which enhance control. Dining out is mediated through money and engenders callous and calculative orientations. Finkelstein is aware that this is not the way diners perceive the dining out experience. They may well view it as a pleasure, highly convenient and entertaining, with social formulae which make it easier to act without thinking. However, she wants us to be aware that the underlying processes she describes are linked to the rise of modern bourgeois culture and the 'democratization of luxury' argued by Mennell (1985). Dining out gives license to take pleasure where there is no sense of accountability or personal history, since it takes place amongst strangers. It is democratic and open to all with money, so remote from the everyday that it permits the confident presentation of self. The restaurant is part of the entertainment industry in Westernized societies and is concerned with the marketing of emotions, desires, states of mind. Finkelstein (1989) identifies a paradox: as with all leisure activities in modern society, dining out weakens participation in the social area even as it appears to increase such participation. By offering social formulae for relationships with others, it prevents the development of what Finkelstein (1989:5) terms 'the examined life' expressed as a civilized awareness of others.

From a somewhat different theoretical starting point, Ritzer (1993) analyses what is perhaps the most characteristic type of eating out in the second half of the twentieth century: 'fast food', which can be either eaten in a restaurant or taken away. There are many outlets and chains currently, each competing to become a household name. Ritzer (1993:30) gives an account of the first fast food restaurant opened by the two McDonald brothers in 1937 in Pasadena, California. Their established restaurant had experienced high demand at specific times (for example, workers' lunchtimes) and they responded with a circumscribed menu (burgers) and were able to serve large numbers at high speed and low price. The assembly line procedures, with food preparation and serving made into simple repetitive tasks, combined with a specialized division of labour for each stage, have been recognized as constituting the first 'fast food factory'. In 1954 the brothers moved and followed the same pattern in San Bernardino, California. They continued to prosper but were merely a local sensation until visited by Ray Kroc, an enthusiast for scientific management. It was he who suggested the idea of franchising which led, eventually, to expansion world-wide. The particular franchise package used retained centralized control, maintained conformity throughout the system and gave the company a return on all sales. Such rationalization of the fast food business through uniformity in production, a standardized menu and systematic staff training provided customers with a guarantee of a familiar setting and the same quality of food prepared in the same way wherever they ate at McDonalds. The demand in the USA and internationally for such eating out seems insatiable and, as Ritzer says,

'the rest is history'. He argues that developments in fast food were possible because of the processes of formal rationality already in place, such as scientific management, assembly-line work, the mass-production of cars and homes and the development of centres for shopping, parts of which became 'amusement parks for food', where both the setting and the food on offer were guaranteed to be familiar and unchanging. In addition, families, particularly those with children, could eat without anxieties about cutlery, tableware and the disapproval of other customers. Interestingly, in terms of Elias's notions of civility, this is an example of 'uncivilized' behaviour. However, Ritzer also makes us aware that such efficiency, predictability and control extends to control over the customer. Fast food is served so that the customer is encouraged to leave and make room for the next person. There is little choice and the food served has been criticized by nutritionists for being high in calories, fat, salt and sugar.

Ritzer goes on to argue that rationalization (or what he terms 'McDonaldization') is not only characteristic of fast food but also of society in general and is becoming an all-embracing feature of life. He makes a case for education, commerce, industry and medicine all being influenced by the push towards higher profits and lower costs. Such pressures can only be countered by individual subversion or by circumstances in which post-Fordism has lead to greater diversity of provision and hence more choice. Ritzer makes it plain that he wishes to encourage such responses. For example, he mentions the importance of eating seasonally and, along with others (for example Driver 1980), advocates 'slow' rather than 'fast' food (Ritzer 1993:184).

OVERVIEW

The foregoing discussion has indicated some of the ways in which eating occasions are situated in a complex social space. Eating events can clearly be seen to be located at points upon a number of dimensions. For example, we might identify a dimension which has eating events shaped by personal social obligations and relationships at one end and, at the other, eating events articulated by a commercial nexus between a consumer and a service provider. We can also recognize a dimension which ranges from informal eating situations only loosely constrained by culture and convention to formalized, highly structured eating events. Finally, this chapter and the previous chapter have indicated that, in an important sense, there is also a continuum linking domestic food events at one end and public food events at the other, and that there is not necessarily a simple dichotomy between 'eating in' and 'eating out'.

The studies discussed in this chapter indicate the changes which have occurred and the continuities which have remained. The commercialization of eating out was a consequence of the breakdown of traditional social relationships, particularly those of feudalism, and the growth of towns and cities. Such changes, which accelerated after the industrial revolution and the separation of home from work, had far-reaching consequences for the organization of both employment and domestic life. Economic resources and socioeconomic position continue to exert a powerful influence upon patterns of dining out. However, despite the somewhat pessimistic assumptions of authors like Finkelstein and Ritzer, at whatever level one eats out there has been a significant expansion in the range of choice. Depending on the context and cuisine chosen, eating out may be either similar or radically different from eating at home. The very diversity of contemporary opportunities for eating out challenges conventional ideas about resistance to change being at its strongest in relation to what we eat.

Part III

FOOD, HEALTH AND WELL-BEING

CHANGING CONCEPTIONS OF DIET AND HEALTH

The linkage between diet and health is an inescapable fact of life. However, in some senses this linkage can be a complex and subtle one, and clear causal pathways may be very difficult to establish, whether by time-honoured intuitive techniques or by the sophisticated, systematic methods of modern science. Thus, while this link is widely recognized in human culture, there are seemingly endless variations in the ways in which it is conceptualized and in the ways in which such conceptualizations are translated into actual beliefs and practices. However, as a starting-point it is useful to see conceptualizations of the relationship between diet and health as having two opposed aspects: positive and negative. The positive aspect is based upon the idea that certain food items, combinations of food items or diets can produce beneficial health outcomes. These beneficial outcomes may be viewed, by those who accept such ideas, as generalized and unspecific. That is, certain dietary choices are seen as maintaining, or actually enhancing, an individual's resistance to disease or as promoting the efficiency or durability of the body. However, such ideas can be much more specific. For example, particular dietary options or particular foodstuffs may be seen as capable of preventing a particular disease. Similarly, certain food items, or a given dietary regime, may be seen as suitable for treating a disease or for managing a disease and relieving its symptoms.

Many of the negative aspects of the linkage between diet and health are selfevident. Most obviously, a grossly inadequate food intake will lead to weight loss and eventually to death (either through starvation or the onset of a related disease). However, nutrient deficiencies which fall short of the absolute deprivation of starvation can result from low food intake, an unbalanced diet or poor assimilation. Thus, dietary protein deficiency in infants after weaning can result in the disease known as kwashiorkor. A deficiency of vitamin D can cause rickets, a disease which mainly affects children and is characterized by the softening of developing bone (resulting in bow legs). The disease scurvy results from a lack of vitamin C, and produces anaemia, spongy gums, and, in infants, is associated with malformations of bones and teeth. Furthermore, inevitably, food intake can act as a channel for the introduction of harmful agents into the body. These may be toxins (whether organic or inorganic, naturally occurring or synthetic) or any of a vast array of disease-inducing organisms. What is more, in many cultures such agents may be conceptualized in ways which modern Western rationality would regard as supernatural or mystical.

The purpose of this chapter is to focus attention upon such cultural constructions of the connections, or supposed connections, between what an individual eats and that individual's state of health. Of course, such ideas, particularly in the context of Western societies, are not static. They change, sometimes radically, over time. Thus, this dynamic perspective is essential, as we look firstly at examples of traditional forms of belief and practice in relation to diet and health and then at the gradual rise to dominance in Western culture of more systematic and rationalized perspectives. The dominance of such perspectives, however, is by no means complete, as will become evident when contemporary common-sense ideas and 'alternative' dietary ideologies are examined.

TRADITIONAL PERSPECTIVES ON THE LINKS BETWEEN DIET AND HEALTH

Traditional forms of understanding and practice clearly cover an impressive array of activities, including hunting, fishing, agriculture, the manufacture of tools, weapons and other artefacts, healing, divination, and so on. Such traditional forms of understanding, often termed 'folk knowledge' or 'prescientific knowledge', are usually based upon the accumulation of often highly detailed empirical information. Accumulation typically takes place over many generations, as concepts and techniques are refined through a repetitive, if somewhat haphazard, process of trial and error. Change in such knowledge is usually slow, although the patient exercise of everyday curiosity plus the occasional fortuitous insight or discovery can lead to effective and sophisticated ways of controlling and manipulating the world. However, it should be borne in mind that traditional knowledge frequently incorporates conceptualizations of cause and effect which modern scientific perspectives would see as essentially irrational, assuming causal mechanisms which would not stand up to rigorous examination. The term 'magic' is conventionally used to refer to such ideas, usually somewhat dismissively and disparagingly. Nevertheless, in traditional societies magical techniques and their associated rituals are employed in many areas of everyday life, particularly where there is uncertainty and unpredictability. What is more, accumulated empirical knowledge and magical formulations of cause and effect become enmeshed with one another, the one difficult to distinguish from the other in any absolute sense, forming a single holistic system of thought. Thus, while the hard lessons of trial and error may eventually be incorporated into practice, where there is ambiguity and ambivalence 'supernatural' forms of explanation have a flexibility which allows them to adapt and survive apparent refutation. We can now turn to actual examples of such traditional ideas in the area of food and health.

Perhaps the most widespread of these traditional conceptualizations of the ways in which diet and health interact are those which are based upon classification according to a hot-cold dimension. In this sense, hot and cold do not refer to the actual physical temperature of the food, but to a more elusive (and in rational terms possibly a more illusory) property of food. In addition, herbs, beverages, medicines, illnesses and even people may be classified in this way in many such belief systems. As Manderson (1987) points out, hot-cold concepts can be found in cultures in Latin America, Asia and Africa. These ideas also appear to have an affinity with ancient traditions of humoral medicine that have existed in Europe, in the Islamic world and in China and India. However, ethnographic evidence indicates that such belief systems are often very variable and are characterized by inconsistencies and disagreements (Manderson 1987:329). In other words, they exhibit the typical flexibility and elasticity of traditional modes of thought. In certain circumstances, as we will see, these properties enable hot-cold conceptions to survive, and adapt to, the impact of modernization.

Malaya provides an example of a society whose people's beliefs place a strong emphasis on the link between diet and health. In that country, hot-cold categorization remains an important feature of folk medicinal systems and of the practices of the folk healers who are the custodians of these systems. Manderson provides us with a general description of Malay hot-cold ideas, indicating the way in which these are sometimes related to a concept of balance. Thus, food classified as hot may be taken to alleviate 'chilling', but consuming hot foods to excess may result in such unwelcome complaints as rashes, fevers and constipation. These complaints can be relieved by the consumption of foods classified as cold (and such foods are also seen as beneficial for the young, whose bodies by their very nature, are hot). However, an excess of cold foods is seen as leading to weakness and lethargy, and to arthritis and rheumatism in the aged. In Malay communities, some illnesses are also classified as hot or cold. For example, measles, smallpox and chickenpox are hot infections and the patient should avoid hot foods until after recovery. Conversely, chills, arthritis, rheumatism and neuralgia are cold ailments and their symptoms can be relieved by reducing the consumption of cold foods and increasing the consumption of hot foods and medicines (Manderson 1987:330). In some cultural groups, individuals may be seen as varying in terms of hot and cold (for example, the old may be seen as colder than the young, and men as hotter than women), and there may even be a personal dimension (what is hot for one individual being cool or neutral for another). Even within Malaya there is considerable variation in these beliefs, and hot-cold is often seen more in terms of a subtle continuum than as a simple binary opposition. However, broadly speaking, foods which are spicy or which are higher in fats, calories or protein (e.g., animal products) are located towards the hot end of the continuum, and foods higher in water content (fruits, vegetables, etc.) towards the cold end.

A more detailed ethnographic account is provided by Wilson's participant observation study carried out in a fishing village on the east coast of the Malay

Peninsula. In fact, this study detected a considerable amount of variation in individuals' opinions concerning exactly how particular items should be classified. However, there was broad agreement that such foods as chicken, beef, goat, eggs, manioc, yeast, chilli peppers and spices are hot, and that fruits and vegetables are cold. Rice and fish, the two basic ingredients of Malay cuisine, were regarded as neutral (Wilson 1981:391). What is more, certain foods were seen as having direct health implications over and above the hot-cold dimension. For example, rice was seen as endowed with an innate vital force which generates strength-giving, curative powers, and there was no condition for which it was regarded as a forbidden food. Garlic was seen as good for the relief of stomach ache, ginger as relieving fatigue, and young coconuts were said to be good for general health. Conversely, some foods could present health hazards. Papaya was said to give small children worms, and prawn paste could give rise to headaches (Wilson 1981:394–5). Food substances might also be used externally by these villagers for medicinal purposes, for example, in the form of poultices to treat headache, toothache, boils, chills, fever and dizziness. Thrush in a newborn infant was treated by placing the cut end of a young coconut, covered with powdered medicinal leaves, on the infant's stomach. By and large, these can be regarded as essentially magical treatments, although Wilson does admit that in some instances the plant substances employed may have active pharmacological properties.

In fact, these Malay villagers recognize a whole range of diseases which could be seen as having a magical or supernatural causation, and response to such ailments frequently involves food prescriptions or proscriptions. Thus 'seduan', an upper respiratory disease, was believed to be caused by an evil spirit and, if neglected, as likely to lead to serious damage. Treatment entailed the use of incantations and root medicines and the avoidance of soy sauce, groundnuts, duck, prawns and most kinds of fish. In addition, ailments which were not seen as having supernatural causes might also require the avoidance of certain foods. Thus, 'medu', a condition involving breathing difficulties and pain throughout the body, was seen as caused by constipation, and such cold foods as okra, eggplant, pumpkin and papaya were regarded as harmful for sufferers.

As well as employing self-diagnosis and self-treatment, Malays consult both traditional healers and doctors trained in modern medicine, according to the nature of the illness concerned. Western medicines are incorporated into the traditional conceptual scheme, in so far as such substances (whether in liquid or solid form) are classified as hot, and thus eating hot foods while taking them is prohibited. In fact, certain foods like eggs may become *bisa* (toxic) when taking Western medicines like pills. The flexibility and adaptability of hot-cold beliefs in Malay culture is further illustrated by the fact that novel food items, introduced as a result of the modernization of some aspects of Malay society, have been absorbed into the system. These include bread, flour, refined sugar, ice-cream, soft drinks and foreign fruits and vegetables which have been assimilated into the categories used for local produce. While Wilson suggests that traditional

food prohibitions may, in certain circumstances, adversely affect the nutrient intakes of women subject to the high physiological demands of reproduction, she recognizes the extent to which these ideas form a coherent, integrated and reassuring body of belief and practice. In fact, as Manderson (1987:330) notes, the power of such ideas resides in their ability to provide plausible and intelligible explanations for (and accessible responses to) otherwise incomprehensible processes of affliction and recovery.

Some valuable insights into the cognitive foundations of hot-cold classification systems are provided by Messer (1987). Focusing her attention on hot-cold beliefs in indigenous Mesoamerican thought, she notes the essential syncretism between European versions of the 'humoral' medical framework (introduced by the Spanish) and the deeply rooted concepts based on a hot-cold continuum found, for example, in Aztec and Mayan culture. In fact, Aztec hot-cold beliefs were not limited to such areas as food, health and medicine. Indeed, this basic duality appears to have been seen as encompassing the entire cosmos and was applied to plants, animals, minerals, stars and supernatural beings. Among the Aztecs, in food terms, dark-coloured substances, piquant flavours and sweet fruits were regarded as hot, whereas wild animals, sour fruits and thick-skinned fruits were regarded as cold. The Mitla Zapotec people (like the Aztec, indigenous to Mexico) classify foods according to digestibility. 'Hard to digest' foods are classified as hot or cold according to whether the individual regards his or her body to be hot or cold at the time of eating (Messer 1987:341-2). Thus, care must be taken, since a hot-cold imbalance may cause illness or aggravate an existing condition.

What Messer attempts is a general description of the underlying logic of such hot-cold classifications. Taking the classification of herbs as an example, she suggests that three types of attribute may be taken into consideration by those operating hot-cold ideas. The first of these types she terms 'perceptible' attributes (those which can be seen, tasted, etc.). These perceptible attributes may be intrinsic (e.g., red colouring is often associated with hot) or extrinsic (e.g., plants which require sunny conditions may be regarded as hot). Secondly, 'functional' attributes may be referred to, again split between intrinsic and extrinsic. As an example of an intrinsic functional attribute, Messer cites the belief that certain herbs may act to 'cook' uncooked foods in the stomach, and are therefore hot. An example of an extrinsic functional attribute is the idea that a given herb is hot because it can be applied externally to treat a 'cold' headache. Finally, 'affective' attributes operate in terms of good and bad. Hot herbs may be regarded as bad if they produce an excess of hot over cold in the eater and thereby result in illness. Messer suggests that children learn these principles through a gradual process of socialization, although the vagueness and essential flexibility of the system allows for competing and sometimes flatly contradictory classifications to be arrived at by different individuals apparently operating the same classificatory criteria.

It is Messer's contention that the hot-cold duality may represent an opposition which is as primordial and as universal as the fundamental opposition between male and female. Such an opposition, being 'good to think' (Messer 1987:344), is therefore good for classification. Hot-cold beliefs, deeply embedded in the epistemological foundations of many traditional cultures, can provide a potent conceptual framework for articulating the complex linkages between diet and health. While the linkages and mechanisms proposed by such ideas may seem eccentric or implausible according to the criteria of Western scientific, medical and nutritional discourses, they do provide their adherents with a framework of everyday understanding and practical action. Indeed, built up over many centuries and elaborated by dedicated specialists, such beliefs may evolve into highly complex systems of thought. Perhaps one of the most highly developed of these systems, in which food items can be construed as having important medicinal properties, is represented by Chinese traditional medicine (see, e.g., Read 1982).

RATIONALIZATION AND MODERN VIEWS OF DIET AND HEALTH

The process of rationalization represents a powerful driving force in modern societies, placing strong emphasis on measurement, calculation, prediction and systematic organization. The analysis of this process has been one of sociology's central and most enduring themes, a theme which has already been confronted at least twice in this book (in Chapter 2 in relation to the emergence of the modern food system and in Chapter 5 in relation to Ritzer's (1993) 'McDonaldization' thesis). However, the principles of rational calculability have been extended beyond the spheres of food production, distribution and marketing, and have been applied to diet itself. Turner (1982:255) draws a parallel between earlier religious asceticism and modern medical regimens, both of which seek to discipline the body by the imposition of rules, and both of which commonly use diet as a focus for such discipline. Turner points out that the development of formal rationality and its application to an ever-widening range of human activities is a process which in turn generates a broad spectrum of specialist professional groups, whose specific collective interests are closely bound up with the process itself. What is more, the rationalization of diet, and the production of rational scientific conceptions of the links between diet and health, required the creation of a new metaphor for the body. That metaphor emerged as the Cartesian concept of the body as machine, a machine whose functioning, inputs and outputs could all be subjected to precise measurements and quantification (Turner 1982:258-9).

In order to illustrate the emergence of rational medical views of diet and health, Turner examines the career and ideas of George Cheyne, an influential Scottish physician born in 1671 or 1673 in Aberdeenshire. Having studied medicine at Edinburgh University under Archibald Pitcairne, a proponent of the application of mathematics to medicine, by the 1720s Cheyne had become a highly successful medical practitioner in London, with many individuals from England's aristocracy and political and literary elites among his patients. He also published a series of books on his medical ideas and treatments, which were translated into several European languages. In a very real sense, Cheyne's approach to the issue of the link between diet and health was directly connected to his experience of a crisis in his own health. As a result of a prodigious appetite for food and drink, Cheyne's weight rose to a grotesque 448 lb. He experienced considerable difficulty in walking and, understandably, lapsed into a state of deep depression. However, after a period of experimentation, Cheyne devised a treatment scheme for himself based upon a diet of milk and vegetables, regular exercise on horseback, strictly limited alcohol intake and regular periods of sleep. This self-imposed discipline proved highly successful, in that his weight was significantly reduced and he survived to the age of 70.

Cheyne's therapeutic system was based upon a specific and explicitly rationalistic view of the nature of the human body. This was conceptualized by Cheyne as a hydraulic machine, a complicated interlocking system made up of pumps, pipes and canals around which circulated a vital liquor. This machine could only function satisfactorily with the correct inputs of foods and liquids, and the qualities and quantities of these foods and liquids were seen as crucial for proper digestion. In turn, proper digestion and evacuation, and suitable levels of exercise, were seen as the foundations of good health, the role of medical practitioners being conceived as essentially a secondary, facilitating one. In fact, what the body machine required was the careful monitoring of its inputs and outputs, an approach which Cheyne termed 'Diaetetick Management'. In his view, threats to the smooth functioning of the body machine came from a number of sources. First among these were dietary changes in the eighteenth century which had particularly affected the more affluent sections of English society. The expansion of trade had brought numerous rich and exotic foods and wines within reach of the upper strata, and it was overindulgence in such delicacies, coupled with an inactive lifestyle, that was seen by Cheyne as the root cause of most of the illnesses which afflicted his privileged clients. Of particular concern for Cheyne was the consumption by the rich of strong wines and potent spirits, which had the lethal potential to dry up the body machine's vital juices. However, he also laid considerable emphasis on wider environmental factors. Not least of these was another of the consequences of economic success and the advance of civilization, the increasing levels of overcrowding in expanding urban areas like London. Insanitary conditions and poor air quality could create a reservoir of diseases which could threaten the most affluent as well as the most impoverished.

Given the central importance of digestion to Cheyne's views on health and illness, it is not surprising that, as part of his system of Diaetetick Management, he set out to classify foods according to their 'digestibility'. White flesh and dry, fibrous and mild-tasting foods were deemed easy to digest, whereas red flesh and

Easy to digest	Less easy to digest
Spring vegetables	Pears
Asparagus	Apples
Strawberries	Peaches
	Nectarines
Poultry	Cows
Hares	Horse
Sheep	Asses
Kids	
Rabbets (sic)	
Whiting	Salmon
Perch	Eel
Trout	Turbot
Haddock	Carp
Pullet	Duck
Turkey	Geese
Pheasant	Woodcock
	Snipe
Veal	Red deer
Lamb	Fallow deer

Table 6.1 Cheyne's classification of foods according to digestibility

Source: Adapted from Turner (1982)

fatty and strong-tasting or spicy foods were deemed hard to digest. Turner (1982:263) provides a schematic representation of Cheyne's classification based upon these principles, as is shown in Table 6.1.

Furthermore, Cheyne favoured 'natural' foods, uncomplicated by exotic preparation techniques and ingredients, which could inflame 'unnatural' appetites. Cheyne's approach led him to devise a whole series of dietary regimens, each one appropriate to a given age group and lifestyle.

Many of Cheyne's ideas may seem eccentric to the modern reader, and the classification scheme laid out in Table 6.1 has an appealing quaintness about it, appearing to have a closer affinity with traditional beliefs about food than with current dietary ideas. Yet, on the other hand, other features of Cheyne's perspectives appear strikingly familiar, from his hydraulic metaphor of the body to his insistence on the importance of 'natural', minimally processed plain foods, moderation in alcohol consumption and regular exercise. His warnings concerning the negative effects of overcrowded, urban living also strike a familiar note. In fact, his ideas are prototypically modern, emphasizing as they do the rational, instrumental use of dietary regimens to enhance health and avoid disease. There is a clear linkage between Cheyne's conception of the nutritionally disciplined, healthy body and the ideas of Elias on the internalization of restraint which we encountered in Chapter 5.

As we have seen, Cheyne's system was aimed specifically at 'a class of people that was professional, sedentary, urban and engaged in mental activity' (Turner 1982:265). This was essentially a discipline for the elite, overindulged body, in many ways irrelevant to the demands imposed upon the labouring body, a body all too often on the verge of malnutrition, or even starvation, in the eighteenth century. However, by the late nineteenth and early twentieth century this rational gaze was to be turned upon the problem of managing and modifying the diets of the lower strata of society. Turner's analysis of the grounds for this shift in focus rests upon the argument that a number of major issues came together to concentrate the concerns of the elite upon the health and dietary standards of the masses. Such issues included the fear that the insanitary and overcrowded conditions of the working class could always pose an indirect threat to the middle and upper classes through the spread of contagious diseases, and there was also an unwillingness to bear the burden of taxation involved in maintaining an extensive system of relief for the destitute and malnourished. But, underlying such concerns, Turner identifies deeper anxieties among the elite concerning the state of the working classes. Not only could an undisciplined work-force be seen as a threat to the stability of a civilized capitalist state, but also unhealthy and undernourished working classes could present a threat to society's very continuity and long-term survival. Thus, Turner argues that the findings of Rowntree's influential study of urban poverty (Rowntree 1901), pointing out the significant undernourishment of the bulk of the industrial population who carried out the heaviest manual labour, are symptomatic of a rising awareness that the nutritional status of the working classes is, in some senses, the responsibility of the state.

In fact, from the latter part of the nineteenth century onwards, the government of the United Kingdom was increasingly to involve itself in attempts to monitor, regulate and improve the dietary standards of the mass of the population. This increasingly interventionist stance on the part of the state went hand in hand with the development of an ever more sophisticated and rationalistic intellectual apparatus whose theories and methods could be applied to measuring the extent of these problems and devising suitable responses and solutions. Thus, scientific and statistical disciplines like demography, dietetics and biology could be harnessed to the attempt to apply a form of social engineering to the British diet (Turner 1982:267).

Yet it is, perhaps, a tragic irony that the most powerful single impetus which drove the British government towards ever more ambitious attempts to improve the population's health by improving its dietary standards was in response to the demands of modern mass warfare. In fact, at least one historian has suggested that the disclosures of social reformers like Rowntree concerning the poor state of nutrition of lower sections of the working classes initially had relatively little impact on the thinking of those in power (Burnett 1989:243). The piece of information which appears to have attracted the attention of the government was a finding by the Director General of the Army Medical Service during the

Boer War in which the United Kingdom was engaged towards the end of the nineteenth century. No less than 38 per cent of the men who volunteered for military service were rejected on grounds of ill health, including heart disease, defective vision, defective hearing and decayed teeth (Burnett 1989:243). The concern generated by this finding caused the government to set up the Interdepartmental Committee on Physical Deterioration and, in 1906, to pass an Act of Parliament providing free school meals for deprived children. The government also began to provide grants for infant welfare centres, set up to advise mothers on child-rearing practices. However, it was to be the food crises created by the First World War which were to push the state gradually towards a more interventionist stance. Initially, the government was reluctant to intervene in food markets, but by 1916 food supplies had been severely disrupted by the German submarine campaign. In 1916 the Ministry of Food was established, and a Committee of the Royal Society was asked to draw up minimum food requirements for the population. Measures introduced included, in 1917, a subsidy for bread and the fixing of milk prices. Early in 1918, rationing for key foodstuffs like meat and butter was introduced. Burnett, in assessing the success of the government's food measures, points out that Britain was far better fed than her enemies, with average intakes remaining over 3,300 kilocalories per day (Burnett 1989:249). However, that there remained an enormous legacy of the consequences of earlier poor nutritional standards in Britain is indicated by the fact that of 2,500,000 men medically examined in 1917-18 as a prelude to conscription, 41 per cent were graded as C3 and unfit for military service (Burnett: 1989:254). Such findings meant that national nutritional and health standards, and the state's responsibility for these, were becoming an increasingly important political issue in the United Kingdom (Tannahill 1988:334).

The interwar years saw a general rise in dietary standards in Britain, although on the basis of 1933 data it has been estimated that some 30 per cent of the population were still technically 'undernourished', according to standards laid down by the British Medical Association for a basic minimum diet devoid of obvious deficiencies (Burnett 1989:271). On the basis of data gathered in 1936-7 it was calculated that over 17 per cent of the population, nearly eight million people, were spending less on food than the minimum necessary total set by the BMA. However, state interest in such results was rising, and an increasing amount of work on nutritional standards and related health issues was being carried out by such agencies as the Medical Research Council, the Food Investigation Board and local Medical Officers of Health. It is Burnett's contention that by 1939 the government had begun to acknowledge that nutritional policy would have to form an integral part of any system of health services, and that professional dieticians, armed with ever more sophisticated nutritional knowledge, were pressing for the state to take on an enhanced role in this area.

It was, however, the outbreak of the Second World War which pushed the British government into far-reaching intervention. Food price controls and a

detailed system of food rationing were rapidly introduced and effectively implemented in response to the threats to Britain's food supply posed by the hostilities, threats all the more serious given the United Kingdom's continued reliance on food imports. Improving levels of knowledge concerning nutritional needs allowed rationing to be placed on a much more precise scientific basis. In addition, the nutritionist, Professor J.C.Drummond, in his role as Chief Scientific Adviser to the Ministry of Food, was able to use his position of power and influence to see that food controls were used to raise overall dietary standards, especially those of the poorest sections of the population (Burnett 1989:290). Schemes were introduced to provide additional proteins, vitamins and minerals to vulnerable groups like pre-school children and pregnant and nursing mothers. On the other hand, for the general population, animal proteins and fats, for example, were strictly rationed, whereas carbohydrate-rich foods like bread and potatoes were freely available at controlled prices. Government measures, including the provision of communal eating facilities in factory and school canteens, did eventually produce actual improvements in nutritional standards in Britain over the war period. Thus, Burnett notes that by 1944, the pre-war average intake of 3,000 kilocalories per head per day had risen to 3,010 and total protein intake had risen by 6 per cent above its pre-war level. What is more, there were also improvements in the intake of minerals like calcium and iron and also of riboflavin, vitamin B and vitamin C. Overall, these improvements appear to have played a significant role in a fall in infant mortality and a rise in the birth rate in Britain over the war years. In stark contrast, over the same period Germany saw a decline in the birth rate and a rise in infant mortality.

Burnett's analysis demonstrates just how successful was the British government's attempt to regulate the food system and to protect the nutritional welfare of the population, despite the demands placed upon the state by the conduct of warfare on a global scale. While much of the bureaucratic apparatus of regulation was eventually to be dismantled (although it was some years after the end of the Second World War that the last food rationing measures were abolished), the ideological apparatus of intervention, once created, proved to be more enduring. However, in the intervening decades, the logic of intervention has undergone a number of very significant changes. For example, once direct state control could no longer be justified on the grounds of national emergency, more subtle forms of indirect intervention gradually came into play. In the postwar period an increasing emphasis has been placed upon the individual's responsibility to protect his or her own health through adopting the eating patterns and dietary choices congruent with current scientific orthodoxies concerning the links between diet and health. Hence, regulation and rationing have, in the longer term, been replaced by education and exhortation. What is more, dietary threats to health have been fundamentally reconceptualized. Food deprivation and serious nutritional deficiencies, historically two of the most widespread threats to human well-being, have been banished to the margins of

public concern in most modern, developed societies. Currently, concern has become focused squarely upon the nutritional problems associated with affluence and over indulgence.

By 1983 professional and official consensus concerning the most pressing issues relating to diet and health had developed to a sufficient degree to permit the publication of specific dietary targets for the UK population. In that year the National Advisory Committee on Nutrition Education (NACNE) under the aegis of the Health Education Council, put forward proposals for a set of explicit nutritional guidelines. The Committee was particularly concerned with the effects on health, not only of actual obesity, but also of relatively mild levels of overweight, especially in relation to such ailments as coronary heart disease, high blood pressure, diabetes mellitus and gall bladder disease. Lack of exercise was cited as a contributory factor to the diseases associated with being overweight, and recommendations concerning slimming diets and the control of food intake were also made (National Advisory Committee on Nutrition Education 1983:10-14). The targets set by the Committee were detailed and explicitly quantified. They included recommended reductions in fat intake, in saturated fatty acid intake, in sucrose intake, in salt intake and in alcohol consumption, plus a rise in the intake of dietary fibre (see Figure 6.1).

- i. Fat intake should be reduced to an average 30% of total energy intake.
- ii. Saturated fatty acid intake should be reduced to an average 10% of total energy intake.
- iii. Average sucrose intakes should be reduced to 20 kg per head per year.
- iv. Salt intake should fall on average by 3g per head per day.
- v. Alcohol intake should decline to 4% of the total energy intake.
- vi. Protein intake should not be altered, but a higher proportion of vegetable proteins is appropriate.
- vii. Fibre intake should increase on average from 20g per head per day to 30g per head per day.

Figure 6.1 Selected long-term dietary aims for the UK population proposed by the National Committee on Nutrition Education (NACNE)

Source: Adapted from National Advisoty Committee on Nutrition Education (1983)

The Committee went on to discuss a whole series of measures that would be involved in achieving such targets. These included not only education-based attempts to encourage individuals to modify their own diet, but also the selective breeding of leaner food animals, the reduction of fat content in meat products and the labelling of food products with energy, sugar and fat content.

Some eight years later, an independent, multidisciplinary committee noted that obesity in Britain was, in fact, increasing (Jacobson, Smith and Whitehead

1991:44). The report reiterated the kinds of dietary targets that had been set by the Committee on Medical Aspects of Food Policy (COMA) which, in turn, were closely related to those proposed by NACNE (Jacobson, Smith and Whitehead 1991:249). COMA's advice at that stage included a reduction of the amount of energy from total fats to 35 per cent or less of energy intake, reductions in sugar and salt consumption, and the replacement of fatty and sugary foods with cereals and starchy foods. The need to increase levels of exercise was also stressed, particularly in relation to what was seen as the role of exercise in the prevention of coronary heart disease and the maintenance of general health. The *Health of the Nation* white paper also recommended the setting up of the Nutrition Task Force, and this recommendation was carried out in 1992. Two years later the Nutrition Task Force itself published a detailed action plan to achieve the targets which had been set out (Department of Health 1994). The components of this action plan included proposals for schematic dietary models for conveying information to the public (e.g., in the form of plates or pyramids), liaison with the advertising industry in the promotion of approved dietary patterns, and extending the role of the educational system in disseminating official conceptions of healthy diets. The action plan also included proposals to recruit the support of the catering industry in achieving nutritional targets (e.g., hospital and school caterers, restaurants and fast food outlets). Indeed, the production, manufacturing and retailing sectors of the food industry were also to be drawn into the process, particularly in terms of undertaking an industry-wide 'fat audit' to examine the possibilities for reducing fat content across the whole product range. This whole strategy, it was suggested, should be supported by enhanced training for health professionals, nutritionists and dieticians, and by improved research into the relationship between nutritional factors and clinical outcomes.

This ambitious and far-reaching programme of nutritional intervention and persuasion provides a graphic demonstration of the extent to which the state has taken on a central role in shaping national dietary patterns with a view to improving overall health standards. However, what is arguably the most distinctive aspect of this process is the striking family resemblance between eighteenth-century conceptions of diet and health and the medically and scientifically informed targets and guidelines which form the basis of current thinking. The dietary prescriptions and proscriptions are decidedly similar, as are the emphases on the deleterious effects of excessive weight and low levels of physical exercise. However, as we have seen, Cheyne's criticisms, admonitions and treatments were aimed at high-status and relatively sedentary elite groups, and in his day had little relevance to the broader population. The emergence of the modern food system, and fundamental changes in work organization and activity levels, have been construed as requiring the degree of dietary restraint and control on the part of the whole population that was formerly seen as appropriate only to the privileged and overindulgent few. The mantle of George Cheyne, successful nutritional and medical moral entrepreneur, has been assumed by an expanding army of professionals, bureaucrats and politicians,

who increasingly claim ownership of what can be regarded as nutritional wisdom and acceptable dietary practice. However, whereas Cheyne was a physician, in direct contact with his patients and tailoring his therapeutic recommendations to what he perceived to be their specific needs, the current role of the state is an essentially impersonal one. Quantified nutritional objectives have been established for the entire population, yet the translation of such objectives into dietary choices and practices at the individual level remains problematic. For example, while it may make sense to recommend that no more than 35 per cent of energy should be derived from fats as a long-term aim for the population as a whole, such a recommendation is of little relevance to the day-to-day decisions of the individual consumer, who is not equipped to monitor food intake in this quantified fashion. There are clearly limits to the application of rational, systematic conceptualization of the links between diet and health to the mundane routines of everyday life.

Further dimensions are added to our understanding of the modern rationalization of diet by Levenstein's account of the evolution of nutritional theory and nutritional policy in the USA. In the last two decades of the nineteenth century, for example, an ambitious attempt was made to rationalize the eating patterns of the poor in order to improve their nutritional standards while actually reducing the amount spent on food. A Boston businessman, Edward Atkinson, taking up recent developments in scientific knowledge concerning the nature of human nutritional requirements propounded by the chemist Wilbur Atwater, put forward the argument that those on low incomes could achieve greater 'nutritional efficiency' by avoiding the consumption of expensive food items selected merely on the basis of taste or prestige. Instead, he argued, they should consume cheaper items (e.g., less expensive cuts of meat) which, though less prestigious, nevertheless provided an equivalent input of nutrients for the body (Levenstein 1988:45-8). In co-operation with a nutritionist and a chemist (both women) Atkinson was instrumental in setting up public kitchens to demonstrate to the working classes the benefits of selecting foods on the grounds of nutrient content and value for money, and of preparing these foods in a fuel-saving, slow-cooking oven of his own invention. However, despite some initial success in Boston and New York, the quaintly named 'New England Kitchen' culinary regime had little impact on the eating patterns of the American working classes, which was probably just as well, given its heavy emphasis on the consumption of animal fat, and its serious vitamin deficiencies, the significance of which was not understood at the time (Levenstein 1988:57–8).

In fact, the proponents of the New England Kitchen concept were soon to shift their attention towards the middle and upper classes, on the assumption that good nutritional practices, once entrenched in the upper reaches of society, would eventually 'trickle down' to the lower orders. At the same time, 'home economics' and 'domestic science' were undergoing a process of professionalization, involving their inclusion in programmes at the University of Wisconsin in 1895 and subsequently at the University of Illinois. What is more, the teaching of these subjects in schools shifted away from an exclusive emphasis on cooking skills towards the physiology and chemistry of food and eating. Thus, by the early twentieth century large numbers of young American women who had graduated from the public school system had absorbed at the least the rudiments of the rational scientific view of human nutrition (Levenstein 1988:79– 80). It is Levenstein's contention that American middle-class women were able to use these ideas to rationalize and simplify domestic cuisine in order to reduce the burden of food-related work in a situation in which domestic servants were becoming increasingly difficult to acquire and retain.

As in Britain, but to a lesser extent, the First World War acted as a catalyst which stimulated government intervention in the food system of the United States. Food prices, already on an upward trend, rose sharply in 1916, partly due to the demands of the Allies actually involved in the war, and there were foot riots in some eastern cities (Levenstein 1988:109). With America's entry into the war imminent, the Food Administration was set up (headed by Herbert Hoover). Its task was to seek to regulate the food supply and to encourage Americans to reduce food wastage and to cut down on their consumption of meat, white wheat flour, sugar and butter, substituting more readily available items like beans, pulses, cornmeal, oats, lard and vegetable oil. Levenstein notes the similarity between these ideas of substitution and those of the nutritionists who had already sought to rationalize the diets of the poor. The Food Administration harnessed the ideas of the home economists and embraced the scientific approach to nutrition as a means of putting the American diet on a war footing. While it seems clear that these exhortations had little effect on the mass of the American population (for example, beef consumption actually rose in 1917 to above pre-war levels) the more affluent classes did appear to have reduced their food consumption. What is more, in the interests of sound nutrition and the avoidance of waste, the War Department, in 1916, issued a new manual for army cooks based upon the new nutritional principles, and dieticians were recruited to oversee food provision in army hospitals. In this way, Levenstein argues, through the experience of military service, large numbers of American men were exposed to rationalized and simplified diets (Levenstein 1988:145-6).

However, in the decades after the First World War, discoveries in the new science of nutrition led to an increasing emphasis on the role of vitamins and minerals in the diet. These innovations in nutritional knowledge were enthusiastically taken up by large food processing firms eager to promote their products using the latest scientific ideas, aiming at a public ever more susceptible to rationalized conceptions of food quality and suitability (Levenstein 1988:152–3). The impact of the Second World War also appears to have been a significant one. Levenstein points out that dieticians played an even greater part in the rationalization of the feeding of the armed forces than in the First World War. The Institute of Medicine's Food and Nutrition Board created generous dietary standards for the population, and food shortages, while never as severe as had been expected, were managed through direct state intervention in the form of

rationing and price controls. The standards set down by the Food and Nutrition Board were first established in 1941, and took the form of Recommended Dietary Allowances (RDAs), these being defined as the level of intake of essential nutrients adequate to meet the nutritional needs of healthy individuals, as currently understood. The first edition of these standards was published in 1943, and by 1989 the publication had reached its tenth edition, these regular revisions reflecting the constant elaboration and extension of scientific nutritional knowledge in the intervening decades. Drawing upon a truly impressive range of scientific research, the tenth edition lays down detailed, updated recommendations concerning energy intake, protein allowances, and the intake of such vitamins as K, C, B and B . It also covers changes in the RDAs for such minerals as calcium, mågnesium, iron, zinc and selenium, and changes in scientific views on estimated safe and adequate intakes of such substances as copper, manganese and molybdenum. The central role played by the RDA concept in the scientific and medical rationalization of nutritional ideas and practices is demonstrated by an extract from the tenth edition itself:

Over the years, RDAs have become widely known and applied. They are typically used for planning and procuring food supplies for population subgroups, for interpreting food consumption records of individuals and populations, for establishing standards for food assistance programs, for evaluating the adequacy of food supplies in meeting national nutritional needs, for designing nutrition education programs, and for developing new products in industry.

(National Research Council 1989:8)

In addition to the RDAs, the Food and Nutrition Board has also set out a series of dietary guidelines or targets for the American population. These are broadly comparable to those which have been laid down for the population of the UK and reflect similar scientific and medical views concerning the links between diet and health, and the prevention of specific illnesses. These targets (expressed in terms of individual diets) include the reduction of total fat intake to 30 per cent or less of total calories consumed, the daily consumption of five or more servings of fruit and vegetables, the moderation of protein intake levels, the balancing of food intake with physical activity level, the limiting of sodium intake and the maintenance of adequate calcium consumption (see Figure 6.2 and compare Figure 6.1).

As well as setting these targets, the Food and Nutrition Board provides a highly detailed set of recommendations about how they might be attained in everyday settings by real individuals making real food choices. The advice provided ranges from the selection of low-fat meat to the use of lemon juice and salt-free seasonings to reduce sodium consumption (Thomas 1991:84–109).

As has been suggested earlier in this chapter, there can be no doubt that the rationalization of conceptions of diet and health has been associated with the professionalization of nutritional science and dietetics. Riska (1993), in outlining

- i. Reduce total fat intake to 30% or less of calories. Reduce saturated fatty acid intake to less than 10% of calories and the intake of cholesterol to less than 300 mg daily.
- ii. Eat five or more daily servings of a combination of vegetables and fruits. Also, more daily servings of a combination of breads, cereals and legumes. Increase carbohydrate intake to more than 55% of total energy.
- iii. Maintain protein intake at moderate levels.
- iv. Balance food intake and physical activity to maintain appropriate body weight.
- v. Limit alcohol consumption to the equivalent of less than one ounce of pure alcohol per day.
- vi. Maintain adequate calcium intake.
- vii. Avoid taking dietary supplements in excess of the RDAs in any one day.
- viii. Maintain an optimal intake of fluoride.

Figure 6.2 Dietary guidelines for North Americans from age 2 Source: Adapted from Thomas (1991)

this process of professionalization in the USA, shows how women largely succeeded in capturing this area for their own. She points out the central role played by women in the health reform movement in the latter part of the nineteenth century, with its strong emphasis on hygiene and a nutritious diet. At the same time, middle-class women in America were increasingly infiltrating the sciences and the professions, although they were mainly channelled into 'female' areas like home economics and domestic science, and women physicians were concerned primarily with the care of women and children. This form of professional separatism, Riska argues, led to the development of separate institutions, and the American Dietetic Association founded in 1917 was dominated by women. However, from the Second World War onwards, nutritional science as an area of study has been largely male dominated (see e.g., Copping 1985). On the other hand, women have retained their dominance in the dietetics profession, which has been incorporated into the health care system. The professionalization of dietetics was enhanced when in 1969 the American Dietetic Association instituted the credential 'registered dietician', and this licence is currently held by approximately 60,000 practitioners (Riska 1993:175). The processes of social closure and collective upward mobility promoted by professionalization have also been enhanced by a drive towards increased specialization within dietetics itself. However, the profession as a whole remains one of relatively low status and remuneration, largely subordinate within the health care system to a medical establishment which is still male-dominated. Indeed, Riska highlights a fundamental dilemma for dieticians. In stressing the medical importance of diet, that is, in 'medicalizing' food choice and nutritional practice, dieticians reinforce their own claims to professional status. At the same time, however, this strategy seems to guarantee continuing subordination to the

medical profession, which jealously guards its exclusive title to medical diagnosis and treatment.

In this section we have seen how the rationalization, and indeed the medicalization, of diet was initially a process aimed at a relatively inactive and 'overfed' elite. Eventually, however, the political and social establishment in both Britain and America chose to concern itself more and more with the nutritional standards of the poor and the underprivileged. In both countries, reformers, nutritional moral entrepreneurs and the state itself, employing the increasingly sophisticated knowledge made available by a rapidly developing science of nutrition, sought to lay down adequate nutritional standards and to intervene in the dietary affairs of groups perceived as disadvantaged and nutritionally vulnerable. Such intervention took many forms, from attempts at exhortation and education to rationing, subsidies and the provision of free foods and supplements. In recent decades, a distinct shift of emphasis has become obvious, as concern has switched away from a preoccupation with nutritional deficiencies to a preoccupation with the implications of the overconsumption of certain nutrients and food items. Thus, contemporary official guidelines and targets are not so much aimed at bringing standards up to specified levels as at encouraging the reduction of the intake of specific nutrients to below what are seen as desirable upper limits. Thus, in a sense, the controls on food intake that characterized George Cheyne's recipes for the dietary chastening of the privileged have been generalized for whole populations, for whom overindulgence rather than deprivation is seen as the main problem.

Of course, the whole process of rationalization has been facilitated by key professions, not only medical practitioners and physicians, but also scientists, nutritionists and dieticians. In a sociological sense, it is perhaps not surprising that dietetics as an occupation has developed as an essentially feminine profession, which can be seen as an extension of customary assumptions about women's domestic duties, obligations and competences into the public domain.

CONTEMPORARY COMMON-SENSE IDEAS AND ALTERNATIVE IDEOLOGIES

There can be little doubt that rationalized and medicalized models of the links between diet and health have come to exert enormous influence over public perceptions. However, although public awareness of official dietary guidelines is increasing, such awareness is sometimes confused and lacking in clarity, for example, in relation to fat, a group of nutrients which has certainly figured particularly prominently in current nutritional messages (Thomas 1991:48–9). Indeed, guidelines and targets expressed in scientific and quantitative terms may be extremely difficult for members of the public to interpret, and even more difficult to translate into informed choices and everyday decisions at the supermarket or in the kitchen. In effect, rationalized views of diet may lack some of the intuitive comprehensibility of more traditional ideas, and thus it is hardly surprising that common-sense notions survive and continue to shape nutritional ideologies and practices in modern Western societies. These notions come in many guises and range from claims that excessive sugar consumption causes diabetes, that red meat causes aggressiveness and that eating fried food causes acne, to beliefs in the medicinal properties of substances like honey and garlic. Some of these ideas do appear to find some support from current medical and scientific knowledge, whereas others are inconsistent with, or actually contradict, orthodox scientific views (Rinzler 1991). Happily, there exist several sociological studies which can provide us with direct insights into the contents and logic of such common-sense ideas and their relationship in everyday life to more rationalized and systematic forms of knowledge.

Inevitably, there is likely to be a good deal of variation from individual to individual and from household to household in exposure to and reliance upon rationalized conceptions of diet as opposed to 'folk' or lay conceptions. Pill (1983) set out to examine working-class mothers' views on food and health by studying a sample of forty-one women from South Wales, all aged between 30 and 35, living with their husband and at least one primary-school-age child. In fact, Pill uncovered a clear distinction between what she termed the 'lifestyle' group and the 'fatalist' group. The former tended to see illness as caused by environmental and lifestyle factors. Thus, by implication, health and resistance to disease could be enhanced by making the correct lifestyle choices. On the other hand, the fatalists tended to see illness as caused by factors over which the individual had little or no control, and resistance to disease as an unchangeable personal characteristic, determined largely by heredity. Not surprisingly, these two groups held sharply contrasting views on the relationship between diet and health. Members of the lifestyle group were much more likely to mention foods that they avoided for health reasons (e.g., foods with a high sugar content) and foods they deliberately selected for health reasons (e.g., wholemeal bread). These mothers also appeared to be attempting to plan and control their family's diet explicitly in order to improve its members resistance to disease. In contrast, the fatalist mothers were much less likely to mention specific health-oriented avoidances and selections. While both groups emphasized the value of fresh food, the fatalists stressed taste as the main advantage whereas the lifestyle mothers tended to mention the importance of vitamin content and the perceived health dangers of processed foods. However, the defining characteristic of the fatalist mothers' view on food and health was the emphasis they placed upon the traditional 'cooked dinner' as the epitome of good food and the source of nutritional well-being. The customary combination of roast meat, gravy, potatoes and vegetables clearly retained a powerful symbolic significance for this group of respondents (Pill 1983:122-4).

It is a plausible hypothesis that adherence to the concept of the 'cooked dinner' as a basis for good health is related to respondents' age. It would seem likely that older respondents would be more attached to long-established common-sense views of diet and health than would their younger counterparts.

Some supporting evidence for this contention is to be found in a study of fiftyeight three-generation families carried out in a Scottish city (Blaxter and Paterson 1983). Amongst the two generations of working-class women studied, the authors did indeed uncover a powerfully nostalgic attachment on the part of the older women to the 'good' food of the past. For them 'goodness' was equated with simple and natural foods, prepared in basic, uncomplicated ways (boiling or baking, for example). Meat and vegetables were seen as essentials, and slow cooking (boiling meat and vegetables together) was seen as a process which could, in effect, distil the very essence of goodness (Blaxter and Paterson 1983:97). The very opposite of 'good' food was food which has been manufactured or processed, food which replaced 'proper' meals: snacks, sweets and biscuits. Indeed, almost any food item, except fruit, eaten outside the context of the proper meal, was classed as 'rubbish' in health terms. In contrast, the younger generation of women was actually less likely than the older to mention food when asked, for example, about how children's health could be protected. Fewer mentioned the proper meal as the basis of healthy eating, and those who did were noticeably less enthusiastic than their elders.

The importance of such symbolic considerations in common-sense conceptions of diet and health is demonstrated even more clearly by a study which included an analysis of French mothers' views concerning children's health and nutritional needs (Fischler 1986). The study was based upon semi-structured interviews with a sample of 161 mothers with children aged from 4 to 14, drawn from six socioeconomic categories and various regions of France. Fischler concludes that, for these mothers, the feeding of children is, in fact, a highly 'medicalized' issue. In the course of interviews, respondents were at pains to exhibit their knowledge of the technical terminology of nutritional science and, indeed, a rudimentary familiarity with the basics of rationalized concepts of health and nutrition was perceived by these interviewees as an indispensable requirement for the responsible and competent mother (Fischler 1986:948). However, Fischler, despite the fact that he finds the medicalization of lay discourses on diet and health unsurprising, goes on to pose a crucial question: Just what do these mothers know about the science of nutrition, and just what are the contents of their own ideas?' In fact, what Fischler uncovers is a series of themes, but these are sometimes not quite what they seem. For example, the desire to limit children's sugar intake appeared to be as much about preventing the child from subverting the parent's dietary authority by 'nibbling', as about preventing tooth decay. Starches were seen by many as implicated in obesity (Fischler 1986:953) and therefore to be limited in children's diets, and fats invoked a good deal of disapproval, but for reasons little connected with nutritional science.

Yet, the most striking aspect of these mothers' views on children's nutritional needs is the concept that was mentioned more frequently than any other: the notion of 'balance'. The idea of a balanced diet was clearly gleaned from professional discourses on nutrition, but many of the respondents' nutritional ideas showed significant discrepancies in relation to current medical views. As suggested above, starch was given largely negative connotations (a contradiction of contemporary medical evaluations) and ideas relating to fat and fat intake did not necessarily coincide with the current medical orthodoxy. In fact, Fischler claims, the concept of dietary balance, although often discussed by respondents in nutritional terms, is a pre-scientific as well as a scientific concept. The idea of achieving an 'equilibrium' in terms of food intake is a feature of many forms of traditional medicine, and has an ancient pedigree. What is more, balance is an open-ended, self-justifying concept, and can mean quite different things to different respondents. In common-sense thought, it goes beyond merely technical considerations. As Fischler puts it:

However, for the greater number of respondents, a true dietetic balance seemed to result from equilibria of another nature, i.e., as it were, of a moral order. Balance, in more than one way, could indeed be viewed as an almost ethical requirement. What must be balanced, the interviewees believed, was pleasure and health, gratification and duty, appetite and reason.

(Fischler 1986:961)

Thus, the need for balance in contemporary common-sense thought is seen as deeply rooted in traditional ideas and as expressing the fusion of what Fischler sees as 'modern' and 'archaic' symbolic demands. Evidence for the universal appeal of this concept of balance is provided by a study carried out in a context very different from that discussed by Fischler. In the course of a long-term analysis of African-American folk beliefs concerning health and illness, Snow (1993) notes a recurring theme of balance and moderation in food intake as a means of preventing ill health. Snow's respondents also laid stress on the idea that not only could overindulgence and eating the 'wrong' foods induce illness, but that even 'good' foods could be hazardous if eaten in the 'wrong' context. For example, foods suitable for fit adults might be too 'strong' for children, invalids and the elderly. What is more, good foods might pose a threat to health if eaten in the wrong combinations. The author came across respondents living in Michigan who reiterated traditional beliefs from the South, such as the idea that eating fish and drinking milk at the same meal is dangerous, and that one should never consume whisky and watermelon together for fear of a potentially fatal toxic reaction (Snow 1993:78). What is more, there is also evidence for the survival of beliefs concerning sorcery and witchcraft in relation to food, with one respondent describing the way in which magically doctored food could pose a very real hazard to the intended victim (Snow 1993:79). However, certainly the central theme running through these beliefs is the idea that diet influences health through the effects that it has on the blood. The basis of good health is seen as 'good blood' (Snow 1993:95–113). A balanced food intake is viewed as crucial, in that certain foods are seen as having the effect of changing the actual composition of the blood, making it too 'thick', too 'thin' or too 'acid'.

Thus, it is vital for the individual always to be aware that one's dietary choices will have a direct impact upon the blood and hence upon one's state of health.

Folk beliefs of this kind can often form a backdrop to the mundane routines of everyday life and act as a set of taken-for-granted assumptions about the relationship between food intake and bodily well-being. As such, they may require deliberate probing by the social scientist to bring them to light and to render them intelligible. On the other hand, lay or non-medical perspectives on the links between diet and health can also develop into much more elaborate and explicit conceptualizations, which are not simply the vestiges of a folk tradition but which enter into the public domain and attract public attention in their own right. Perhaps the best example of such conceptualizations are the ideas behind what are widely known as 'health foods'. From the point of view of the sociologist, one of the problems involved in explaining such ideas is their very diversity. However, a study by Kandel and Pelto (1980) of what they term the 'health food movement' in the USA provides a clear and convincing analysis of the underlying features which underpin the surface variations in the contents of these beliefs. Kandel and Pelto carried out their study in the Boston area and at a rural university centre, using a battery of techniques including survey methods, 24-hour recall diet histories and participant observation.

On the basis of their results, the authors conclude that the beliefs and practices they studied had two significant aspects. The first of these is what they term 'social revitalization', a process through which a cult or movement provides its followers with the means radically to restructure their cultural affiliations and ideological postures in order to lead a more satisfying way of life. The ideologies of these revitalization cults may include metaphysical as well as dietary tenets (Kandel and Pelto 1980:337). Secondly, these beliefs may constitute what the authors call an 'alternative health maintenance system', a system which is seen by its adherents as a viable alternative to modern medicine, which may be characterized as fragmented and unable to adopt a holistic approach to the individual, and preoccupied with the treatment of disease rather than its prevention. The alternative view of health maintenance sees food choice as one of the most direct and practical ways an individual can influence his or her health standing. In fact, the authors identify three recurring themes which run through the dietary ideologies of these alternative systems. The vitamin motif often uses a terminology similar to that employed in the technical discourses of nutritionists, but participants may believe certain nutrients are required in very large amounts (e.g. massive supplementary doses of certain vitamins or minerals daily). The *organic motif* places a high value on what are seen as the health-giving properties of 'organic' or 'natural' foods, which have been subjected to a minimum of human interference and processing. Stress is laid upon what are perceived as the harmful effects ascribed to 'synthetic' foods, whose production may involve, for example, artificial fertilizers, additives, colourings and preservatives. Finally, the mystical motif represents food selection according to the symbolic rather than the nutritional properties of foods. For example, 'life energy'

may be seen as inherent in raw vegetable foods, or foods may be selected explicitly to achieve a mystical balance, as in the balancing of positive and negative forces (*yin* and *yang*) in the macrobiotic dietary system.

The authors go on to describe the complex social networks which make up the broad health food movement, with their different cults and their different levels of participation, including the largely independent followers, the peripheral social members and the committed full 'joiners' (Kandel and Pelto 1980:339). In addition to these fluid categories of membership, there are many styles of leadership and many channels of communication (ranging from books, articles and television to face-to-face channels like lecture tours and word of mouth spread through friendship networks, health food outlets, etc.).

The clear implication of the arguments put forward by Kandel and Pelto is that the potent symbolism inherent in the very idea of health foods represents a challenge to more orthodox modes of conceptualizing human health, and, indeed, the relationship between the 'cultural' and the 'natural'. This notion is taken up and developed by Atkinson (1980), who points out that health food use often takes place in the context of broader 'alternative' and unorthodox movements and ideologies (particularly alternative views of science and medicine). In the health sphere, such ideologies may include acupuncture, herbalism, faith healing, popularized forms of psychotherapy, and so on. These forms of belief frequently depend upon challenges to conventional divisions like mind/body and human/ non human. A crucial feature of such thinking is the ubiquitous emphasis on 'naturalness' also noted by Kandel and Pelto. Modern life is seen as antithetical to 'balance', and modern foods are seen as overprocessed, contaminated and nutrient-deficient. In contrast, health foods offer naturalness, and explicitly appeal to tradition and folk wisdom. The emphasis laid upon avoiding foods which have undergone elaborate transformations and manufacturing represents a desire to benefit from the perceived virtues of 'pure' food. By implication, pure and natural foods offer a counterbalance to what are seen as the destructive, stressful and unhealthy features of modern lifestyles. Atkinson argues quite explicitly that such ideas are closely related to pre-scientific modes of thought, and summarizes the symbolic significance of health foods in the following terms:

They convey the message that ills are created by the particular characteristics of modern living, specifically by virtue of a fracture between the realms of Nature and Culture. Hence health foods provide a concrete resolution of this separation. Therein lies their symbolic power.

(Atkinson 1980:87)

However, despite the fact that health foods promise benefits by putting the consumer back into contact with a more 'natural' way of life, there can be a subtle irony at work here. For example, in an earlier paper Atkinson provides a fascinating account of the way in which certain features of the folk medicine of rural Vermont were taken up and propounded in the 1960s by a medical

practitioner, D.C.Jarvis (Atkinson 1979). Jarvis was concerned to promote the alleged health-giving properties of a traditional blend of honey and vinegar. Despite a negative reaction in several medical journals and an investigation by the Food and Drugs Administration, both Jarvis's books, and the commercial version of this preparation (under the brand name 'Honegar'), sold well. In effect, Atkinson demonstrates how folk beliefs can be rediscovered and packaged for sale to a public eager to benefit from customary wisdom. What is more, commercial appropriation of concepts of 'naturalness' and 'tradition' in relation to foodstuffs, and their health implications, can take place on a large scale. Thus, health foods themselves are increasingly mass-produced while still being marketed on the basis of an appeal to naturalness. What is more, in the marketing of a much broader range of foods (and, particularly in the UK, beverages like beer) manufacturers and retailers increasingly use the rhetoric of tradition and of rural life to enhance the appeal of their merchandise (Atkinson 1983:15–16). Attached to food products, such terms as 'farmhouse', 'granary', old-fashioned', 'dairy', 'heritage', 'natural' and 'traditional', all serve to evoke a connection with what is seen as an older and less synthetic way of life. Yet, the irony is that elements of common-sense beliefs concerning food and health have been taken over and recycled in the pursuit of profitability by a highly rationalized and industrialized commercial food production and distribution system.

In fact, Belasco (1993) makes the bold claim that, from the 1960s onwards in the USA, the health food movement, as a form of radical consumerism, represented a kind of 'counter-cuisine'. He sees the challenge that it presented to the orthodox food system, dominated by the great food producing, processing and retailing corporations, as central to the broader challenge mounted by the 'counter-culture' to some of American society's most basic assumptions and institutions. Yet, what had begun as a challenge to the commercial food system turned out to be a golden marketing opportunity. Through a process of 'nutrification' (Belasco 1993:218) food manufacturers could add back the nutrients lost through processing and charge a premium for the new product. Yet, despite this process of incorporation and attempts by the food industry to contradict the claims of the 'counter-cuisine', Belasco contends that it has had a significant impact on American attitudes to food and health.

OVERVIEW

As we have sought to demonstrate in this chapter, the intimate and intricate connections between one's eating patterns and one's state of health are an enduring focus of human concern. Modern societies have witnessed a fundamental and far-reaching transformation in the ways in which these concerns are conceptualized. Traditional beliefs, while rich in detail and highly ingenious and imaginative in the causal mechanisms they postulate, are essentially straightforward in their underlying logical structure. They offer plausible ways of explaining events and experiences relating to health and illness which might otherwise be perceived as driven by arbitrary and capricious forces, largely beyond the reach of human intervention. What is more, these explanations can be readily understood by any competent adult because of the nature of their basic structure. Although specialist healers (individuals perceived as gifted with special powers and insights) may be consulted, by and large the patient will be conversant with the reasoning behind the treatments being used. The manipulation of diet represents a response to illness (or the threat of potential illness) which is clearly within the realm of the individual's own control. Whatever else they offer, traditional conceptions of diet and health can provide a reassuring sense that the individual has access to remedies which are, in both a practical and an intellectual sense, readily within his or her own reach.

However, the rationalization and medicalization of diet and health issues has brought about a significant change in this connection. There can be no doubt that, in a technical sense, modern scientific formulations of the physiological mechanisms which articulate the links between diet and health, offer great explanatory power and theoretical sophistication. But, by their very nature, such formulations have become the intellectual property of specialized and highly trained professionals: medical practitioners and researchers, physiologists, nutritionists and dieticians. As such, they are not readily within the reach of the average member of the public, whose grasp of them will be at best partial and selective and at worst confused. Yet the rationalization of diet has seen professional groups, and the state itself, progressively claim ever more authority over nutritional knowledge and over dietary choices, in so far as these affect both short- and long-term health outcomes. Recommendations concerning the restraint of the appetite for certain foodstuffs, originally relevant only to the eating habits of a privileged minority, have now been generalized to entire populations in societies like the USA. and the UK.

Yet the public's response to the nutritional pronouncements of the 'authorities' (in the widest sense of that term) has often been uneven and inconsistent. Common-sense conceptions clearly continue to play a central role in the public's views on diet and health. What is more, as we have seen, 'alternative' frameworks of explanation, in the form of what might loosely be termed the 'health food movement', have emerged and established themselves as offering versions of the 'rational menu' which, within a climate of menu pluralism, can attempt to compete with or complement orthodox perspectives. Certainly, a good measure of the appeal of the health food approach is related to a characteristic it shares with traditional modes of belief: its promise to provide individuals with a sense that they can influence their own health for the better by means of choices and practices which they feel they personally can control and comprehend.

FOOD RISKS, ANXIETIES AND SCARES

The risks and anxieties associated with eating in modern Western societies need to be placed both in economic and historical context. Quite clearly, for large numbers of people in the contemporary world the overriding anxiety relating to food emerges out of a concern that now or in the future one simply will not be able to get enough food to remain healthy and active or, for that matter, alive. Similarly, even in Europe, we do not need to reach very far back into history to come across situations in which food shortages affected the lives of millions of individuals. The Second World War, for example, saw widespread food shortages in continental Europe, although they were often unevenly distributed in geographical and social terms. Indeed, in some instances, large numbers starved, or were starved, to death. As we have already seen, low nutritional standards and inadequate food intake were common in the lower orders of British society in the nineteenth century. Indeed, Mennell (1985:27) argues that centuries of recurrent famine have left their mark upon the European mind, with such themes as starvation and cannibalism woven into the very fabric of European folklore.

Risks other than shortage have long threatened the food consumer. The contamination of food with naturally occurring micro-organisms and toxins has always posed threats to human health, all the more disturbing when the underlying mechanisms were not understood. Perhaps one of the most chilling and bizarre manifestations of such contamination is the illness known as ergotism. Ergot is a fungal disease which affects cereals, the grain becoming infested with the spore-bearing bodies of the fungus. Rye is particularly susceptible to this fungus, and if the grain is badly affected cooking may not neutralize the toxic effects, rendering bread baked with the affected flour highly dangerous. The symptoms of ergotism include either burning pains and gangrene in the limbs, or itching skin and convulsions, hence the names 'Holy Fire' or 'St Anthony's Fire' given to the disease. An outbreak in the Rhine valley in AD 857 is thought to have caused literally thousands of deaths (Tannahill 1988:101). The disease occurred all over Europe throughout the Middle Ages, causing intense suffering, insanity and death. Its actual cause was not discovered until 1670, when a French country physician, a Dr Thuillier, after years of patient study of the

affliction, deduced its connection with the rye bread which was the staple of rural peasant families (Carefoot and Sprott 1969:19–21). However, it was not until 1853 that the fungus parasite itself was identified and its connection with disease finally proven.

Yet, if in the past the presence of natural contaminants and infections could pose a threat to the food consumer's well-being and peace of mind, so too could the presence of deliberately introduced substances in food placed there for fraudulent purposes. As Burnett (1989:86) reminds us, food adulteration has a long history, but the increasing industrialization and urbanization of society meant that from the late eighteenth century onwards food adulteration became increasingly feasible, profitable and widespread. The work of the chemist Frederick Accum, published in 1820, revealed the diversity and the seriousness of the abuses taking place, including the use of copper to colour pickles green, the use of sulphuric acid to 'age' beer, the use of verdigris to give a green bloom to dried hedgerow leaves passed off as tea, and the use of red lead to colour the rind of cheese. Such adulterations were not only an assault on the consumer's purse, but on his or her long term health. Later in the nineteeth century a voluminous treatise running to nearly 900 pages (Hassall 1876) detailed the adulteration, often with hazardous substances, of a wide range of everyday foodstuffs, including tea, coffee, cocoa, sugar, honey, bread, flour, milk, butter, cheese, lard, potted meat, preserves, mustard, vinegar and spices.

Currently, of course, the kinds of food hazard discussed above no longer appear to menace the consumer in quite such a direct way. Life-threatening food shortage or starvation are pressing concerns for few, if any, individuals in most modern societies. Advances in medicine and the biological sciences have provided the means to comprehend and avoid the deleterious effects of microbial contamination. In relation to deliberate adulteration, the state has increasingly taken upon itself the task of creating a legislative framework to ensure the purity of food (Paulus 1974). Indeed, there now exist substantial bodies of legislation in countries like the UK and the USA governing such aspects of food processing as additives, contaminants, packaging, labelling and hygiene (Jukes 1993). Yet, perhaps ironically, despite these undoubted advances in food safety, food-related anxieties persist, sometimes in a decidedly disturbing form. It may even be the case that once many of the traditionally most threatening food risks have retreated into the background, other, subtler anxieties, perhaps previously masked and relatively low in visibility, have become more prominent and have thereby gained more public attention. The aim of this chapter is to analyse such anxieties and to attempt to uncover some of the mechanisms which generate and sustain them. In order to achieve this aim, we will first need to consider the fact that the very act of eating can be charged with ambivalence, and then go on to examine customary modes of coping with the anxieties such ambivalence may produce. It will then be argued that these customary modes of managing food-related anxieties may be breaking down, a breakdown which has given rise to both acute and chronic effects on consumers' food choices and attitudes.

Whether new modes of sustaining food confidence and alleviating anxiety are, in fact, emerging is a question which will also be addressed.

THE DIMENSIONS OF FOOD AMBIVALENCE AND THEIR ASSOCIATED ANXIETIES

In Chapter 3 we encountered the concept of the omnivore's paradox. This paradox, it will be recalled, emerges out of the fact that all omnivores (and this includes, of course, the human omnivore) experience the opposing pulls of neophilia (the inclination to sample novel food items) and neophobia (caution when confronted with novel items, based on the possibility that they may be harmful). All omnivores must find ways of coping with this paradoxical juxtaposition of attraction and repulsion. Thus, for the omnivore, eating is a profoundly ambivalent activity, as is the individual's relationship to food itself. However, for the human omnivore, eating with the mind as much as with the mouth, immersed in the symbolic nuances of food, this ambivalence has many more dimensions than the basic tension between neophilia and neophobia. In a study of vegetarianism, the present authors identified three additional paradoxes which can be seen as generating ambivalence for the food consumer (Beardsworth and Keil 1992a), and these can be used as examples in order to develop the argument. Each of the three paradoxes consists of an opposition between a positively valued and a negatively valued feature of food (see Table 7.1).

Positive	Negative
 Food provides gustatory pleasure, satiety, etc. Food is required for vigour, energy and 	Food can produce gustatory displeasure, dyspepsia, nausca, vomiting. Food can introduce illness or disease.
health.3. Food is required for the continuation of life.	Food entails the death of the organisms consumed.

Table 7.1 The paradoxical nature of food

Source: Adapted from Beardsworth and Keil (1992a)

Paradox 1 (what might be termed the pleasure/displeasure paradox) refers to the fact that while food can provide gustatory gratification and a welcome sense of fullness and satisfaction, it can also produce sensations and reactions ranging from mildly unpleasant to severely distressing. The anxieties associated with these negative possibilities are largely self-evident. For example, there is the fear of encountering unpalatable flavours or textures, as well as the fear of experiencing digestive distress, in the form of sensations of 'bloatedness' or nausea. Concerns about such unwelcome effects are likely to be particularly prominent when the individual encounters a novel food item, and such concerns represent an important component of neophobia. Indeed, disgust when encountering novel food items may, in certain circumstances, represent an important safeguard against biological hazards, even though its origins may be largely cultural (Fischler 1988:282–4). In addition to these anxieties about effects which may be felt by the eater himself or herself, there may be fears about potential effects of food intake which may be disapproved of by others (for example, short-term effects like flatulence and belching, and long-term effects like weight gain, regarded as cosmetically undesirable).

Paradox 2 (the health/illness paradox) is based upon the fact that, while food is the source of physical energy and can be conceived of as the foundation of vitality and health, it is also recognized as having the potential to introduce disease-inducing substances or organisms into the body. As has been argued in the previous chapter, the issue of the ways in which the connections between diet and health are conceptualized is a complex one. However, it is clear that this paradox can give rise to anxieties about acute effects (e.g., rapidly acting toxins and infections) and chronic effects (e.g., slow-acting toxins, disease-causing agents or long-term nutrient deficiencies).

Paradox 3 (the life/death paradox) emerges out of the fact that, while the consumption of food is absolutely essential for the maintenance of life, the act of eating usually entails the death and dissolution of other organisms. There are, of course, some qualified exceptions to this general rule. Fruits can be consumed without the destruction of the donor plant, and cereals are derived from plants that in any case have an annual life cycle. Nevertheless, fruits, seeds and vegetables are living organisms. There are also some animal secretions which can be used for food without necessarily entailing the killing of the donor animal itself. Two significant examples are milk and honey. Some pastoralist peoples also use blood from their livestock as a source of nutrients, opening a blood vessel to draw off the required quantity, thus obviating the need to slaughter the animal. However, although the use of such animal products does not directly involve the taking of life, it is usually based upon a regime of husbandry of which this is an integral part. For example, aged or unproductive dairy cows are slaughtered and eaten, as are the male offspring of dairy herds.

Typically, the consumption of plants and plant products gives rise to little or no concern, since plants are generally not regarded as sentient organisms. Animals, however, are an altogether different matter, and paradox 3 may generate a whole range of anxieties related to ethical concerns about inflicting suffering and death upon food animals. This is not to argue that all animals are likely to stimulate the same level of ethical interest, since there is clearly a distinct 'hierarchy of sympathy'. Invertebrates of all kinds are obviously very near the bottom of this hierarchy, with 'cold-blooded' vertebrates a step up the ladder. At the top of the hierarchy are 'warm-blooded' vertebrates, particularly large mammals, with their perceived proximity to the human species.

TRADITIONAL MODES OF COPING WITH FOOD AMBIVALENCE AND ANXIETY

Coping with or managing the anxieties generated by the kinds of food paradox discussed in the previous section is not a process which goes on merely at the individual level. Rather, solutions and coping strategies must emerge and be sustained at the cultural level, and thus be available as ready-made social constructs upon which the individual can rely to make sense of his or her experiences and to produce a feeling of ease and confidence. In traditional societies with relatively low rates of social change, long-established customs, beliefs and rituals provided a taken-for-granted frame of reference within which food-related anxieties could be submerged or neutralized. It is, of course, difficult to sustain hard and fast generalizations concerning the nature of traditional societies given the fact that they have exhibited such tremendous variety in culture and institutional forms. However, it is possible to identify a number of common features of premodern social systems which contributed to the process of anxiety neutralization.

A prime factor in the neutralization of paradox 1 (pleasure/displeasure) anxieties is undoubtedly the long-term stability of what we have termed the 'alimentary totality' of traditional societies, that is, the sum total of all the items defined as food suitable for humans. Changes in the alimentary totality are rare and gradual, with the result that familiarity with staple foods breeds in individuals a largely unquestioning confidence that they understand the implications and conditions which cluster around the consumption of a particular item. What is more, long-established rules of cuisine also work to sustain a sense of familiarity and confidence. Rozin and Rozin (1981) note that many traditional cuisines, that is, bodies of rules and recipes governing the preparation of food, have at their foundations distinctive 'flavour principles'. Such flavour principles actually consist of specific combinations of flavouring elements which provide each cuisine system with its own characteristic gustatory identity. The authors point out that the principles operated by major 'cuisine groups' like those found in India, China and Mexico, have remained relatively stable over long periods of time. Thus, in traditional societies, not only does the sum total of food items remain relatively unchanging, but so do the modes of cooking, combining and flavouring these items. Indeed, Rozin (1976) argues that established flavour principles can also mitigate the effects of neophobia. Unfamiliar or novel food items can be rendered less threatening by being suffused with familiar flavours, flavours which the author suggests can reduce the 'tensions of ingestion' which are necessarily inherent in omnivorous eating patterns (Rozin 1976:66-7). In fact, the entire traditional culinary culture, based upon a set of flavour principles, can operate to sustain confidence and reassurance. Taken-for-granted rules concerning the structure and timing of meals, the appropriateness of given foods in relation to the gender, age and rank of the individual, and the division of labour in respect of food production and preparation, all serve to maintain an overarching framework of familiarity.

Digestive distress produced by overeating, which is also one of the anxieties associated with paradox 1, may be of somewhat different significance in traditional societies. For all but the most privileged, opportunities for overindulgence are likely to be rare, with food shortage being a more likely possibility. Chronic insecurity in the food supply can give rise to a characteristic oscillation between fasting and feasting, with occasional gorging (often associated with particular rituals or observances) providing a periodic release from fears of food deprivation and starvation (Mennell 1985:23). Anxiety concerning the experience of embarrassment due to the effects of eating and digesting (also related to paradox 1) is likely to be much less salient in traditional societies. For example, medieval Europeans seem to have been largely uninhibited about the physiological processes of digestion, and the sounds and odours they can produce (Elias 1978a: 129-43). Embarrassment in relation to these effects seems to be a product of the civilizing of appetite discussed in Chapter 5. Indeed, in some traditional cultures, manifestations which would be seen by modern Westerners as dreadful lapses in good manners may be required expressions of politeness. For example, Grimble (1952:35–6) noted that, among the people of the Gilbert Islands in the Western Pacific, a guest who had been provided with food was expected to belch loudly after eating to show his or her appreciation.

In Chapter 6 we have already come across some of the ways in which beliefs and practices in traditional societies can act to neutralize paradox 2 (health/ illness) anxieties. We have noted the way in which the combination of tried and tested empirical knowledge and flexible magical beliefs can cope well with threatening aspects of daily life. In relation to food and illness, such a combination can provide intelligible and plausible explanations for disease. In addition, however, traditional cultures provide ways of responding to such misfortunes. Afflicted individuals have, within their realm of common-sense knowledge, criteria for the selection or avoidance of specific foods or food combinations, as well as remedies which are within their own grasp and under their own control. The very fact that traditional knowledge and ethnomedical practices evolve slowly, without frequent or obvious disjunctures in their continuity, provides them with the power to reassure. Their taken-for-granted nature is, perhaps, the best guarantee of the suppression or masking of paradox 2 anxieties. To a degree, this guarantee can operate independently of the actual technical efficiency of the particular avoidances, dietary regimes and treatments that a given traditional culture prescribes. Given the flexibility of common-sense knowledge and magical beliefs, apparent failures can be accommodated or explained away without their presenting a damning challenge to the whole system. Thus, the very resilience of these ideas, along with their apparent immutability, is a powerful factor behind the maintenance of a sense of confidence in the face of the threat of ingesting harmful as well as nutritious substances in the course of day-to-day eating.

As we have already noted, most animal-derived foods (although not all) directly entail the killing of the donor animal, although the extent to which this fact gives rise to ethical concern on the part of the human consumer is likely to vary markedly from species to species. Thus, the probability of the emergence of anxieties related to paradox 3 will itself vary according to the species being eaten. As a broad generalization, warm-blooded animals seem to elicit most concern, especially mammals. Indeed, the larger the mammal the more intense is likely to be the moral unease associated with dining upon it. However, inside paradox 3 is yet another paradox, for the flesh of large mammals, in Western culture at least, is traditionally accorded high status and credited with great potency. This is demonstrated, for example, in its role as the focal or 'stressed' element in the 'cooked dinner' or 'proper meal' which is such an important feature of British culinary culture. (The multiple significances of meat will be dealt with in detail in Chapters 9 and 10.) Within the cultures of many traditional societies are to be found deeply rooted beliefs and customs which serve to legitimize the use of animals for food and to allay any qualms the individual might entertain concerning the morality of eating meat.

Such beliefs and customs are particularly clear and explicit in cultures which derive a significant proportion of their protein resources from the hunting of large game animals. These ideas can take many forms, including ritual apologies to the slain animal and the notion that the purpose of the prey animal's existence is to provide for the needs of the hunters and their dependants. For example, in the past the Akoa pygmies of West Africa would chant a formal incantation of apology to each elephant they killed, absolving the hunter of blame for the animal's death and exhorting the creature's spirit not to return and take revenge upon them. The Mbuti pygmies of the same region also carried out elaborate rites over the body of a freshly killed elephant to appease its affronted spirit (Coon 1976:140-4). A rather different approach to the explicit rituals of the Akoa and the Mbuti is found in the culture of the Chipewyan, a people of the boreal forests of Canada. In Chipewyan thought, animals are seen as exhibiting features which locate them both in the realm of the natural and of the supernatural, mystically renewing themselves to become rejuvenated each spring. Such beings, reason the Chipewyan, can only be killed with their own consent, voluntarily giving themselves up to the hunter they deem worthy of their sacrifice (Sharp 1988:187). Indeed, the Chipewyan believe that respect must be shown for game animals at all times, since offending or insulting them could lead them to withdraw their consent to be preyed upon, with disastrous consequences for a people traditionally dependent on the resources of the wilderness for their subsistence. The Bushman hunters of the African Kalahari desert protect themselves from moral qualms by emphasizing the 'otherness' of the animals upon which they prey, rather than seeing them as surrogate humans (Guenther 1988:198–9). Thus, although these people express affection, respect and aesthetic appreciation in connection with their quarry animals, they see them as sufficiently distinct and distant from themselves to render them legitimate sources of food.

If the hunting of wild mammals presents ethical problems, so too does the slaughter of domesticated mammals. Among pastoralist and agricultural peoples the belief is often found that humans have been granted permission by a creator

or supreme being to exploit and subjugate the natural world for their own benefit. Within this context, the use of domesticated animals for food is seen as a divinely licensed practice. This idea is, for example, deeply rooted in Judaism, Christianity and Islam, and in each of these three religions it is seen as based upon the consent given by God to Noah to consume flesh. However, within Judaism, privileges such as this are hedged around with a complex set of food prohibitions, including detailed specifications of those animals which are 'clean' and therefore can be eaten, and those which are 'unclean' and therefore forbidden. A taboo is also placed upon the consumption of an animal's blood, since this is regarded as the medium which contains its vitality (Lowenberg, Todhunter, Wilson, Savage and Lubowski 1974:207). Thus, slaughter must be carried out in a ritually prescribed fashion, to ensure that all the blood is drained from the animal so that its spirit can flow into the earth (Farb and Amelagos 1980:23-4). Islam, too, specifies animals which are clean and unclean, and forbids, for example, the consumption of animals that die by strangulation or are beaten to death (Lowenberg, Todhunter, Wilson, Savage and Lubowski 1974:216).

Even in the context of religions which explicitly forbid the killing of animals, customary practices and beliefs can emerge which legitimize such killing or purge the agent of any culpability. For example, although practising Buddhists are prohibited by their religious beliefs from slaughtering animals or even witnessing slaughter, they are permitted to consume meat as long as they did not participate directly in the taking of the animal's life (Harris 1986:23-4). In fact, blame may be transferred down the social hierarchy or to pariah groups which specialize in slaughter (Simoons 1961:11-12). In Buddhist Thailand, villagers usually sell pigs to Chinese dealers to be slaughtered and sold. Similarly, Thai villagers, for whom fish is an important addition to their rice-based diet, argue that they do not actually kill the fish, but merely remove them from the water (Lowenberg, Todhunter, Wilson, Savage and Lubowski 1974:226). Despite the apparently rigid ban on the killing of cattle in India, Harris (1986:60–1) points out that Hindu farmers can circumvent this prohibition in a fashion which obviates any sense of guilt. They simply sell surplus animals to Muslim traders, and the resulting meat is consumed by Muslims, Christians and even lower-caste Hindus. This conscience-easing accommodation is supported by the common practice of referring to such meat euphemistically as 'mutton'.

THE EROSION OF TRADITIONAL MODES OF MANAGING AMBIVALENCE AND ANXIETY

In the above section we have examined examples of the ways in which the kinds of anxieties associated with the three paradoxes detailed in Table 7.1 have been managed within the settings of traditional cultures, ranging from huntinggathering peoples to long-established civilizations like those of the Middle East and India. However, a whole series of factors has been working to erode these

reassuring beliefs and practices along with the high level of nutritional confidence (in relation to our three paradoxes) that comes with participation in a worldview which provides effective protection from anxiety and guilt. In broad terms, the factors associated with this erosion are linked to more general processes behind the emergence of the modern food system that were outlined in Chapter 2. The intensification and industrialization of food production and processing, and the globalization of food supply, have led to a veritable explosion in food choice. Coupled with rising affluence and purchasing power in Western economies, this has meant that food consumption patterns have been freed from many of the traditional constraints of locality and season, constraints which would once have generated a framework of familiarity and a sense of cyclical participation in the annual rhythms of agriculture. Indeed, the industrialization of the food system means that food production and processing increasingly take place beyond the view of the average food consumer, involving techniques that he or she is only vaguely aware of or simply does not understand. Thus, many of the food items routinely purchased may be perceived as having unknown features or unknown ingredients, with a consequent loss of the consumer's confidence. This effect is reinforced by the fact that modern food manufacturing techniques, including the use of synthesized substances and flavourings, can imitate or conceal 'natural' textures or tastes, leaving the consumer effectively unable to trust the sensory messages given off by any given food product as a reliable guide to its actual nature (Fischler 1988:289).

Many of the cultural features of late capitalist societies also appear to contribute to the erosion of the traditional bases of nutritional confidence. The whole ideology of consumerism, driven by an emphasis on a ceaseless search for novel consumption experiences, is essentially antithetical to the maintenance of long-term stability in eating patterns. This hunger for novelty is, in turn, fostered and extended by the mass media, most obviously through explicit advertising and less obviously through the assumptions built into the content of the messages which are conveyed to the various audiences being targeted. Coupled with the globalization of the food supply and the expansion of the alimentary totality of each developed society, virtually open-ended wants can become a salient factor in the affluent consumer's views on food. However, it is not simply that a somewhat bewildering level of choice emerges in relation to food items as such. Even underlying flavour principles, which once served mainly to mark the identity of a particular cuisine and thereby could help sustain confidence and familiarity, have now been effectively uncoupled from the regions and cultures which gave birth to them. In effect, flavour principles themselves have become commodities, options on a kind of meta-menu which consumers with sufficient resources can select from at will. The result is that the long-standing features of the consumer's own native set of flavour combinations become submerged in the sheer variety of principles on offer, with the consequence that they may tend to lose the authority which once made them so reassuring.

If traditional flavour principles can be seen to be losing their central place in the experience of eating, then the changes in the actual patterns of eating that have already been discussed in earlier chapters can also play a role in the erosion of food confidence. Given the changing role of women in the labour market, the modern household (or indeed, the 'postmodern' household) has been characterized as one where the multiple and often conflicting activities and priorities of its members mean that the familiar patterns of commensality, with their confidence-enhancing rituals and habits, have begun to break down. A greater reliance on pre-prepared convenience foods, for example, has led to a situation in which the family meal is far less significant as an occasion for expressing time-honoured assumptions about age, gender and status which serve to locate each individual within the taken-for-granted order of everyday social life (Gofton 1990:92).

In the previous section, it was suggested that religious beliefs can play a part in the alleviation of food-related anxieties, particularly those pertaining to the moral concerns arising out of the killing of animals for food. However, with the extensive secularization of contemporary Western society, the theological and philosophical supports for the use of animals as food sources have themselves been weakened. More generally, accompanying the broad processes of secularization has been the extensive and impressive development of the scientific world-view, which has transformed the ways in which humans seek to understand and explain the natural world. As we saw in Chapter 6, despite the fact that common-sense ideas and 'alternative' views on food manage to persist, it is the professionally accredited voice of the nutritionist, the dietician, the physician, the microbiologist, the toxicologist and the physiologist which speak with the greatest authority on matters nutritional. Yet, professional scientific discourses on diet are by no means necessarily reassuring ones in relation to our three paradoxes. By its very nature, scientific knowledge is always provisional, subject to controversy, challenge, refutation and replacement. In this sense, it is very unlike common-sense knowledge and traditional empirical/ magical thinking, whose elastic and slowly evolving nature makes them appear both homely and proverbial. Scientific knowledge can be subject to disturbing and bewildering changes of revolutionary significance, and its ideas are often largely inaccessible, except in the broadest terms, to those outside a specific discipline. Thus, scientific discourses on food and nutrition do not necessarily produce reassurance and confidence in the public mind.

Indeed, the possibility exists that such discourses may also actively generate public anxiety. This possibility arises out of the fact that science continually and inevitably raises what are, in effect, 'trans-scientific' questions. Weinberg (1972) defines trans-scientific questions as those which scientists can pose quite rationally and reasonably on the basis of widely held views within a given discipline, but to which science itself cannot actually provide satisfactory or unambiguous responses. Questions which appear to require no more than a recourse to suitable facts or data to settle them once and for all can turn out to be highly intractable,

with little prospect of clear solutions in the medium or even the long term. There can be a whole range of reasons behind such intractability. For example, there may be compelling ethical barriers which prevent the necessary experimentation on human subjects. Cause and effect linkages may be extremely difficult to detect if they are embedded in a complex matrix of interacting variables which are difficult or impossible to control. Some effects may be longterm or delayed and may need decades of study to detect, and others may be so complex as to require enormous resources for thorough investigation. In fact, Tracey (1977) argues that some aspects of human nutritional needs and requirements have these trans-scientific dimensions. Indeed, it has been suggested that many of the current issues relating to links between diet and health do appear to exhibit trans-scientific aspects, which may mean that scientists may not be able to provide clear-cut answers to seemingly straightforward questions (Beardsworth 1990). Two striking examples of such questions are whether the consumption of beef from cattle infected with bovine spongiform encephalopathy (BSE) can produce an analogous disease in humans, and the nature of any longterm effects of chronic exposure to pesticide residues in food. Both these questions can be posed in such a way as to alert public attention to possible risks, but both raise extremely complex scientific issues and have generated considerable professional debate and controversy. However, the doubt and uncertainty surrounding such questions in scientific circles, and the controversies they create, may not be well understood by the general public.

Indeed, many members of the public at large lack the basic mathematical skills and insights to assess the practical significance of risks to their health which are pointed out by scientists but are expressed in quantitative or statistical terms. As a result, many individuals may experience exaggerated levels of anxiety and even demand guarantees of freedom from risk which would be virtually impossible to implement (Paulos 1988). It is, perhaps, rather ironic that scientific pronouncements and warnings may act to stimulate food-related anxiety at precisely the time when greatly expanded scientific knowledge has produced significant advances in food hygiene and food safety generally.

SOME CONSEQUENCES OF THE EROSION OF FOOD CONFIDENCE

The thrust of the argument being put forward here is that many of the structural and ideological features of modern food systems have the effect of raising the visibility of the paradoxical nature of food and eating. The resulting anxieties and sense of insecurity about food are characterized by Fischler (1988:288–90) as, in effect, a significant 'disturbance of modern identity'. In fact, as was noted in Chapter 3, Fischler goes so far as to argue that modern societies are witnessing a crisis in gastronomy which involves the breakdown of regulating and reassuring rules, producing a state of *gastro-anomy* (Fischler 1980:947–48). It is Fischler's contention that modern individuals, less than ever integrated into supportive

networks of family and community, increasingly have to make their nutritional decisions in a kind of cultural vacuum, unrestrained by the limitations of season and locality. This nutritional normlessness is, in itself, an anxiety-generating feature of modern society. It clearly goes hand in hand with the erosion of the traditional modes of anxiety management that we have already been discussing. These interlinked phenomena clearly interact with each other, compounding their negative effects upon the confidence and the peace of mind of the contemporary food consumer.

Warde (1991) summarizes this situation by highlighting the three principal competing forces at play in the modern food system, all of which can be seen as pulling in conflicting directions. The first of these forces is made up of the professional nutritional discourse and the official health-oriented dietary advice which were discussed in the previous chapter. The second consists of the customary practices and beliefs which survive in modern societies from traditional culinary culture (which contain the protective elements outlined above). The third force Warde identifies as the taste for novelty, which is a characteristic of the consumption patterns of modern societies in general (and, in a sense, might be seen as an exaggerated manifestation of nutritional neophilia). Each of these three forces is seen as exercising its own potent influence over public attitudes and practices, and the contradictions between them are seen as giving rise to what Warde rather dramatically calls 'a mire of uncertainty' (Warde 1991:9).

The overall consequence of these gastro-anomic effects and conflicting forces at the cultural level of the food system, exacerbated by the erosion of traditional modes of sustaining confidence, has been a general rise in food-related anxieties in the context of all three of our paradoxes. For example, in relation to paradox 1 (pleasure/displeasure) Mennell (1992) seeks to show how in England from the early nineteenth century onwards both professional medical practitioners and members of the public became increasingly obsessed with the uncomfortable or embarrassing aspects of eating and digestion. The practice of attempting to classify foods according to their perceived ability to generate unwelcome effects, like 'indigestion', constipation and flatulence, became increasingly widespread and led to such potentially harmful effects as the increased use of laxatives and the exclusion of an ever-widening range of items from anxious individuals' diets (Mennell 1992:7-8). In more general terms, it may also be the case that intensified paradox 1 anxieties may be one of the contributing factors behind the modern preoccupation with body fat, body shape and the restriction of food intake through dieting (which issues will be discussed in some detail in the next chapter). These modern concerns with body fat have, of course, both medical and cosmetic dimensions.

Tensions and anxieties related to paradox 2 (health/illness) also seem to have intensified in the modern setting. Indeed, one of the unintended consequences of official nutritional and health education campaigns may have been a rise in public nervousness over health and food issues, which would have to be set

alongside the beneficial outcomes such campaigns may be capable of generating. Interestingly, however, there is some evidence that the public's perceptions of food-related health risks may be significantly different from those of professional experts. For example, a study carried out in Sweden suggests that lay opinion actually reverses the rank order of risks as assessed by experts. Thus, experts tended to place dietary fat, sugar and salt high on their list of food hazards, followed by food poisoning, natural poisons, residues and additives. Conversely, consumers appeared to regard poisons as the greatest risk, with concern expressed in relation to such substances as mercury and heavy metals. Then came pesticides, bacteria and mould poisons, with fat, sugar and salt well down the rank order (Sellerberg 1991:197). A similar finding has been reported from the USA (Schafer, Schafer, Bultena and Hoiberg 1993). A study based on a random sample of 630 adults indicated that respondents perceived the highest food-related risks as coming from chemicals and the lowest risks from bacterial contamination (although, to place this finding in context, respondents rated concerns about food safety lower than concerns about such issues as cost and taste). However, a study of adult Texans which investigated public knowledge concerning the specific risks associated with undercooked meat products (McIntosh, Acuff, Christensen and Hale 1994) found that of the 46 per cent of respondents who identified a risk, the majority of these (52 per cent) cited food poisoning as the most likely hazard. Indeed, the cross-cultural study by Jussaume and Judson (1992), examining public perceptions of food safety in the USA and Japan, indicates that food safety concerns are becoming globalized in modern societies. With particular reference to pesticide residues and additives, the researchers found analagous levels of concern in the US and Japanese samples, with particular anxiety in households in which children under the age of 18 were present (Jussaume and Judson 1992:246).

A rise in ethical concerns relating to food seems to suggest an intensification of anxieties in connection with paradox 3. Most obviously, these concerns manifest themselves in the context of heightened interest in issues of animal welfare and animal rights. However, they can also find more indirect expression in the attention increasingly being paid by consumers in modern, developed societies to the environmental implications of intensive food production techniques and to the ethical dilemmas raised by the extreme inequalities in nutritional standards which are present in the global food system. These issues will re-emerge as important themes in Chapters 9 and 10.

THE PHENOMENON OF THE FOOD SCARE

The effects that we have been discussing so far are, in a sense, broad and somewhat diffuse ones, representing gradual shifts at the cultural and ideological levels of the food system. On the other hand, it may well be possible to identify phenomena which are related to the changes in nutritional confidence outlined above, but which manifest themselves in a much more dramatic fashion. One such phenomenon is the so-called 'food scare', an acute outbreak of collective nutritional anxiety which can seize hold of public awareness and can give rise to significant short- and long-term consequences. The typical food scare seems to exhibit a fairly consistent pattern, which for the purposes of presentation can be conveniently presented as consisting of a sequence of steps:

- 1 An initial 'equilibrium' state exists in which the public are largely unaware of or are unconcerned about, a potential food risk factor.
- 2 The public are initially sensitized to a novel potential food risk factor.
- 3 Public concern builds up as the risk factor becomes a focus of interest and concern within the various arenas of public debate.
- 4 Public response to the novel risk factor begins, often consisting of the avoidance of the suspect food item. (This response may be an 'exaggerated' one, apparently not in proportion to the 'actual' risk.)
- 5 Public concern gradually fades as attention switches away from the issue in question and a new 'equilibrium' state establishes itself. However, chronic low-level anxiety may persist, and can give rise to a resurgence of the issue at a later date.

In recent years a series of such food scares has occurred in Britain (Mitchell and Greatorex 1990). The scares themselves have been centred upon a diverse range of perceived hazards, including the presence of the dangerous organism listeria in pâté, cook-chill foods and soft cheeses, the presence of salmonella in eggs and the risks posed to human health by the outbreak of bovine spongiform encephalopathy (BSE) in British cattle. Alarm has also been generated by revelations concerning the contamination of bottled spring water with benzene, and by acts of 'food terrorism', where food products have been deliberately contaminated with poisonous substances or foreign bodies, usually as a means of blackmailing large retail food companies. From a sociological point of view, there are two major questions to be addressed here. Firstly, 'How do we explain the sudden and dramatic nature of these surges of public concern?' Secondly, 'Why do nutritional issues seem prone to this kind of effect?'

In relation to the first of these questions, both Gofton (1990) and Beardsworth (1990) have suggested that the concept of the 'moral panic' may be a relevant one (although reservations about the application of this concept to food scares have been expressed by Miller and Reilly (1995:328–9), who point out that the concept originally implied the focusing of public and official concern on specific marginal or deviant groups who could be characterized as posing a threat to social order). The term itself is to be found in the work of Cohen (1971, 1973) who set out to analyse society's reactions to a series of incidents involving violent public disorder in a number of English coastal resorts in the 1960s. His argument is that the sensationalized coverage of these events by the mass media had two effects. Firstly, it sensitized the public at large to what was perceived as a novel and threatening form of deviance. Secondly, it may even have acted to sharpen and solidify the

collective identities of the two rival youth factions involved in the clashes, providing the stimulus for subsequent repeat performances. Cohen uses the term 'moral panic' to describe the rapid surge of public concern which commonly accompanies intensive mass media coverage of such phenomena. The workings of this effect have also been analysed by Hall, Critcher, Jefferson, Clarke and Roberts (1978), who examine the emergence of the 'mugging' scare which occurred in Britain in the 1970s. Although no specific crime of 'mugging' exists in law, for example, the authors argue that the term itself was imported from the USA by British newspaper and television journalists. The mugging concept was then used as a category into which a whole range of violent street crimes could be reclassified. Thus combined, these crimes could then be presented to the public as a frightening new phenomenon which demanded action from the authorities. In response to rising public concern, the police and judiciary reacted by increasing the severity of penalties for street violence. Examples of such severe penalties were highly newsworthy and were widely reported in the media, as were the pronouncements of senior police officers, judges and members of the establishment. Such reports themselves added more fuel to the public's collective anxiety, and expressions of such anxiety were frequently featured in press reports. In fact, Hall and his co-authors maintain, this intensive media coverage created the impression of a serious crime wave, although it is by no means clear that violent street crime was actually increasing rapidly at this time.

The mechanism which creates these relatively intense but short-lived 'panics' can be seen as a kind of 'news spiral' consisting of a positive feedback loop. Figure 7.1 provides a simplified diagrammatic representation of the workings of this feedback effect.

The stages in this simplified model are virtually self-explanatory. Initially, a novel issue or phenomenon emerges into the public sphere through reporting in the mass media. Next, the public become sensitized to this issue through their exposure to such coverage. Subsequently, the public are likely to react to the issue to which they have been sensitized. Of course, such reactions may be difficult to predict, as mass media audiences are not simply passive recipients of media messages, but actively select and interpret. Audiences' reactions are themselves newsworthy, although not all audience members' voices have an equal probability of being heard, with those in authority and those claiming 'expert' status likely to receive greater attention. The reporting of audience reactions itself increases public awareness of the issue and increases the level of sensitization, thereby closing the feedback loop and allowing a spiralling level of anxiety to build up. This mechanism does appear to be capable of generating acute surges in collective anxiety, and in recent years in the UK such surges have characterized a wide range of issues, including soccer hooliganism, child abuse, dog attacks on humans, and various forms of criminal behaviour and drug abuse.

Of course, the anxiety 'amplification' produced by this feedback effect is bound to be a self-limiting process, and public and media interest in a topic

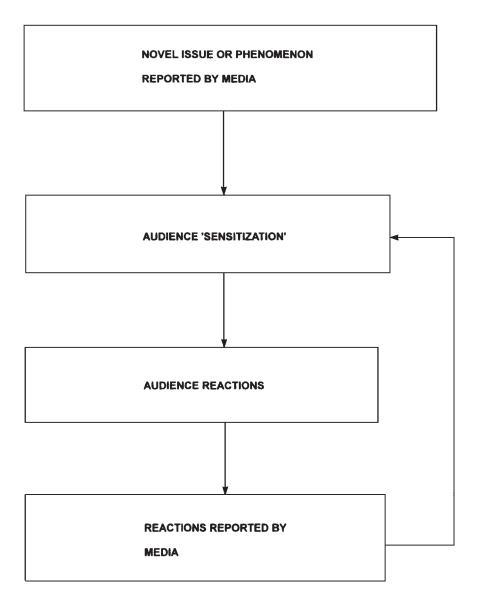


Figure 7.1 A simplified model of the news spiral

will eventually start to decline as that topic goes 'stale' in news terms. This effect is clearly documented by Miller and Reilly (1995:320–2), who present data showing peaks in the frequencies of items in the British press relating to salmonella and BSE between 1988 and 1994. In effect, public attention can be seen as a kind of scarce resource for which the media have to compete (Hilgartner and Bosk 1988). The development of a particular topic as a problem or scare will be affected by what Hilgartner and Bosk see as the limited carrying capacity of the public arenas within which issues can be debated and played out by rival authorities, opinions and interest groups. Eventually, a kind of saturation will occur in connection with a given topic, and the media's need to maintain a sense of novelty and dramatic interest will mean a switch to competing issues in order once again to command public attention. However, even though such scares are of limited duration, they may well produce enduring effects. Official policies may be changed, new legislation may be introduced and long-term alterations in the public's activities and attitudes may be produced. What is more, months or even years after a scare episode, an issue may re-emerge and, given the right conditions, generate further surges of acute anxiety.

We have already noted several examples of food scares which seem to have been characterized by this moral panic effect (although, given that the term 'moral panic' was originally coined to describe reactions to social deviance, in the food context the more neutral term 'news spiral' may be rather more appropriate). Nevertheless, such scares, agumented by powerful news spirals, can and do have both short- and long-term effects on consumer choices and food habits. For example, the scare concerning the dangers of salmonella contamination in eggs caused a dramatic and sudden fall in egg consumption in the UK, with the result that large numbers of laying birds were slaughtered and many egg producers were forced out of business. The scare concerning BSE among British cattle caused some local authorities to remove beef products from their school meals menus and moves were made in some European countries to ban the importing of British beef. The scare itself has arguably accelerated the long-term decline in beef consumption in the UK. The revelation of benzene contamination in a well-known brand of mineral water necessitated a temporary withdrawal of the product and the resulting media coverage and public concern is likely to have produced a significant decline in that product's previously dominant market share.

Thus, in the acute phase of a food scare, consumers are likely to respond by switching away from the affected products or brands. Of course, in a market in which there is an abundance of choice, there are likely to be numerous substitutes for suspect products and therefore switching will be relatively easy, involving little or no deprivation for the consumer. This fact in itself is likely to exaggerate the effects of food scares on consumer behaviour. Once the acute phase of the scare is over, there are several possibilities. Demand may stabilize at a lower level, go into chronic decline or recover to the levels which pre-dated the news spiral, depending upon such factors as the appeal of available substitutes and the intensity and durability of the public concern generated. The impact of food scares upon the food industry of a modern economy is, therefore, likely to be somewhat unpredictable. What is more, this impact will vary from sector to sector of the industry. For retailers, product switching by consumers will be relatively easy to accommodate, as purchasing and stocking policies can be modified quickly. Food manufacturers and processors, heavily committed in capital terms to particular products or product areas, may find rapid adaptation difficult. At the level of the agricultural foundations of the food system, food producers may find rapid responses to changes in consumer demand generated by acute scares virtually impossible, given that significant shifts in patterns of production may take years or even decades to accomplish.

Although news spirals touching upon a whole range of issues can be seen as regularly occurring features of the cultural landscape of modern societies, there are several factors which might render food-related topics particularly prone to this effect. Certainly, questions raised about threats to human health are likely to be newsworthy, virtually guaranteed to gain public attention. Threats to health posed by food are likely to be especially newsworthy, since such threats activate those deep-seated anxieties associated with what we have already argued is one of the fundamental paradoxes associated with food: its ability to provide vital nourishment alongside its ability to introduce disease into the body which it feeds. Given that we have proposed that customary ways of submerging or coping with this paradox have been eroded, the cultural ground is fertile for the food scare to take root. Furthermore, as we have seen, the trans-scientific nature of many food and health issues fuels uncertainty and heightens anxiety. Constant debate and dispute between experts, which are essential to the conduct of the natural sciences as professional discourses (Gilbert and Mulkay 1984), when reported through the mass media, can convey to the public a sense of confusion, indecision and even incompetence in the face of what are seen as serious threats to well-being. Indeed, the coverage of such disputes and controversies is often a crucial component of the food scare news spiral. We must add to these factors the recognition that scientific, technological and organizational innovations in food production, processing, storage and transportation have been so successful as to raise public expectations concerning food quality and food safety to unprecedented levels. These high expectations themselves make a direct contribution to the public's susceptibility to food scares.

Significant levels of public anxiety in relation to food, occasionally manifesting themselves as acute scares, indicate how firmly issues relating to the overall acceptability of food have now taken on a prominent place in the arenas of public debate. While it was the case in the UK, for example, that after the Second World War and until a few years ago, decisions pertinent to issues like food quality and food safety were taken within a relatively closed and elitist 'policy community', this is no longer so (Smith 1991). Increasingly in Britain, food-related issues have become politicized, and the original, officially-based policy community can no longer exclude other voices and opinions. Indeed, those agencies which once constituted the closed policy community (both governmental and commercial) may be viewed by the mass media and the public as excessively secretive and potentially untrustworthy (Miller and Reilly 1995:316–18). Currently, many competing groups seek to influence the public's ideas and to shape food policy. What we now have is an 'issue network' (Smith

1991:236), with food firmly established on the political agenda and food controversies far more visible to the public at large.

THE RECONSTRUCTION OF FOOD CONFIDENCE

This chapter has been primarily concerned with the idea that traditional modes of shielding the individual from underlying food anxieties have been eroded, leading to a rise in both chronic and acute manifestations of nutritional unease. However, from a sociological point of view, it is important to consider the question of whether a culture is likely, in the longer run, to permit a set of anxiety-provoking dilemmas to remain excessively visible or effectively unresolved. As Sellerberg (1991:193) observes, humans *need* to trust in the food they eat. Like any other animals, they have to eat to live yet, unlike other animals, they can and do reflect upon the darker symbolic significances of the food items they consume, and they can at times confront in a conscious fashion the risks and hazards that eating can entail. Yet such reflection and confrontation cannot possibly be undertaken at every meal, or with every mouthful. The result would be a kind of nutritional paralysis or alimentary dithering which would be a constant source of distress. As Sellerberg found from her own study of food trust and mistrust, and as we would expect, most people, most of the time, are not experiencing a constant sense of turmoil about the food they eat. Sellerberg tries to identify what she terms 'strategies of confidence' (Sellerberg 1991:196) which individuals employ to reassure themselves in the face of confusing advice, alarms and reports. Such strategies include emphasizing the choice of foods which are regarded as 'natural' and avoiding those perceived as 'unnatural', and deliberately developing a repertoire of trusted foods and then excluding all others from the diet.

Yet Sellerberg's strategies of confidence are seen as essentially personal and individual. On the other hand, Fischler (1988) advances the proposition that at the social and cultural level there may be forces working to re-establish some kind of equilibrium in the face of modern insecurity and uncertainty in relation to food. As an illustration of this he refers to the increasing demand for what he terms the 're-identification' of foods (Fischler 1988:290). This re-identification involves ever more detailed labelling of food products with elaborate listings of ingredients, and formalized guarantees of purity and quality, often sponsored by official bodies. Similarly, expanding forms of what Fischler calls 'food sectarianism' are also seen as capable of playing a role in this overall process. For example, in the previous chapter we considered the significance of the health food movement in this context, and in Chapter 10 one of the many aspects of vegetarianism that will be discussed will relate to its anxiety-relieving features. In fact, Fischler argues, the aim of such diverse processes is to attempt to reintroduce a sense of order into everyday eating, to provide it with an intelligible normative logic and a coherent framework.

Indeed, it may well be that the state of gastro-anomy which Fischler (1988) describes is an essentially transitional one, a feature of the strains involved in the

breakdown of a more traditional set of foodways and the emergence of a new, more pluralistic nutritional order (Beardsworth and Keil 1992b). This menu pluralism, which we have already suggested is an important emergent feature of contemporary Western food systems, can be seen as providing the setting within which the existence of a multiplicity of menu principles, flavour principles and systems of cuisine is seen as quite normal and essentially unproblematic. Thus, sampling different principles and cuisines, switching from one to the other as mood, context and conscience dictate, can become normal. Traditional, stable and established foodways may be less and less important for the maintenance of nutritional confidence, as long as there exists a relatively stable overall framework within which the choices, whims, fashions and fads of a pluralistic approach to eating can be played out.

There is, perhaps, a certain irony in suggesting that the commercial dynamics of the modern food system are capable of providing such a framework, since capitalism itself has been seen as containing inherently anomic features. Yet there are clearly identifiable aspects of the commercial food system which do act to generate consumer confidence and to counterbalance gastro-anomic forces. One striking example that we have already come across is the commercialization of certain features of the health food movement. The mass-production and mass marketing of health food products and the commercial appropriation of rhetorical devices like 'tradition', 'naturalness', 'wholesomeness', make available to an ever wider public ranges of products which have reassurance as one of their principal ingredients. Broadening the argument to consider the whole field of food marketing, the larger food producers and manufacturers, in particular, make great efforts to establish and maintain high levels of brand loyalty to their products. Such efforts can be extremely costly, in terms of advertising expenditure alone, but clearly can be effective in maintaining or improving market share and profitability. Yet brand loyalty can also provide a form of benefit for the consumer, in that recognized brands provide a sense of familiarity and reassurance in terms of the quality and safety of the products to which they are attached. What is more, capitalist food organizations which own widely recognized and respected brands will make strenuous efforts to protect such commercially valuable assets and to avoid damage to a brand's reputation. Food brands, in fact, provide some of the symbolically most potent and instantly recognizable icons of Western consumer culture. Established brands can thus assume the taken-for-granted acceptability once reserved for the most basic staple foods.

A particular dimension of this brand loyalty effect is related to the phenomenon, discussed in Chapter 5, which Ritzer (1993) terms 'McDonaldization'. The extensive rationalization of fast food catering epitomized by the McDonald's organization is quite clearly geared to control, efficiency and profitability. However, this relentless rationalization of the product range and the methods of handling, preparing and serving the food items on offer also produces an additional crucial feature: predictability. As we have already noted, wherever the outlet, the consumer can feel confident that the food product purchased will be predictably familiar in terms of portion size, texture, taste and ingredients. In the context of the increasing globalization of culture and increasing levels of both social and geographical mobility, standardized branded food items for consumption inside or outside the home provide sources of nutritional confidence which transcend class, cultural and sometimes even national boundaries.

The commercial food system offers products which assuage not just the anxieties generated by our first two paradoxes, but also ease those moral qualms which emerge out of the third paradox. Worries regarding the possible suffering imposed upon food animals in the course of rearing, transportation and slaughter can be tempered by the consumption of food products which offer guarantees or assurances concerning the conditions and treatment to which domesticated animals have been subjected. There is, in the UK, for example, an established market for so-called 'free range' eggs and 'free range' poultry (chickens and turkeys). Some consumers are clearly willing to pay a significant premium for such products, which are not the results of highly intensified 'battery' farming characterized by very high densities of birds in extremely restricted conditions, but purport to be derived from livestock enjoying more 'natural' living conditions. Thus, in certain circumstances, humane production techniques become important saleable features of animal-based food products, with the potential for providing extra peace of mind for the consumer and extra profits for the producer. This principle can also operate in a broader sense, since, as we have already seen, wider moral and ecological anxieties may also be associated with the third paradox. Products advertised as being 'ecologically friendly' also offer the dual benefits of consumer reassurance and premium prices. One example of this effect relates to widespread concerns about the large numbers of dolphins killed annually by becoming entangled in tuna nets. Canned tuna carrying a printed guarantee that it has been produced using techniques and equipment which avoid such undesirable consequences, offers a form of reassurance which can be lifted directly off the supermarket shelf.

Anxiety-reducing or confidence-generating food products can be turned out at all levels of the commercial food system. They may be the stock-in-trade of small, specialized producers, and retailed through specialized outlets and cooperatives catering for highly specific minority tastes and requirements. On the other hand, such items increasingly figure in the product ranges of the giant national and multinational food processing and food retailing corporations, as they move towards the kind of niche marketing necessary to exploit the increasingly pluralistic diversification of tastes, priorities and menu principles.

Of course, it is also the case that a whole range of official agencies and professional bodies is engaged in attempts to influence the public's dietary practices and to shape the public's nutritional beliefs and priorities. By implication, this also represents a form of confidence maintenance, in this context confidence in the officially or professionally sponsored view of what constitutes safe, healthy or ethically acceptable food. Yet these official sources of reassurance

are likely to be somewhat ambivalent ones. The guidelines on healthy eating, upon which the state's dietary targets are based, are themselves founded upon the shifting sands of scientific opinion. Even when an orthodoxy has been established which is intelligible to the public at large (for example, in connection with the links between diet and heart disease), that orthodoxy is always open to challenge and is always susceptible to being undermined by the publicity given to evidence which does not fit the prevailing view. There also appear to be circumstances in which official reassurances concerning the safety of specific suspect food items have the opposite effect to that intended. For example, at the height of the BSE scare in the UK, statements by government ministers and by senior medical officers were juxtaposed by the mass media with dire warnings from controversial dissenters from the official line. The official statements were themselves highly newsworthy and effectively added further fuel to an already vigorous news spiral. Once issues of food safety, for example, have escaped the control of a closed, oligarchical policy community and truly entered into the public domain, the official voice becomes only one voice among many, each presenting its own competing account. What is more, the state's ability to sustain confidence and generate reassurance may be further compromised in the UK setting, for example, where the Ministry of Agriculture, Fisheries and Food, one of the main government agencies in this area, is widely perceived, rightly or wrongly, to accord higher priority to the interests of food producers than to the interests of food consumers.

OVERVIEW

The underlying paradox beneath all the issues and debates which have been discussed in this chapter is one which has already been touched upon in several contexts: the fact that food anxieties persist (and even intensify) in modern food systems, despite the advances made in such systems which have improved the reliability and safety of the food supply. As we have seen, this effect is due in part to the fact that those features of traditional cultures and traditional food systems which could sustain nutritional confidence have been eroded or diluted by the processes of modernization. What is more, the very success of modern food systems in delivering to the consumer an abundance of varied, high-quality foodstuffs has in itself led to a cycle of constantly rising expectations on the part of the public. With immediate and obvious threats to nutritional well-being fading into the background, the consumer is able to occupy himself or herself with more arcane and subtle threats and misgivings relating to food. An anticipation of continually rising standards is established, and members of the public become less and less tolerant of real or supposed food hazards, although the priorities accorded to such hazards may be very different from those calculated by scientists, who may perceive a rather different hierarchy of risks.

Yet there are clearly conflicting forces at work here. On the one hand, we have examined those forces and tendencies which appear to be undermining

confidence and generating anxiety. On the other, we have also analysed in some detail the social mechanisms which may be capable of rebuilding and sustaining confidence and assuaging anxiety. It is tempting to speculate which of these two opposing sets of forces is likely to prevail. Should we predict a slide into ever deepening gastro-anomy, or should we anticipate the emergence of a new, stabilized nutritional order? The probability is that neither extreme case is a particularly likely one. Rather, the two tendencies will continue to coexist and interact with each other. If a new form of equilibrium is emerging, it is an equilibrium which is going to remain vulnerable to disturbance.

Perhaps the most plausible scenario is one characterized by periods of calm, during which chronic anxieties remain relatively dormant. However, such periods are likely to be punctuated by episodes of acute anxiety, produced either by the surfacing of underlying worries or by the introduction of novel scares which tap those deep-seated misgivings inherent in our three paradoxes. Indeed, it is possible to envisage potential food scares waiting in the wings for their day in the public eye. For example, the irradiation of food items in order to reduce microbiological contamination, slow down deterioration and extend shelf life, is already technically feasible. Similarly, the use of the hormone bovine somatotropin (BST) to increase the milk yields (and therefore the profitability) of dairy cows is also a technically feasible option. However, at the time of writing neither of these measures has been fully implemented in the UK, despite their obvious advantages for producers and distributors. This reluctance to sanction the introduction of these types of new high-profile food technologies is almost certainly born of a recognition of the public's enhanced sensitivity to such potentially emotive and anxiety-generating innovations. Such are the implications of a cultural climate in which volatile public reactions to nutritional issues remain an ever-present possibility.

DIETING, FAT AND BODY IMAGE

Many sections of this book may be read as something of a celebration of the conquest of food shortage, of the growth in the security of supplies and of the varieties of food available. It is true that there are issues about access to food by the very poor but, for the majority, food resources are readily available. As a consequence, it may seem rather surprising to be introducing debates about the control of eating by dieting amongst some of the most prosperous groups in society and drawing attention to attempts to explain why some eating disorders, notably those which involve reducing food intake, are so severe that they threaten the life of the individuals concerned. However, these are some of the issues to be addressed if we want to understand current patterns of dieting and the powerful fear of fat which is expressed in popular literature about food, health and body shape in modern western societies.

Although there are many established ways in which these issues may be considered, addressing them also involves the sociologist in a relatively novel activity, one which has been absent from mainstream sociology until relatively recently: the analysis of the ways in which our bodies are socially constructed and experienced in modern society. Featherstone, Hepworth and Turner (1991: vii) argue that the sociology of the body is a way of focusing on one of the crucial instances of the complex interrelationships of nature, culture and society'. However, it was neglected as an area of study for a range of reasons, in particular because the early sociologists concentrated on questions concerning society, social change and social relations as a denial of the 'natural' as an explication of the social (Turner 1991:8). Of course, these interests remain in current sociology, expressed in the continued interest in the social relations of production and the use of occupation as a key to understanding individual social position, but they are no longer considered to be the only ways of understanding social organization and social relationships. The new emphasis is on how people present themselves and appear to others. For example, Cash (1990:52) argues that 'Physical appearance is often the most readily available information about a person and conveys basic information about that person-most obviously, for example, the person's gender, race,

approximate age, and possibly even socio-economic status or occupation'. The interest in and development of the sociology of the body can be viewed, according to Turner (1991) as the consequence of several broad social changes. These include the growth of consumer culture in the post-war period, the development of postmodern themes in the arts, the feminist movement and changes in the demographic structure of industrial societies. For example, he argues that the 'erosion of competitive capitalism based on a disciplined labour force and heavy industrial production for a world market' (Turner 1991:19) has been associated with the growth of the service sector and the development of new lifestyles which emphasize consumption and leisure. Associated with these is 'commercial and consumerist interest in the body' and its representation in art and advertisements together with an emphasis on 'keeping' fit, the body beautiful and the postponement of ageing by sport' (Turner 1991:19). Feminist criticism of the subordinate position of women in society has created a much greater sensitivity to issues of gender, sexuality and biology. The body as a focus of medical control and intervention also becomes important where improvements in standards of living and medicine have increased life expectancy and changed the age distribution to one which is historically unique in that there is a growing proportion of the elderly and the control of disease and of ageing itself are of increasing concern.

An awareness of the reasons why the sociology of the body has become the focus of interest does not necessarily inform us about the specific issues which should be on the sociological agenda. For these we need to consider current writing about dieting, fat and body image, where it is possible to identify at least four major puzzles of interest to the sociologist. The first is the knowledge that, as food supplies become both more secure and more plentiful, a substantial proportion of the population is on a diet with the aim of achieving weight loss and so are trying to avoid eating the range and variety of foods now available. The second is the awareness that, as the average body weight increases in the general population, the preferred (perhaps even the 'ideal') body image as shown in the media and entertainment industry and as demanded by commercial and industrial organizations emphasizes the slim, the slender and the underweight. The third is the fact that the second half of the twentieth century is associated with a rise in eating 'disorders', that is, problems which arise from weight loss which is so extreme as to endanger health and even life (anorexia nervosa) or from a pattern of unrestrained eating (bulimia nervosa) which again threatens the health of the sufferer. The fourth puzzle is highlighted by the data which show that most, if not all, of those involved in dieting and suffering from eating disorders are women, that is, the people who are normally responsible, or will as adults become responsible, for the selection, preparation and serving of food. As Brown and Jasper (1993) argue so cogently, if we are to contribute anything to the analysis of such issues we should find answers to these questions: 'Why weight?' 'Why women?' and 'Why now?'

Anyone interested in these issues has a wide range of sources of information to consider. Much of the writing about dieting, fat and body image appears in popular magazines and other media output. Where these issues emerge in the academic literature, they are discussed by nutritionists, medical researchers, psychologists and also, more recently, by feminists and sociologists. Amongst the multitude of discussions on topics such as body image, dieting and eating disorders, contrasts are often drawn between those who focus on individual experience and those who focus on social constraints. However, it is equally important to be aware of two other contrasting approaches: firstly, those where the underlying purpose is intervention, for example, to help individuals to be slimmer, recover from an eating disorder, adjust to lack of success in dieting. In such writing, the problem may be identified as individual or social in origin; however, the 'solution' is offered at the individual level. The second (and rarer) approach is where the underlying purpose is an analysis of the contemporary cult of slimness, the social pressures to 'shape up' to perceived expectations or the social conditions for the occurrence of eating disorders. Even where these studies give detailed accounts of particular individuals, the analysis remains at the level of the social and does not attempt to offer individual solutions. Although this latter approach may seem unsympathetic to individual sufferers, it may offer useful clues for sociological answers to the questions we have identified.

WHY NOW? THE MAKING OF THE CONTEMPORARY CULT OF SLIMNESS

In her analysis of sociocultural determinants of body image, which she defines as 'the way people perceive themselves and, equally important, the way they think others see them' (Fallon 1990:80), Fallon emphasizes that the concept of beauty has never been static. She traces Western cultural ideals through time with particular reference to body shape and weight. Drawing upon art as an indicator of the ideals of male and female beauty, she argues that from the fifteenth to the eighteenth centuries fat was considered both erotic and fashionable and the 'beautiful woman was portrayed as a plump matron with full, nurturant breasts' (Fallon 1990:85). By the nineteenth century there were two contrasting models of the female ideal. They shared small waists (with an 18-inch circumference where possible) but were different in that one was 'a fragile lady who was admired for her moral values, social status, and beauty' and the other was 'a bigger, bustier, hippier, heavy-legged woman found among the lower classes, and actresses and prostitutes' (Fallon 1990:85). Both these ideals were modified in the twentieth century, initially towards an ideal body that was 'almost boylike' (Fallon 1990:87). Fallon argues that the rise of the mass media, particularly film, probably contributed to the imposition of more general standards of beauty and fashion in the West. Since the media often focused on high-status groups, it was these groups' standards which became widespread. In the USA the 1950s saw the glorification of large-breasted women

in films and magazines, followed by the return to an emphasis on slimness in the 1960s. Similarly, in Britain in the 1960s a young woman nicknamed 'Twiggy' and weighing only 97 lbs, became one of the most famous fashion models of her generation. Fallon draws attention to data from studies of the winners of the Miss America contest between the years 1959 and 1978 indicating a decline in average weight related to height (that is, successful contestants increased in height and declined in weight over the period) and to a similar trend among the women featured in the centrefolds of Playboy magazine between 1960 and 1978 (Fallon 1990:89–90). Fallon also reports on studies of the changes in the commercial images of women, from nineteenth-century curvaceousness to the 1980s' 'more muscular, healthy ideal of the female body' (Fallon 1990:91). She reiterates the point made by other authors that such shapes are neither average nor 'natural' and can only be achieved by those who have the time, the money and the appropriate lifestyle.

Summarizing a wide range of research, Fallon shows that attractiveness is important for the positive evaluation of adults and that slimness is a component of attractiveness. However, many people, particularly women, are dissatisfied with their own weight and shape, with most women preferring to be lighter than their current weight. For example, a study discussed by Fallon (1990) reports that:

College students judged their current figures to be significantly heavier than their ideal figure. In contrast, male college students (as a group) feel themselves to be close to their ideal in weight. Both men and women in their 40s and 50s share similar dissatisfaction with body shape; both judge their ideal to be significantly thinner than their current shape.

(Fallon 1990:93)

For those of us who take for granted the desirability of being slim, Fallon's work is an important reminder that ideals of beauty are variable and that the emphasis on slimness is a very recent characteristic and, even today, occurs only in modern western societies. There are other illustrations of the processes Fallon describes. For example, in the medieval period it was said: 'Eating made one handsome. A thin wife brought disgrace to a peasant. But of a plump wife it was said that 'a man will love her and not begrudge the food she eats' (quoted by Mennell 1987:147). The notion that eating made people handsome was not confined to women, nor to those who worked on the land; there are many portraits of the rich, both men and women, who are shown in 'magnificent amplitude'. This emphasis on the importance of size remained an important theme at least until the end of the nineteenth century. Similarly, in modern non-Westernized societies, the ideal woman is much larger than in the West. For example, Buchanan writes of Tanzania that 'men expect their wives to gain weight once they are married: "If she doesn't get fat, people will think I'm not taking good care of her!" men often say' (Buchanan 1993:36). In the light of such evidence, it is clear that the

task is to identify what it is about modern Western societies which is different from Western societies in the past and non-Western societies of today.

These studies raise an important question: 'If standards of attractiveness and ideals of beauty are highly variable, why is the mid- and late-twentieth century associated with an ideal of slimness?' Fallon suggests that the 'curvy look, associated with motherhood, may have lost much of its value in a world striving for zero population growth' (Fallon 1990:88). For Mennell (1985) the key lies in changed historical circumstances and, in particular, the increasing security of food supplies. As we have already seen in earlier chapters, he argues that, in the premodern period, fluctuations between fasting and feasting, want and plenty, were taken for granted. Even when supplies increased, the fear of food scarcity remained because of the lack of coordination between the location of needs and supplies of produce. The change towards greater security of supplies was a consequence of other changes, for example, the development of trade and a more specialized division of labour in the context of the development of the nation-state. Mennell (1985) maintains that changes in the regulation of appetite in the quantitative sense paralleled the civilizing process and the development of manners. He distinguishes between hunger and appetite and sees appetite as controlled by the 'appestat'. With the appestat set too high, we eat too much food; with it set too low, we eat too little. The setting of the appestat is influenced, even controlled, by both individual and social factors. For example, in Western society the move is towards greater self-control over appetite, a change encouraged by the growing medical opinion, based on rational medical knowledge, that moderation is healthier than excess and that gluttony was coarse. Over time, these processes have culminated in the twentieth-century fear of fatness. This began with the elite and then moved downwards and was associated with the growing confidence in food supplies and the unlikelihood of dearth. Indeed, Mennell (1987) goes so far as to argue that the fear of fat, and certainly the eating disorders of anorexia nervosa and obesity, are problems of prosperous Western societies. His case is supported by the incidence of anorexia nervosa which is thought to have first occurred amongst high-status families. However, the more general approval of self-control over appetite is now part of the message of all magazines going to every social level where slimness is equated with health and sexual attractiveness.

The issue of control is argued by Turner (1991) to be of particular importance in what he terms the production of 'disciplined' bodies. Featherstone (1991) in the same volume draws attention to the contemporary emphasis on general 'body maintenance' which sometimes culminates in an obsession with the procedures for presenting oneself as youthful, healthy and beautiful, almost regardless of biological age. People are willing to spend large sums of money and to invest time and effort in order to overcome any perceived defects or to improve their appearance. Slimness is part of the demonstration to others of individual success, with fat becoming associated with lack of control ('letting oneself go') and thus with moral failing. This preoccupation with fat, diet and slenderness is viewed by Bordo as 'one of the most powerful "normalizing" strategies of our century, ensuring the production of self-monitoring and selfdisciplining "docile bodies" (Bordo 1990:85). She points out that this creates a situation in which the individual becomes habituated to self-improvement and self-transformation. For historical reasons, she suggests, women are subjected to this form of control to a greater extent than are men, and the idea that women's divergence from these norms is somehow 'pathological' is a powerful device for the reproduction of conventional gender relations. Such a position leads to a closer consideration of other writers' ideas about the links between gender and a concern with body weight and shape.

WHY WOMEN? THE IMPORTANCE OF GENDER

Meadow and Weiss (1992) write as psychologists who work with women suffering from eating disorders. They argue that their work, together with all that they have read in the popular literature and observed 'in the culture', leads them to the view that food and eating are 'a metaphor for what is required for survival as a woman in today's society' (Meadow and Weiss 1992:ix). They contrast the contemporary situation with the 1950s and 1960s, when eating disorders were rare and almost unheard of, and magazines showed food as a natural part of life with none of the 'romantic, mysterious and forbidden connotations that it has today' (Meadow and Weiss 1992:60). At that time, the ideal figure was voluptuous. However, it must not be assumed that it was easy to achieve. Women struggled to achieve it in the same way as they try to attain today's ideal of the thin and sinewy body. They argue that women 'have always defined themselves in terms of an external ideal' which 'simply reflects the norms of the times' (Meadow and Weiss 1992:96). The authors are in no doubt that the norms are set by men and that women tend to be evaluated on the basis of their physical appearance as an indicator of their value in the marriage market. Traditionally, the great majority of women would have been financially as well as emotionally dependent on men, and would have been able to embrace the qualities of caretaking and nurturing as an integral part of the 'female psyche', leading them to place particular value on sexual and social relationships.

However, the current preoccupation with thinness for women has its origins in a series of social changes: the new youth culture of the 1960s with its emphasis on the natural, youthful look; the demands for equality from the women's movement and the move towards a more androgynous body image; reliable contraception; greater access to career opportunities in the labour market where a 'motherly image' would be positively disadvantageous; the fitness movement and ideas about the ways in which exercise could change the look of the body. In sum, 'Through her perfect body, she announces that she can have it all: look like a woman and succeed like a man' (Meadow and Weiss 1992:99). The preoccupation with thinness is so powerful that 'Fat oppression, the fear and hatred of fat people, remains one of the few "acceptable" prejudices still held by otherwise progressive persons' (Meadow and Weiss 1992:133).

Meadow and Weiss argue that the tension between the demands of personal relationships and those of the marketplace place women in a situation where there is conflict between the desire for dependence and the need for selfexpression, a conflict which manifests itself through food. They argue that the link between food and love begins at birth, and that food can become a source of love, comfort, warmth and security, particularly in a society where high divorce rates offer no guarantees of permanent partners and providers and where women are encouraged to maintain their independence. However, although food offers the advantages of asking nothing from you other than that you enjoy it, and is an area of life where one can put one's own needs ahead of others, it also presents problems in that 'food is a destructive lover, a double-edged sword. At the same time that it offers immediate gratification and comfort, it insidiously builds up a layer of fat that society states is guaranteed to make one unlovable' (Meadow and Weiss 1992:125). The authors conclude that there is a direct link between eating disorders and the powerful emphasis on slimness as the basis of female beauty. For the authors, the solution to the problem of eating disorders is to challenge the rules by recognizing that it is impossible to attain bodily perfection and that slimness does not automatically deliver love and happiness.

Charles and Kerr (1986b) point out that most empirical studies of women and food focus on women who have some kind of eating disorder and that there is virtually no research exploring women's 'normal' relationship with food. Drawing upon their own sociological research based on interviews with 200 women, research which was discussed in detail in Chapter 4, they argue that virtually all women have a relationship with food which is problematic and that individual responses lie on a continuum with eating disorders at one extreme. Women are caught up in a contradiction: they must be both the guardians of their families' health and see that they are properly fed, whilst at the same time they must be attractive for their husbands by being slim and fashionably dressed. It is slimness which is equated with sexual attractiveness in our society and it is also legitimized by the medical profession as being healthy, yet these views do not fit with the ideologies of maternity and maternal care. There is clearly a tension inherent in being both slim and going through pregnancies and in feeding others and yet remaining slender. A further tension is caused by the fact that sweet foods are used to reward and comfort. It is no surprise that the women in the sample were dissatisfied with their present weight and not happy with their body image. Only twenty-three (11.5 per cent) of the women in the sample claimed never to have dieted nor to have had worries about their weight. Dissatisfaction was reinforced by the negative comments of men, particularly their partners. Except when pregnant, it was virtually impossible to be relaxed about food. Since the women in the sample were no longer in employment, there were tensions because they were constantly in the presence of food, acknowledging it as a source of comfort, yet wanting to avoid eating it. All

wished to be a few pounds lighter and successful dieting was reported to give a feeling of well-being, achievement and control, yet it was extremely difficult to manage. Charles and Kerr (1986b) also present the argument that this situation of tension is the consequence of women's position of relative powerlessness in capitalist society, where control is exerted over women by ideologies which define female beauty in terms of unnatural slimness to which, by definition, most women's bodies do not approximate. At its most serious, the body and food are regarded as hated enemies. For example, some women even start smoking in an attempt to suppress appetite or to avoid eating. Charles and Kerr emphasize that these are not the problems of those with identifiable eating disorders; these problems are the product of women's structural position and are a function of their marginal and powerless situation in society.

Cline (1990) draws upon qualitative interviews with women in England and in North America, together with her own experiences in relation to food, to argue a similar case: that women's relationship to food rests on contradictions. However, she goes further and argues that food is yet one more focus for the battle between men and women. The writing is vivid and direct: 'Women's bodies have always been a screen onto which different values, such as receptive sexiness or fecundity, have been projected by men' (Cline 1990:164). Thus, the ideal might vary over time (for example from rounded to 'razor thinness') but the models are always defined by men, and women strive to achieve each in order to obtain men's approval. When the ideal is to achieve extreme slimness, then women take seriously the latest diet and fear the possibility of getting fat. All this makes food a source of danger for women. In common with Charles and Kerr, Cline emphasizes the widespread character of these concerns and argues that eating disorders have to be seen in this context. As the Western cultural ideal weight continues to decline, all women's eating habits become destabilized, raising the possibility of higher levels of clinical disorders. The author sees it as a tragedy that 'there is hardly a woman in the West between adolescence and old age who does not desire to alter something about her shape or size' (Cline 1990:187). If they do not achieve the changed shape or weight loss, then women feel themselves to be failures. This is also a tragedy in that women, Cline asserts, are challenging their own biology, a biology which may be geared to maintaining a certain fat level and which may resist attempts to achieve a permanent reduction in that level.

One of the most famous contributions to the general debate about the cult of slimness is *Fat is a Feminist Issue* (Orbach 1988). Originally intended to be a self-help guide to compulsive eaters, the book has subsequently been interpreted as having a more general relevance. Orbach locates the preference for being thin in the structure and organization of patriarchal society of late capitalism where middle-class female socialization offers contradictory expectations: an egalitarian emphasis on educational and work opportunities existing alongside an emphasis on traditional female sexual identity in motherhood. The outcome is confusion, insecurity, low self-esteem and negative body images which are expressed in

ambivalence about eating and ambiguities about women's aspirations. The solution offered by Orbach is for women to abandon dieting and to allocate priority to their own interests and their own life. Once fat is no longer a central concern, weight will no longer be a problem, in that a more 'natural' (and lower?) body weight will be achieved. Examples are given from her own and others' experiences. Orbach writes as a 'feminist therapist' with a commitment to help women who suffer from compulsive eating to reduce both their anxieties and their weight. Diamond (1985) contends, however, that it is inappropriate for feminists to engage in discussions about weight and body image, in that involvement in such discussion takes for granted, instead of challenging, the thin/fat opposition and, in particular, the privileging of thin over fat. In Diamond's view, feminists should be concerned to develop, collectively, new arrays of identities and alternative body images.

A collection of contributions from academics and from those involved in therapy and in community education edited by Brown and Jasper (1993) reports on feminist approaches which present challenges to the conventional pressures on women to police their own bodies through habitual dieting. There are women, they argue, who are prepared to accept their bodies as they are and to reject the treadmill of constant nutritional self-denial. The editors indicate their preference for avoiding terms such as 'eating disorders', 'anorexia', and 'bulimia' because they are terms which originated in psychiatric literature and are associated with a medical or disease model, a model which they wish to criticize. However, in the end, they retain the use of such terms because they are everyday terms which are readily comprehensible to a wide readership. Interestingly, whilst they recognize that words like 'obese' and 'overweight' imply deviation from some objective standard, the editors recommend reclaiming the word *fat* by shedding its pejorative overtones and using it simple to refer to a particular body type.

Brown and Jasper's answer to the questions 'Why weight?' 'Why women?' and 'Why now?' is similar to those identified above, in that they see the ideal of the slim body as a product of industrialization, the increasing participation of women in the labour force and the impact of feminism with its pressure for increased social equality.

RECENT TRENDS IN BODY WEIGHT

Alongside feminist analyses of the significance of slimness in the context of the control of women in a patriarchal framework, there does, of course, exist a medical model of the significance of body weight. In contemporary medical discourse slimness is often equated with health and a range of diseases and disorders has been directly linked to obesity. For example, the US Food and Nutrition Board of the Institute of Medicine (Thomas 1991:102–3) began its discussions on dietary recommendations by noting that body weight and body mass index are increasing in the USA and other Westernized societies and also noted that excess weight is associated with an increased risk of several health disorders, including certain types of diabetes,

hypertension and coronary heart disease. The Board also note that, in the USA, disadvantaged groups are more likely than the general population to suffer from diseases associated with obesity. Although some feminists might deplore an argument which equates fatness with pathology, seeing it as part of an oppressive patriarchal ideology, we nevertheless need to confront the question of how weight varies in the populations of countries like the USA and the UK, and whether the patterns are currently undergoing change. Ironically, as the evidence about the links between weight level and health builds up, there is also evidence that an increasing proportion of the population falls into the category of being medically defined as obese. The government-initiated Health Survey for England 1991 (Office of Population Censuses and Surveys–Social Survey Division 1993:x) summarizes the situation as follows: 'There is a considerable amount of epidemiological evidence that obesity is related to ill health and results in increased risks of a number of diseases including hypertension and CVD [cardiovascular disease].' The report employs the standard measure known as body mass index (BMI), calculated by dividing the weight of the individual in kilograms by the square of his or her height in metres. The BMI, a continuous variable, can be divided into a series of categories and the ones used in the report are those used by the Royal College of Physicians (See Table 8.1).

Level of BMI Index	Description		
20 or less	Underweight		
over 20 to 25	Desirable		
over 25 to 30	Overweight		
over 30	Obese		

Table 8.1 Body mass index categories

Source: Adapted from Office of Population, Censuses and Surveys 1993

The 1991 data indicated that mean BMI for men was 25.6 and for women 25.4. However, 53 per cent of men and 44 per cent of women were shown to have a BMI of over 25 and, indeed, 13 per cent of men and 16 per cent of women fell into the category over 30 and therefore were defined as obese. The report also identified significant increases in mean BMI for men and women in the 16–64 age group over the previous decade (for men an increase from 24.3 to 25.5 and for women an increase from 24.0 to 25.2). The report also compares the situation in 1991 with that which pertained in 1986/7 and notes a striking increase in the proportion of adults aged 16–64 with a BMI of over 30. For men the figure rose from 7 per cent to 13 per cent and for women from 13 per cent to 15 per cent (OPCS 1993:x).

The association between BMI and such variables as age, social class and education is also discussed. BMI tends to increase with age up to 65 but then tails off. Men in non-manual social class categories tend to have a higher BMI than those in manual categories although, interestingly, the reverse is the case

for women, with those in non-manual groups tending to have a lower BMI than those in manual groups (OPCS 1993:x).

These figures suggest yet another paradox within the realm of food and eating. If we accept the contention that Western society places a heavy emphasis on the slender body as a cultural ideal, these data suggest that the average woman (and, indeed, the average man) is actually moving further away from this ideal, and for an increasingly large number this ideal is completely out of reach. This ideal and the divergence from it creates the conditions for the development of a thriving slimming industry. It is an industry with a guaranteed clientele in those who strive for slimness but may actually see their goal constantly retreating before them. This is illustrated dramatically by the estimates given by Meadow and Weiss (1992) in their discussion of the scale of the slimming market in the USA. Over 60 per cent of women are said to be dieting at some point in a year and that number may be increasing. The authors present calculations to show that more than \$10 billion a year are spent on 'diet drugs, diet meals, diet books, exercise tapes, weight-loss classes, and fat farms' (Meadow and Weiss 1992:25). Within this overall figure, they estimate that \$800 million are spent on frozen diet dinners and another \$200 million on diet pills. There are no directly comparable firgures for the UK. However, there is evidence to suggest that the UK slimming product market is also big business. For example, the market for all types of reduced-calorie foods was estimated at $f_{1.5}$ billion in 1994 (Economist Intelligence Unit 1994:48). Within this figure, the market for slimming foods (defined as including meal replacements, very lowcalorie diets and appetite suppressants) was valued at more than f 69 million. In the previous three years, meal replacements were the fastest-growing sector of the slimming foods market with the market in very low-calorie diets declining and the market in appetitie suppressants remaining a relatively low but stable sector of the market. The authors refer to medical research which indicates that up to 24 per cent of women and 37 per cent of men are 'overweight'. Even so, it is women who are more likely to be involved in slimming. As the association of slimness with health (rather than with responsiveness to social pressures to be slim) becomes established, the authors argue that a more 'unisex image' is likely to develop, with men and women associating slimming with movement towards a more healthy lifestyle. If this happens, the writers argue, the market in slimming foods is likely to change and there may be a blurring of the lines between foods which are marketed as slimming and those which are marketed as being associated with more general healthy eating (Economist Intelligence Unit 1994:52). There is nothing to suggest that such foods will not also be marketed aggressively in an effort to continue to profit from the manufacture and sale of special foods.

EATING DISORDERS

The paradoxical nature of the situation in which there simultaneously exists a cultural ideal of slimness and a rising trend towards obesity, as we have already noted, is one which potentially creates a certain tension for many individuals in

their relationship to food. It is clear that a significant proportion of the population of societies like the UK and USA experience a chronic state of concern about their weight and that conventionally this is seen as a concern which affects women more frequently than men. However, in certain circumstances, disturbances related to eating and weight can be so severe that they are clinically defined as serious eating disorders, which can be very debilitating and, indeed, even life-threatening to the sufferer.

Any discussion of such eating disorders is likely to rely heavily upon studies of those specifically involved in the analysis, treatment and management of anorexia nervosa. This particular disorder has certainly attracted the major share of attention in this area. Amongst such studies is the work of Bruch (1978) who was one of the first to draw attention to the increase in the number of cases amongst young women and to the contradictions and paradoxes associated with the disease. Although focused on a set of case studies from her own therapeutic practice, Bruch sets her analysis in the context of cultural and, indeed, physiological responses to food and uses this context to highlight the underlying and often unrecognized logic of her patients' anorexic behaviour. Bruch's interpretation of her case studies is that these young women from upper-middleand upper-class homes use their anorexia, consciously or otherwise, to draw attention to themselves, possibly in an exhibitionistic fashion, in order to make sure that others care for them. In a sense, she suggests, their behaviour attracts a degree of awe and even admiration from people for whom self-starvation is a course of action which they would never countenance for themselves. She goes on to argue that the disease gives the girls power through the control of their eating. In contrast to those who argue that women are passive recipients of cultural expectations, Bruch uses her case material to argue that the sufferer is an active participant, rejecting food that is offered and available and becoming resentful of attempts to restore 'normal weight', because this process of starving 'in some strange way...fulfils their urgent desire to be special and outstanding' (1978:20-1).

Bruch's book is entitled *The Golden Cage*, a title derived from an image used by one of her patients to explain her feeling both of being unworthy of all the privileges and benefits offered by her family and of at the same time being constrained and deprived of freedom of action. The question thus arises as to what kind of home relationships could produce feelings of this kind, so powerful that the outcome was a health-threatening condition. Bruch indicates that many of her patients had in common small family size with a predominance of daughters (two-thirds of the families had daughters only), and older parents. The impression of the harmonious home and the initially compliant behaviour from the child may conceal complex relationships of high expectations and parental lack of awareness concerning the extent to which the child is being controlled and restricted. Bruch argues that their inability to let go and permit the child to develop independently may contribute to and sustain the illness. Her case material seemed to indicate that the illness often manifested itself at a

point where the young women were confronted by some new experience, such as going to a new school or to college, where they no longer had the support of the family and where they were anxious about having to cope with relationships outside the family and to perform on the basis of their own merits. In other words, they seemed to be afraid of becoming teenagers with all the independence and femininity implied. In extreme cases, Bruch argues, the patients' weight loss enabled them to return to childhood. Bruch even goes as far as to suggest, perhaps very contentiously, that this behaviour may be interpreted as a means of avoiding the end of 'a secret dream of growing up to be a boy' (Bruch 1978:69). In addition, dieting could provide an area of control and accomplishment and, paradoxically, patients could even experience a sense of satisfaction in relation to their own self-imposed ill-health. Within this framework, treatment involves the family as well as the specific sufferer and is considered successful when the young women involved both are able to gain sufficient weight so that their health is not endangered and to be recognized within the family as an individual with independent needs. Interestingly, Bruch is one of the few writers on this topic who see the possibility of a decline in the incidence of anorexia nervosa. She notes the way in which, when she first had sufferers referred to her, each of her patients would emphasize her uniqueness. In recent years, not only do patients know of other sufferers but they have also read a great deal about the illness (including Bruch's own contributions to the literature), so Bruch speculates that, if anorexia nervosa becomes sufficiently common, it will, in a sense, become 'commonplace'. Thus, sufferers would no longer gain the same sense of satisfaction at being special through achieving something that others cannot achieve.

One of the most comprehensive reviews of the literature on the characteristics of those suffering from eating disorders is that of Hsu (1990), which was written specifically to provide a summary of current knowledge on the eating disorders of anorexia nervosa and bulimia nervosa. The focus is on attempts to define and identify the disorders in a clinical sense and also to provide information about empirical findings, although there is more information about anorexia nervosa than about bulimia nervosa. Like other writers, he notes that the first use of the term 'anorexia nervosa' (from the Greek term for 'loss of appetite') was relatively recent, even though the condition had been recognized earlier as an illness which occurred infrequently. The term was used first in 1874 by the medical practitioner Sir William Gull to identify the eating problems of some of his young, female patients. The term has remained and is used widely in nonmedical contexts, even though Hsu argues that it may, in fact, be a misnomer, since the evidence suggests that many patients have not 'lost' their appetites and often, in fact, wish to eat but are afraid to do so. Many studies show that patients identified as suffering from anorexia nervosa exhibit similar characteristics. However, the boundary between this disorder and 'normal' dieting is recognized as a blurred one and Hsu (1990) raises the question of whether anorexia nervosa is, in fact, an extreme form of the widespread

phenomenon of dieting but a form which has run out of control. Having recognized what he sees as a 'behavioural continuum' between dieting and anorexia nervosa, Hsu takes the view that the crucial task is to identify those factors which might push the individual towards the anorexic end of this continuum. Thus, he identifies the central feature of the anorexia nervosa sufferer as a severe distortion of attitudes towards weight, eating and fatness. Hsu notes that the resultant fear of fatness actually intensifies as the individual loses weight, though for sufferers from bulimia nervosa the fear is accompanied by powerful urges to overeat or 'binge' and then to shed the unwanted food through vomiting or the use of laxatives. Since Hsu's task is largely informed by a wish to provide information which could form the basis for the treatment of disorders, he is primarily concerned to analyse the available data in such a way as to reveal crucial interactions between the cultural, psychological and biological processes involved. The survey of empirical investigations of these which Hsu provides is an attempt to examine data on such interactions.

Hsu begins by summarizing the data recorded about sufferers from eating disorders and indicates that those most commonly affected consistently exhibit certain features: they are young (often adolescent), white, female (the ratio of female to male is ten to one), and drawn from families located in the middle or upper social classes. They are also likely to already have been involved in attempts to control weight. Reviewing the clinical data from the available American and British studies, Hsu notes that most cases are presented to the medical practitioner when the sufferer is in her late teens. The case notes which Hsu reviews indicate that approximately 25 per cent of anorexics and about 40 per cent of bulimics were recorded as overweight before the onset of their illness and thus he concludes that attempts to control weight are the initiating phase of both these illnesses, though once there has been some weight loss, the two disorders diverge (Hsu 1990:14). The anorexic person pursues thinness in spite of escalating weight loss; the bulimic person establishes a pattern of fasting, bingeing and purging with two-thirds using vomiting to control their weight. In ways which are similar to accounts of those who have been forced on to starvation diets because of external factors such as war or imprisonment, sufferers from eating disorders also begin to show an increased preoccupation with food and eating and an obsessive interest in recipes and cooking.

At the very point when family, friends and medical advisers are deeply concerned about the pattern of rapid weight loss, the sufferers themselves often deny that they are ill. Some even claim that they feel special or unique because of their thinness and experience despair and panic if they begin to gain weight. Some, indeed, claimed explicitly that their thinness demonstrated their autonomy. However, few were able to explain their fear of fatness. Those suffering from bulimia nervosa also feared fatness but were less able to control their food intake. Various situations or experiences could trigger binges. There are considerable problems involved in obtaining accurate information about the events which may have precipitated these eating disorders. However, the material provided by patients includes a range of possibilities which seem to emphasize the significance of social relationships and potentially stressful events in adolescence. Such events included feelings of being too fat, being teased about size, the occurrence of interpersonal conflicts, separation from the family, personal illness or failure and family crises. In relation to the latter, Hsu draws attention to the importance of recognizing that, in certain circumstances, the illness might prove useful to the family by, for example, stabilizing its relationships by focusing collective concern on the person who is ill.

Anxieties about weight appear to be accentuated amongst higher socioeconomic groups where thinness is sought after yet where there is ample food available. The high-status young women described in the case material were particularly aware of the importance of a favourable evaluation from others for the maintenance of their self-esteem. In addition, many of the young women in these groups aspired to combine professional careers with motherhood, that is, non-traditional aspirations informed by new models of women's potential. For some, these tensions about social identity could lead to eating disorders. Indeed, as Hsu asserts, 'Thus it would appear that the feminist movement has so far brought mixed blessings for women' (Hsu 1990:86).

The range and detail handled by Hsu in his analysis is impressive. However, he is not able to come to any precise conclusions about the causes of eating disorders and sees treatment of them as involving a largely pragmatic selection from a wide range of possible therapeutic responses. None the less, Hsu's account involves more than mere summary. He makes an important argument that, if eating disturbances occur on a behavioural continuum, then the prevalence of eating disorders will increase or decline in proportion to dieting behaviour in the population. Associated with this is his observation that, although eating disorders appear to be linked with dieting behaviour, not everybody who diets moves along the continuum towards an eating disorder. This means that an interesting research issue would be an attempt to identify those influences which moderate eating patterns as well as those which precipitate disordered eating patterns.

Whilst Hsu acknowledges the significance of sociocultural factors, it is not his primary concern to analyse these in detail. However, for other authors such factors provide their central interest. For example, Brumberg (1988) focuses on the cultural context of eating disorders, in particular, anorexia nervosa. In common with other writers, she recognizes that anorexics frequently belong to prosperous families in an affluent social world: 'In other words, the anorexic population has a highly specific social address' (Brumberg 1988:13). Brumberg sees anorexia nervosa as the outcome of the 'psychopathology' of middle-class life which, for some, generates tensions between a preoccupation with looks, dating rituals and pressures to succeed in both the private and the public domains. In more general terms, she suggests that the idealization of the thin and weak female body is a symptom of the female subordination which is characteristic of capitalism and patriarchy.

MacSween (1993) takes previous studies as her starting-point with the aim of providing a perspective on anorexia nervosa which is both feminist and sociological. She notes the ways in which anorexia nervosa has recently moved from being a relatively unknown psychiatric illness to a position where the term has been incorporated into the popular vocabulary and is increasingly used to label any woman in the public eye who is perceived as underweight. Anorexia nervosa is seen by MacSween as of particular interest for feminists and for sociologists in that its apparent increasing incidence has taken place among middle-class women at precisely the time when feminism is challenging female subordination. MacSween argues that most discussions recognize these issues and make reference to them but few actually attempt to provide a satisfactory sociological analysis. Her own analysis is based upon an examination of anorexic meanings and practices as revealed by interview material from one bulimic and eight anorexic women, together with the results of a postal questionnaire completed by women who had experienced or were experiencing this disorder. MacSween wishes to avoid what she terms an 'added on' sociological perspective which simply argues that, while there are 'social pressures' on young women, it is some shortcoming in the sufferer prior to the onset of anorexia nervosa which explains why one woman rather than another becomes anorexic. On the contrary, she asserts that 'in the anorexic symptom women try to synthesize contradictory elements in their social position through the creation of an "anorexic body" (MacSween 1993:2).

In discussing the rejection of such social causation by writers who emphasize the importance of individual psychology in the onset of anorexia nervosa, MacSween (1993) argues that it is important not to assume that social pressures constrain all individuals in similar ways and to recognize that circumstances do not determine behaviour but rather set the framework within which a range of behaviours can occur. In this author's terms, anorexia nervosa is one particular response to the contradictions and pressures experienced by women in a patriarchal and capitalist setting. Anorexia nervosa is one response to the contradictions inherent in female identity as constructed in a patriarchal capitalist system which, in effect, survived the onslaught of feminism and continued into the post-feminist era. A further barrier to a fuller understanding of the social construction of conditions like anorexia nervosa and how they are experienced is the emphasis of many writers on therapy and treatment. Psychological analysis, in particular, appears to be based on the assumption that the cause of anorexia nervosa is to be found at the individual level and therefore it should be treated at the individual level. In MacSween's view psychological analysis overemphasizes the idea that the causation of anorexia nervosa can be understood at the individual and interpersonal level and, therefore, puts too much faith in the effectiveness of treatment at the individual level. From this point of view, the emphasis on therapy, with its model of the 'natural', 'whole' person which can be reclaimed through successful treatment, gets in the way of a thorough going analysis of the roots of the problem. According to MacSween, the social

construction of bodies in bourgeois society involves gender defined in terms of an opposition between masculine as active and feminine as passive. The problem for women in modern society is to reconcile the contradictory demands of being both active and passive, both assertive and responsive. It is MacSween's contention that this struggle can be manifested at the level of the body, through the production of the classic symptoms of anorexia nervosa.

The strength of MacSween's position as a feminist sociologist is that it encourages us to be aware of the cultural and structural setting which can give rise to such apparently bizarre phenomena as eating disorders. There is, of course, the strong implication in this view that, while an individual 'cure' for an individual case of, for example, anorexia nervosa might be achieved through skilful and dedicated therapy, the underlying conditions and contradictions remain. Not surprisingly, from her sociological perspective, MacSween takes the view that only a transformation guided by feminist principles of the structural conditions which sustain the subordination of women can have any long-term effect on the incidence of eating disorders of the kind we have been discussing in this chapter.

OVERVIEW

There can be little doubt that concern with body image, body fat and dieting is so pervasive within contemporary popular consciousness that it represents one of the more distinctive cultural obsessions of our age. We are faced with an apparent paradox: in the context of an abundant food supply many Western consumers (particularly women) become preoccupied with the desire to restrict food intake. However, in a sense, this apparent paradox is dispelled when we recognize that in a situation where food is not abundant and the food supply is not reliable the restriction of food intake to control body weight is, for the most part, an irrelevance. In this sense, the highly productive nature of the modern food system itself generates the motivation to control the quantity of nutrients absorbed. In fact, we have noted the existence of a more clear-cut paradox: the observation that, at precisely the time when our cultural preference for the slim body has been intensifying, actual body weights and levels of obesity in the population (as measured, for example, by mean BMI) have been rising. The response of commercial interests within a capitalist system has been to focus these anxieties by the provision of special diets, foods and relevant information and to capitalize on them to enhance profits.

The feminist contribution to the whole debate concerning body image and dieting has been a considerable one. It has encouraged social scientists to pay due attention to the patriarchal and capitalist context of the social construction of the feminine body. Similarly, feminist analyses have made a valuable contribution to the enhancement of our understanding of eating disorders by requiring that they be extracted from the narrow confines of a purely clinical setting and placed within a broader context of gender politics. As we have seen, the already complex debate concerning the causation of eating disorders has itself been complicated by a division between those who are primarily concerned to offer treatment at an individual level, and those whose main concern is to offer a sociological analysis which may emphasize structural constraints and contradictions which could only be resolved through collective action or farreaching social transformations.

Quite clearly, this chapter, in attempting to provide a review of the literature on dieting, body image and eating disorders, inevitably reflects that literature's preoccupation with the predicament of women. However, we must bear in mind the distinct possibility that concern about weight and even the incidence of eating disorders may actually be rising amongst men. To date, this issue has received comparatively little attention from social scientists. If it should prove to be that case that issues of body weight and disordered eating become entangled with masculinity as well as femininity, then currently widely accepted explanatory frameworks, particularly those based on feminist perspectives, would need extensive reappraisal and revision.

Part IV

PATTERNS OF PREFERENCE AND AVOIDANCE

THE MYSTERIOUS MEANINGS OF MEAT

Meat, in its many forms, represents what is probably the most universally valued of foods across the broad spectrum of human cultures. For an omnivorous species like ourselves, it can be construed as a food of particularly high nutritional value, especially as a source of protein. However, this whole book is, of course, based upon the premise that human food consumption is not only a question of satisfying nutritional needs. Certainly, it could be argued that there is much more to meat eating than the ingestion of a conveniently packaged range of important nutrients. For example, meat is arguably one of the most ambivalent of food items in terms of the three paradoxes discussed in Chapter 7. In gustatory terms, in health terms and in moral terms, meat carries particularly potent connotations, both positive and negative.

This chapter is concerned with the fundamental questions of why humans eat meat, and why they endow it with such significance. Are these effects largely a function of its physiological and nutritional relevance to the human diet or is its symbolic potential the more important source of its widespread appeal? We will consider these questions by examining the work of a range of social scientists whose views are sometimes in conflict, but who all acknowledge the singular salience of this particular food. However, initially we will need to consider briefly, by way of background, the nutritional import of meat in the human diet before examining the argument that our appetite for meat is, at root, a physiologically driven imperative which finds expression in many ways and in many guises. The symbolic dimensions of meat will be introduced by reconsidering examples of the taboos and prohibitions which exist, or have existed, in more traditional cultures. This will then lead us to an examination of the complex and often highly ambiguous symbolism associated with meat in contemporary Western culture. Finally, we will assess the view that the underlying meanings of meat in Western thought are undergoing far-reaching changes, associated with broader shifts in ideas about the relationship between humans and the natural world.

MEAT IN THE HUMAN DIET

In order to understand the role of meat in the human diet, a necessary first step is to attempt to clarify just what is meant by this term. In fact, in English the

word 'meat' has a very broad meaning and can, indeed, signify literally anything that is edible. However, in its narrower sense, the word has come to denote the flesh of animals in general. Even more narrowly, in everyday parlance, the word 'meat' can be used quite specifically to refer to the flesh of mammals. What is more, the term 'meat' is usually assumed to refer to lean skeletal muscle tissues, that is, muscle tissue attached to the skeleton directly, and thus excluding the muscular tissues of such organs as the heart and the tongue. Indeed, in contemporary British culinary culture these organs are classified as 'offal' and usually regarded as cheap, low-status and not particularly palatable food items. Nevertheless, in the UK food manufacturers and retailers are permitted by law to label quite a wide range of offal as 'meat' on their product packaging. As well as heart and tongue, this category includes kidney, liver and pancreas, but excludes brain tissue and parts of the alimentary canal and reproductive system. It is clear, then, that the word 'meat' is something of a semantic minefield, with its multiple meanings and convoluted connotations. In this chapter we will be using the term in the broader sense of animal flesh in general, as well as in the narrower sense of lean muscle tissue (usually, but not necessarily, derived from a mammal).

Lean meat (i.e., lean muscle tissue) is composed of approximately 70 per cent water and 20 per cent protein before cooking, plus variable amounts of fat, connective tissue, vitamins and minerals. The amount of fat in muscle tissue depends upon a range of factors related to genetics, feeding and activity levels. Wild mammals, for example, have significantly less fat inside their muscle tissues than do domesticated mammals. The actual structure of meat is complex. It is composed of muscle blocks made up of bundles of elongated cells capable of contraction and relaxation to produce movement in limbs and organs. Muscles are bound together with connective tissue containing the proteins elastin and collagen (which yields gelatin on boiling) and are served by an elaborate network of blood vessels and nerves. Well-used muscles are made up of thicker fibres and contain more connective tissues than less-used muscles and therefore produce tougher meat. Meat intended for human consumption is usually cooked in order to neutralize potentially harmful organisms it may contain and to tenderize it. Tougher meat is often subjected to 'moist' cooking methods like boiling and stewing, since these are more effective in breaking down connective tissue than 'dry' methods like grilling and roasting. Hanging meat after slaughter is also a common practice, as this allows rigor mortis to wear off and facilitates the tenderizing effect brought on by complex chemical changes in the tissues themselves.

The nutritional significance of meat for humans is related to our specific needs for certain amino acids. The proteins which are indispensable constituents of the human body (as they are of all living things) are made up of chains of amino acid molecules. Some of the amino acids which make up human proteins can be made by the body itself, and do not need to be supplied in a ready-made form in the diet. However, other amino acids cannot be synthesized by the

human body and have to be obtained directly by breaking down proteins that have been ingested. These are termed *essential* amino acids, in the sense that they are essential components of any nutritionally adequate diet. There are eight of these essential amino acids for adults, and ten for children. Quite clearly, dietary proteins whose components most closely match human essential amino acid requirements will be of particular nutritional value. In fact, the closest match is provided by egg protein, and this is often used as a kind of standard against which other proteins can be compared. Proteins which are rich in essential amino acids are conventionally termed 'high biological value' proteins (Brownsell, Griffith and Jones 1989:40), and as well as eggs include a wide range of meat, fish and other animal products. Those which are deficient in one or more of the essential amino acids are termed 'low biological value' proteins. All plant proteins fall into this category, since no plant proteins contain all the essential amino acids. Of course, the full inventory of essential amino acids can be obtained by consuming a suitable combination of plant-derived foods. However, what is distinctive about animal-derived proteins like meat is that they contain all the essential amino acids in one readily assimilable package. In addition, animal products also provide the crucial vitamin B, which is not found in vegetable food items. Liver is the richest source of this vitamin, although it is also present in meat, milk, eggs and fish. A deficiency of vitamin B12 causes the disease pernicious anaemia, which is associated with such symptoms as spinal cord lesions, weakness, numbress of the arms and legs, and diarrhoea. This disease is usually the result of the body's failure to absorb vitamin B12, but pernicious anaemia among vegans, arising from the total exclusion of animal products from the diet, has been observed (Gaman and Sherrington 1981:96). Thus, the use of dietary supplements containing synthesized B12 is a sensible precaution for anyone following a strictly vegan dietary regime.

As a rough rule of thumb, it has been suggested that the typical adult requires approximately one gram of protein per kilogram of body weight per day, whereas children, with the added demands of growth, require approximately two grams per kilogram of bodyweight per day. Protein requirements rise during pregnancy and lactation, and during illness and convalescence. Various attempts have been made to calculate the sources of protein in the average British diet, and from these we can obtain some idea of the significance of meat in this respect. Thus, Gaman and Sherrington (1981:80–1) estimate that meat in all forms contributes around 31 per cent of protein intake. Fish contributes approximately 4 per cent (being eaten much less frequently), milk 18 per cent, cheese 5 per cent and eggs 5 per cent. Significant contributions from non-animal products include bread and flour (19 per cent) and other cereal foods, such as rice, pasta and breakfast cereals (7 per cent). Later estimates offered by Brownsell, Griffith and Jones (1989:45) provide a broadly comparable picture, with meat making a 30 per cent contribution to the protein component of the British diet, fish 4 per cent, milk 18 per cent, eggs 5 per cent and bread 20 per cent. While these figures are

only broad approximations, they do indicate the centrality of meat as a protein source, and the overall preponderance of animal products in this respect.

Meat has long held a dominant position in the typical American diet, a dominance which has its origins in the early days of European settlement and the abundance of game species (Thomas 1991:42). Levenstein (1988:4–5) also links the centrality of meat in American diets to the long-term influence of British culinary culture, in which meat has traditionally been accorded pride of place. Thus, for example, nineteenth-century American cuisine involved the consumption of large quantities of pork, plus lesser amounts of lamb and poultry. Beef, however, was pre-eminent in terms of the status accorded to it and the symbolic value placed upon it. On the other hand, as Levenstein points out, the early New Englanders held fruit and vegetables in relatively low esteem, consuming them in comparatively small quantities. Indeed until the mid-nineteenth century constipation seems to have been regarded as a widespread national affliction among Americans, due to the large quantities of meat and starch consumed, compared to the modest intake of fruit and vegetables (Levenstein 1988:5).

However, although meat has historically played a central role in British and American diets, the actual patterns of meat consumption are by no means static. In fact, in the course of the twentieth century a number of significant trends have emerged. For example, if we consider meat consumption patterns in the

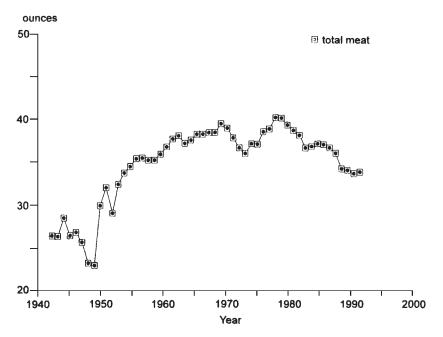


Figure 9.1 Total UK meat consumption (oz per person per week) *Source:* Ministry of Agriculture, Fisheries and Food (1991, 1994)

UK from the Second World War onwards, we can detect not only changes in overall consumption but also noteworthy shifts in the consumption of specific types of meat and meat products. Figure 9.1 shows the total consumption of meat and meat products in the United Kingdom from 1940 until 1993, expressed in ounces per person per week. This graph has some very clear features. Meat consumption was relatively low during the Second World War as a result of meat rationing, although it dropped even lower during the late 1940s as a result of post-war austerity measures. However, from the early 1950s onwards meat consumption began to rise consistently in response to increased affluence resulting from rising real incomes. After a temporary dip in the 1970s, the figures peaked at 40.27 oz per head in 1979, and then went into decline in the 1980s. Within these broad overall trends, different pictures emerge for different types of meat. Figure 9.2 provides details of consumption trends for beef and veal, mutton and lamb, and poultry, also for the years 1940 to 1993 in oz per person per week. Figure 9.3 shows the same data for pork, bacon and ham, and sausages.

Thus, for example, the consumption of beef and veal, relatively low in the 1940s, rose in the mid-1950s and peaked in 1957 at 10.54 oz per person per week. It then appears to have gone into a rather erratic decline, down to a figure of 4.68 oz by 1993. Mutton and lamb seem to have followed a similar pattern, with consumption peaking at 7.16 ozs in 1956 and declining to 2.33 by 1993. Pork consumption, low in the 1940s, peaked in 1982. Bacon and ham peaked in

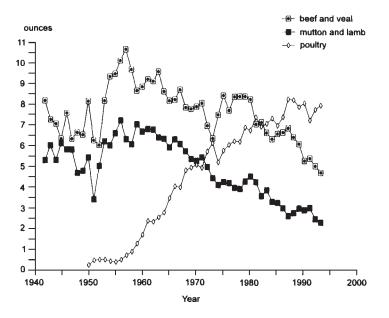


Figure 9.2 UK consumption of beef, lamb and poultry (oz per person per week) Source: Ministry of Agriculture, Fisheries and Food (1991, 1994)

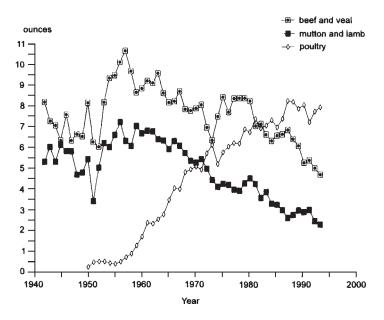


Figure 9.3 UK consumption of sausages and pork products (oz per person per week) Source: Ministry of Agriculture, Fisheries and Food (1991, 1994)

1962 and then also declined. Sausages showed their highest level of consumption as early as 1948 and then their popularity began to diminish steadily and consistently. In stark contrast, the data for the consumption of poultry (in the UK this category is made up largely of chicken) exhibits the opposite of the trends we have so far been discussing. From very low levels in the early 1950s (well under 1 oz per person per week on average) consumption climbed steadily to peak at no less than 8.14 oz in 1987. In 1993, poultry was the most popular category of meat in the UK by a wide margin. This trend towards poultry is due in large part to the dramatic drop in its price relative to other meats, a fall which is a result of the progressive intensification of poultry production techniques in a drive to reduce costs and improve profitability. The data indicate a clear pattern, which involves a switch away from meat derived from mammals to meat derived from birds and, broadly speaking, from red meat towards white meat.

A broadly similar picture emerges for the USA when we examine data relating to the quantities of various types of meat available to the public. Such data are not, in themselves, directly comparable to the survey based per capita consumption statistics in Figures 9.1, 9.2, and 9.3, since they are actually attempting to estimate the disappearance of food into both wholesale and retail markets. This is achieved on an annual basis by subtracting exports, year end inventories and non-food uses from production, start of year inventories and imports. Of course, the availability levels will be higher than actual consumption

Type of meat	190913	1929–33	1944–8	1970-4	1975-9	1987
Beef	53.2	38.2	48.2	83.9	87.8	73.4
Veal	6.3	5.9	9.8	2.0	2.8	1.5
Pork	60.9	63.6	63.9	62.1	55.8	59.2
Lamb & mutton	6.2	5.8	5.4	2.6	1.5	1.3
Chicken	14.9	14.4	19.3	40.5	44.8	62.7
Turkey	1.1	1.6	3.1	8.6	9.1	15.1
Total	142.6	129.5	149.7	199.7	201.8	213.2

Table 9.1 Quantities of meat available for consumption in the US food supply (lb per capita per annum)

Source: Adapted from Thomas (1991:44–5)

levels, due to wastage in distribution and processing, and in the home (Thomas 1991:42). Table 9.1 shows the quantities of various types of meat available for consumption in the USA, covering the period 1909 to 1987.

The data for beef show a significant dip in the period 1929–33 and then a dramatic rise to the levels of 1970–4 and 1975–9. This latter period, however, seems to represent a peak, and the figure calculated for the year 1987 shows a significant fall. Veal availability peaks much earlier, in the period 1944–8, and lamb and mutton decline steadily throughout the entire period covered. Interestingly, pork availability seems to remain remarkably stable. In contrast, the availability of chicken rises dramatically, to a level in 1987 which is approximately four times that of 1909–13. The rise of turkey is even more spectacular, to a level in 1987 which is nearly fourteen times higher than the 1909–13 figure. Thus, once again, we observe the stagnation or decline of red meat and a clear trend towards white meat.

However, the trends in meat consumption in countries like the UK and the USA clearly need to be placed in a wider global context. Such a global context is provided by Grigg (1993) who uses the Food Balance Sheets produced by the Food and Agriculture Organization (FAO) as a source of comparative data. For each member country over eighty food items are listed along with the weight available for consumption each year. Items are also converted, for example, into calories per capita per day and grams of protein per capita per day. The data are arrived at by starting with national agricultural production statistics and adding imports and the quantities withdrawn from storage, and then deducting exports, industrial usage and crops retained on the farm. Finally, 10 per cent is deducted to allow for wastage between the production and retailing stages. Although, as we have already noted, actual consumption is lower than availability and, in addition, these statistics can be criticized on several counts, they do provide at least some basis for international comparisons. Perhaps the most useful comparative measure is that which converts food items into calories per capita per day. On this basis, for the years 1986-8, in worldwide terms animal-derived foods provided only 15.7 per cent of per capita calories daily. In fact, meat itself provided only 7.0 per cent

of per capita daily calories on a global basis. This figure masks a significant difference between developed and developing countries, however. In the former, on average, individuals derive 30.8 per cent of their daily calories from animal products and 13.1 per cent from meat specifically. In developing countries these figures are only 8.9 per cent and 4.3 per cent respectively (Grigg 1993:67). Indeed, there appears to be a consistent positive correlation between Gross Domestic Product per capita and livestock-derived calories per capita consumed daily. In short, in worldwide terms, meat eating is clearly associated with wealth. Indeed, the extent of the inequalities in meat consumption becomes even clearer when the data are broken down on a regional basis, as shown in Table 9.2.

Region	All meat	Bovine meat ¹	Sheep meat ²	Pig meat	Poultry meat	Other meat
Western Europe	476	121	22	269	56	8
Australasia	593	189	168	143	89	4
North America	641	259	1	247	131	3
Eastern Europe & USSR	359	171	13	132	40	3
Latin America	210	113	5	48	42	2
Near East	95	34	42	-	18	1
Far East	30	7	4	12	6	1
Africa	32	23	9		_	_
Developed	436	161	15	190	66	4
Developing	100	21	7	60	11	1
World	182	55	9	92	24	2

Table 9.2 Available meat supply by region expressed as calories per capita per day (1986–88)

Note:

1 Cattle and buffalo

2 Includes goat meat

Source: Adapted from Grigg (1993)

There are clearly considerable regional variations in the patterns of meat consumption. For example, the availability of beef-derived calories is particularly high in North America and Australasia, and the same is true for poultry meat. The availability of pig-meat calories is even higher in Western Europe than in North America, and sheep meat is far more common in Australasia than in any other region. Yet the most striking features of Table 9.2 relate to the differences between developed and developing countries, with on average 436 calories per person per day available from meat in the former, and only 100 calories in the latter. Comparing regional inequalities provides even more striking results. The Far East and Africa show only 30 and 32 calories respectively available from meat daily, just about one-twentieth of the level of availability in North America.

Despite the limitations inherent in the statistics Grigg employs, his results clearly demonstrate the extent to which levels of meat consumption vary between the richer and poorer regions. In general, as wealth rises, meat consumption also tends

to rise, indicating the extent to which the desirability of this food item is translated into actual demand. Moreover, it should be noted that the comparative data we have considered, given that they are per capita averages, conceal the extensive inequalities which often exist between individuals within a given society or culture, related to status, gender and age, for example. Thus, when we consider the role of meat in the human diet, we must always bear in mind that, while for some individuals this role may be highly significant, for others it may be minimal, and that this state of affairs is as likely to be due to economic constraint as to cultural dictate or personal preference.

THE IDEA OF 'MEAT HUNGER'

In the above section we have noted the nutritional significance of meat in the human diet, in the setting of particular societies like the UK and the USA as well as in a global context. In addition, important changes in meat consumption patterns have been pointed out. Before possible explanations for such changes can be considered in further detail, it is necessary to pose a very fundamental question: 'Why, in fact, do humans go to all the trouble of eating meat?' After all, in its wild form it is often difficult to pursue and hard to catch (Farb and Armelagos 1980:44). In its domesticated form it is decidedly expensive to obtain. For example, animal protein produced in modern intensive agricultural systems by feeding grain to livestock involves the input of large quantities of vegetable protein. For every kilogram of poultry-meat protein, a chicken needs to be fed 5.9 kilograms of grain protein. For every kilogram of pork protein a pig must be fed 7.7 kilograms of grain protein. Grain-fed beef produced in feedlots is even more demanding, requiring 22 kilograms of grain protein per kilogram of beef protein (Allaby 1977:20). Thus, in terms of yield per unit of land, livestock products apparently cannot compare in efficiency with vegetable products. Indeed, it has been estimated that every calorie of animal foodstuff produced requires the input of five to eight primary calories (Borgstrom 1972:31). However, it should be noted that in less intensive agricultural systems, animal husbandry may be a much more obviously efficient use of resources. For example, domesticated food animals can be fed on vegetable by-products and food wastes inappropriate for direct human consumption. Also, areas unsuitable for arable farming (e.g., low-fertility uplands, semi-arid or arid zones) can be used for food production by stocking with grazing or browsing ruminants which can consume high-cellulose plant foods with which the human digestive system cannot cope (Blaxter 1986:55).

Perhaps the most obvious answer to the question of why humans eat meat (despite the fact that, as already noted, its production can appear inefficient compared to that of vegetable-based foods) relates to the fact that it represents a compact and palatable package rich in nutrients. Some social scientists accept this view as their starting-point for explaining patterns of meat consumption, arguing that the complex symbolic significances which cultures ascribe to meat are, in effect, manifestations or reflections of this underlying nutritional attraction. In contrast, others have argued that the symbolic dimensions of meat, the potent meanings it bears within a given cultural context, provide the principal reasons for its consumption, with nutritional considerations taking second place. Of course, these two views are not, in practice, mutually exclusive, although they do represent an important difference in emphasis, a difference which can lead to very different conclusions. In this chapter we will examine both these views, beginning with what is perhaps the intuitively more obvious one: the idea that humans are drawn to the nutritious properties of meat, and that this is a basic inclination of primary significance.

This idea finds its most direct expression in the work of Harris (1986), who explicitly entitles one of his chapters 'Meat hunger'. Harris bases his argument for the universal appeal of meat for humans on the idea that, although we are not true carnivores, meat provides an especially appropriate source of nutrients for our species. He refers specifically to the profile of essential amino acids which meat contains and to its provision of the vitamin B , which features were discussed in some detail above, as well as to its provision is put forward that the evolutionary background of the human species is at the root of this match between meat and our most basic nutritional needs. The inability of the human digestive system to deal with bulky and fibrous plant tissues rich in cellulose and lignin is seen as associated with our preference for high-energy, high-protein and low-bulk foods, of which animal products represent one of the most desirable categories (Harris 1986:36–7).

It will be recalled that in Chapter 1 we came across the argument that the human need for a high-quality, high-energy diet is related to the unusually high metabolic demands of the human brain, which typically takes up 20-5 per cent of the energy expended at the resting metabolic rate. Thus, in Harris's terms, meat consumption could be seen as part of a broader set of nutritional needs related to low bulk and high quality. What is more, as Harris (1986:29-31) and Farb and Armelagos (1980:43) point out, with the exception of larger species like the gorilla, our close primate relatives are by no means exclusively vegetarian. For example, baboons, although largely dependent upon vegetable foods, will eat insects, reptiles, birds and small mammals. Both baboons and chimpanzees will also engage in the co-operative hunting of small primates and the young of small grazing animals like gazelles. On these grounds, it would appear that the incorporation of meat into the diet as a significant, if not necessarily dominant, component is a common feature of the order of mammals to which our own species belongs. It is in this evolutionary context that authors like Harris, and Farb and Armelagos, locate their argument for an inbuilt meat hunger related to the intrinsic nutritional needs of humans. This position is closely related to the somewhat contentious viewpoint discussed in Chapter 1 which allocates central significance to hunting, not only as the basic mode of subsistence of early humans but also as the key driving force behind the initial development of human cooperative capacities and human culture.

In order to support his contention that meat represents an intrinsically preferred element in the human diet, Harris points out the esteem in which meat is held, not only in Western cultures but also in a wide range of traditional societies. He provides ethnographic evidence relating to traditional cultures where meat is accorded significantly higher status and desirability than plant foods, and points out that the languages of traditional peoples may contain explicit concepts of 'meat hunger', that is, a hunger which is construed as focused specifically upon animal flesh, and one which can be satisfied by no other foodstuff. For examples of the use of such a concept he cites the Canela of Amazonia and the Semai people of Malaysia (Harris 1986:26–7). Indeed, he argues that meat is so highly valued that there usually exist elaborate rules which govern the way in which the carcass of a game animal or slaughtered domesticated beast is divided up and the parts then distributed through the community. Such rules appear to ensure access to this prized food by a wide range of individuals and also establish and maintain obligations of reciprocity which guarantee future supplies of meat when one's own hunting or husbandry is less productive. (See Coon 1976:201-4 for examples of meat sharing rules among such hunting peoples as the Tigarans, the Ona, the Birhors and the Mbuti.) As Farb and Armelagos (1980:48) point out, using the Inuit as an example, such is the value placed on meat in hunting-gathering cultures that the consistently successful hunter is accorded a unique degree of prestige. In contrast, the providers of gathered (e.g., plant) foods are accorded far less prestige, this differential being closely associated, as we might expect, with gender. Indeed, the intense desire for meat, Harris argues, can lead to disputes and quarrels when the supply is reduced and reciprocity gives way to jealousy and resentment. He cites the case of the Yanomamo of Amazonia, whose communities may split and separate as a direct result of the tensions generated by meat shortages which begin to occur when the group's hunters have seriously depleted the stock of game in the immediate locality (Harris 1986:28).

Such evidence, then, is taken as demonstrating the unique status of meat, placing in its true nutritional and cultural contexts the considerable amount of effort and ingenuity humans expend in order to obtain this particular source of nutrients. Yet, even if we accept, at least in broad principle, Harris's view that there is a powerful physiological factor behind meat eating by humans, this position does not necessarily lead to clear-cut conclusions about the role of meat in the diet of members of affluent, industralized societies. In such societies, a foodstuff traditionally hard to obtain and often in relatively short supply, becomes abundant and accessible. In such circumstances, its nutritional and symbolic significances may undergo fundamental changes.

MEAT TABOOS AND PROHIBITIONS IN TRADITIONAL CULTURES

However, having examined the argument for human 'meat hunger', we need to confront an apparently awkward question: 'If humans have an innate taste for meat, why is this prized food item the object of complicated taboos and prohibitions in many traditional societies and in some of the world's major religions?' Perhaps the best documented and most detailed study of the diverse customs of meat avoidance found around the world is provided by Simoons (1961). In effect, the study is based upon the premise that flesh foods are far more likely to be the subjects of powerful prohibitions supported by punitive sanctions than are vegetable-based foods (Simoons 1961:108). Such prohibitions, therefore, demand description and explanation, and Simoons examines the patterns of acceptance and avoidance relating to six types of meat: pork, beef, chicken, horse flesh, camel flesh and dog flesh.

In relation to pork, Simoons notes that the pig is a very significant source of meat for a substantial proportion of the world's population. Pork was a favoured food among the Greeks and the Romans, and the pig was introduced as a domesticated animal into Africa south of the Sahara from the fifteenth century onwards. Pig keeping is widespread in South East Asia, in Polynesia and Micronesia, and is particularly important in China, where pork is a highly valued food. Yet, despite the importance of the pig as a domesticated animal, its use for food is totally rejected by adherents to two of the world's major religions, Judaism and Islam, whose doctrines define the animal as unclean and unfit for human consumption. (As we noted in Chapter 7, this rejection of pork is part of wider sets of prohibitions relating to flesh foods contained in the teachings of these two related religions.) What is more, Hindus also regard the pig as unclean, and in India these animals are raised and eaten mainly by aboriginal peoples.

Domesticated cattle, in all their various breeds and forms, constitute the single most numerous large herbivore on earth. Their flesh is consumed with relish in Europe, North and South America, Africa and Australasia, and consumption has also begun to rise in areas like China and Japan, where traditionally it was relatively low. Yet, apparently paradoxically, Hinduism, the major religion of India, a country estimated to contain a fifth of the world's cattle, prohibits the consumption of beef. This prohibition appears to be related to the status of the cow as a sacred animal and to the fact that vegetarianism and the avoidance of flesh foods is associated with the higher ranks of the Indian caste system.

While the prohibitions which relate to the consumption of pork and beef are well known to most Westerners, far less well known in the West are the widespread taboos which exist around the world relating to the eating of chicken and eggs (Simoons 1961:65). In fact, Simoons describes the rejection of the flesh of domestic fowl by such peoples as the Vedda of Ceylon (Sri Lanka) and provides numerous examples of beliefs which hold that the consumption of chicken or eggs can be positively dangerous (e.g., the belief among the rural Annamese that chicken is toxic for pregnant women). What is more, there is a widespread dislike of chicken among Hindus, which seems to be related to vegetarian preferences and to the belief that because of its eating habits, the chicken is unclean. Similarly, Buddhist beliefs are largely antithetical to the consumption of chicken, again possibly related to distaste for the bird's feeding habits. Thus, in Tibet, chickens are seen as 'sinful' and 'unclean' since they eat worms (Simoons 1961:70).

In contrast to his discussion of prohibitions which run counter to Western dietary practices, Simoons also describes avoidances and taboos which the average Western consumer would find entirely in line with his or her own nutritional culture. For example, horse flesh is a prohibited food in a wide range of societies and cultural settings, including Europe, where the influence of Christianity gradually eliminated the practice of eating horse, which had strong associations with pagan beliefs (Simoons 1961:83–4). The teachings of Islam are somewhat ambivalent on the acceptability of horse flesh, and in Hindu India only a few untouchable groups eat horse meat. Camel flesh is widely consumed in the Muslim world, but is a prohibited food among many non-Muslim peoples of the Middle East. Camel meat is also widely avoided in the Far East, and in Mongolia camel milk is drunk but the flesh is rejected as a food item.

Faced with the wide range of prohibitions on flesh foods, of which the above are only illustrative examples, the challenge of explaining their origins and significance is a decidedly daunting one. This is particularly so when neighbouring cultures contain quite different forms of avoidances and taboos. In fact, Simoons offers a number of explanations, each of which is tailored to the taboo in question. By and large, his explanations rest upon the premise that such prohibitions are primarily based upon the symbolic significance of the foods or animals in question, and that the avoidance of particular flesh foods can often be a powerful expressive act in itself. For example, in discussing the range of explanations which has been put forward to explain the Hindu rejection of beef, he gives particular prominence to the view that this rejection had its roots in rivalry between Brahmans and Buddhists. Indeed, one argument maintains that Brahmans gave up cattle sacrifice and beef eating in order to improve their moral and political credibility in the face of Buddhist criticisms of these practices. What is more, Simoons suggests that such a move could have been facilitated by the long established sacred character of cattle in Indian culture (Simoons 1961:61-3). This line of reasoning concerning the expressive significance of meat rejection is closely related to the view that the rejection of a certain animal as a source of food may be a way of showing disapproval of, or contempt for, those peoples or cultures with which that animal is associated. Thus, for example, the taboo on pork characteristic of Judaism and Islam has been characterized as having its early roots in the pastoralist's disdain for the way of life of the settled agriculturalist. Given that the conditions needed for successful pig rearing can only be achieved by settled farmers, and that pigs are quite unsuited to a nomadic, pastoralist way of life, they came to symbolize, as an animal and a food source, the very antithesis of nomadic culture.

In effect, what is being suggested is that the rejection of a particular flesh food can be a powerful cultural device to reinforce and emphasize a particular group's collective identity, as can the acceptance of a given flesh food. Thus, the acceptability of camel flesh to Muslims may be countered by the rejection of camel flesh by non-Muslim groups wishing to resist Muslim cultural influences (Simoons 1961:121). Indeed, the prophet who initiates a new religion or cult may lay down a whole series of dietary regulations and avoidances to enable the faithful clearly to distinguish themselves from non-believers. As we have already noted, such symbolic avoidances can be associated with carefully specified rituals concerning the slaughtering of animals and the preparation of flesh foods for human consumption. Flesh not prepared according to the prescribed rituals is likely to be seen as dangerous or polluting. The rejection of such flesh is in itself a clear expression of the individual's continuing commitment to the religion or system of belief in question.

As well as the flesh avoidances which are integral to some of the world's major religions, magical beliefs leading to the avoidance of the flesh of particular animals also appear to be very widespread. Indeed, Simoons provides a wide range of examples of such beliefs, which often take the form of the idea that eating a given animal will magically produce specific undesirable or dangerous effects. One instance of this is the avoidance of venison by warriors and young men among the Dyak of Northwest Borneo, for fear that they would become timid like deer (Simoons 1961:117). Where totemic beliefs are present in a culture, individuals may be required to honour and protect their totemic animal and forbidden to kill and eat it under threat of dire supernatural sanctions. It has even been suggested by structuralists like Mary Douglas that animals which present taxonomic contradictions within a given culture will be rejected as food sources because of their disturbing symbolic import (Douglas 1966:54–6).

The argument that meat taboos, generally speaking, have their origins in the diverse symbolic significances and cultural meanings attached to this particular form of food can, as we have seen, be countered with a much more pragmatic view of such prohibitions. In essence, the pragmatic perspective argues that meat prohibitions frequently have a real practical utility and that this utility is the fundamental reason for their existence, any symbolic or expressive attributes being merely reflections or reinforcements. One of the best-known versions of this pragmatic view is the idea that certain forms of meat prohibition have important hygienic aspects. For example, animals which act as scavengers and consume waste products may be seen as sources of health hazards, a view which has often been cited to explain pork avoidance in Judaism and Islam. A similar argument suggests that pork may be avoided in warmer climates because of its supposed susceptibility to rapid decay and spoiling. Perhaps the most sophisticated of these hygienic arguments relates to the disease trichinosis. This serious illness produces nausea, diarrhoea, fever and swelling of the muscles, and is caused by eating undercooked pig muscle tissue infested with the larvae of the parasitic nematode worm trichinella spiralis. However, both Harris (1986) and Simoons (1961) are sceptical concerning such arguments, pointing out, for example, that it is only comparatively recently that the aetiology of trichinosis has been fully understood, and that other serious diseases like tapeworm infestation can be contracted from other forms of undercooked meat.

Furthermore, since the delay between the ingestion of the larvae and the onset of symptoms is a relatively long one, it is unlikely that traditional cultures could have established the causal link and made it the basis of a prohibition. In fact, hygiene-based explanations may be little more than modern rationalizations of much more ancient and deep-seated taboos and prejudices (Simoons 1961:16).

A much more convincing example of the attempt to explain meat taboos in pragmatic terms is provided by Harris's analysis of the Hindu prohibition on beef consumption. Harris confronts the apparent irrationality inherent in the fact that India has the largest cattle population of any country on earth (a significant proportion of this population being sick, barren or dry) along with a very large population of humans, many of whom are desperately short of dietary protein. In these circumstances, a taboo on beef eating seems the height of folly, a curious religious observance which wastes precious resources and condemns many to malnutrition. However, Harris seeks to demonstrate that the prohibition on beef consumption may actually have crucial practical advantages, protecting and enhancing the living standards of some of the poorest sections of Indian society. The whole argument hinges upon the nature of the humpbacked Zebu breeds of cattle which are found in India. These breeds are capable of providing the motive power for ploughing, even in extreme conditions of heat and drought, and can survive on very meagre rations of feed and fodder, often consisting of little more than such items as stalks, chaff, leaves and waste left over from human food consumption (Harris 1986:56). Harris points out that such animals are, in fact, far more cost-efficient than tractors for ploughing purposes, given that most Indian farming units are very small and taking into account the very high initial investment that mechanization demands. Indeed, cows provide the Indian peasant with several valuable products: oxen for ploughing, milk (a precious source of fats and protein even if available only in small amounts) and dung (a clean and effective fuel for cooking in an environment where wood is scarce). In short, Harris argues that the prohibition on killing cows effectively enhances the long-term viability of Indian agriculture. It encourages farmers to resist the temptation to eat temporarily useless animals during periods of food shortage and climatic stress. If they were to succumb to this temptation, their ability to resume the cycle of agricultural production when conditions improved would be seriously compromised, and many of the poorest farmers would be driven off the land and into an even more marginal existence in already overcrowded cities.

As further evidence of what he sees as the underlying pragmatism of Indian attitudes to cattle, Harris cites a number of practices, some of which have already been referred to in Chapter 7. For example, surplus animals are sold off to Muslim traders, and many of these animals are actually destined for slaughter and consumption. Cows which die of natural causes or neglect become available as food to carrion-eating castes, who consume the edible parts and recycle the rest of the carcass. What is more, the sex ratios within the cattle population vary significantly from region to region in India, according to local agricultural requirements and practices. Harris suggests that such differences can only be produced by farmers' favouring calves of the preferred sex and neglecting calves of the non-preferred sex, thereby producing significant differences in mortality rates (Harris 1986:59–60).

Harris also seeks to find a similarly pragmatic explanation for the avoidance of pork inherent in the teachings of Judaism and Islam. For example, he is highly critical of the view put forward by Douglas (1966) that this pork taboo emerges out of the idea that the pig represents a kind of taxonomic anomaly in terms of the dietary laws of the Old Testament, which require that in order to be acceptable to eat an animal must both chew the cud and be cloven-hoofed. Since the pig only fulfils one of these conditions but not the other (it does not chew the cud), Douglas maintains that it came to be seen as a dangerous abomination and therefore as unclean, unfit for human consumption. Harris (1986) rejects what he sees as the circularity of this kind of structuralist argument, looking instead for a more mundane and practical basis for this prohibition. In effect, his explanation is an ecological one. The deforestation of the Middle East and the degradation of farmland into desert progressively removed the conditions in which pig husbandry could be practised economically. Pigs require shade, water, mud for wallowing and a relatively high-quality diet which in many ways overlaps with that of humans. All these features would militate against their use as food animals in arid conditions. On the other hand, cloven-hoofed, cudchewing ruminants like cattle, sheep and goats can survive even in near-desert conditions and can subsist on high-bulk, fibrous plant foods like leaves and stems that humans simply cannot digest. Thus, in agricultural and ecological terms, the ruminants were clearly a better option than the pig in the arid Middle East. This inescapable fact of life represents, for Harris, the basis of pork rejection in these cultures.

There can be no doubting the ingenuity and the plausibility of arguments like those of Harris. The value of such arguments is that they remind us that no food system can possibly maintain its continuity in the long term other than within the parameters set by economic, climatic and ecological realities. Yet, within the framework provided by those parameters there is often enormous scope for humans to exploit the multilayered symbolic potential of food for a whole range of expressive and cultural purposes. This is certainly the case when we consider the logic behind meat prohibitions of various types. Such prohibitions certainly carry potent symbolic charges. They are loaded with meanings, some explicit, some more implicit, but they may also carry some direct or indirect pragmatic advantage, at least for some of the parties who subscribe to the taboo. Any attempt to assess the relative weightings of symbolic and practical factors is fraught with difficulty, particularly as the two are inevitably closely, often inextricably, intertwined with each other. Even more difficult is the attempt to allocate priority to one or other. Do pragmatic choices and strategies give rise to prohibitions, which are then enshrined in the symbolic vocabularies of ritual, custom and religion? Or do attempts to create meaning,

order and legitimacy at the symbolic level give rise to prohibitions which later have retrospective pragmatic rationalizations attached to them? In the case of meat prohibitions these are unresolved, perhaps unresolvable, questions. This lack of resolution means that we must keep both possibilities in mind when analyzing the role of meat in any nutritional culture.

MEAT SYMBOLISM IN CONTEMPORARY WESTERN CULTURE

Of course, meat prohibitions are not limited to traditional cultures, but also exist in modern Western societies and can exert a significant influence on dietary patterns. For example, while the flesh of wild mammals and birds currently furnishes only a very small proportion of the protein component of Western diets, some species are still hunted for recreational purposes and as seasonally available sources of food. However, in general, only a very narrow range of fish, bird and mammal species is defined (legally and culturally) as 'game', although the actual list does vary somewhat from society to society (North American hunters, for example, regard the grey squirrel as an edible quarry species, whereas in Britain the same animal is regarded either as an inedible pest or as an attractive decorative feature of park or garden, depending on one's point of view). Thus, in effect, all wild species outside the definition 'game' are prohibited flesh for the average Westerner, and eating them would be virtually inconceivable. This taboo upon the eating of wild species is so ingrained in Western culture as to be totally taken for granted by the average individual. Yet it stands in sharp contrast to the dietary practices of our not-too-distant forebears, who were happy to feast upon a veritable menagerie of wild creatures should their status and the occasion permit. For example, the menus of courtly feasts provide ample evidence of the variety of species that were prepared and served, often in highly elaborate dishes. Explaining this near universal Western taboo is by no means easy. It has been suggested that the taboo on eating the flesh of predatory, meat-eating birds and mammals arises out of the idea that, in symbolic terms, they are too 'strong' for human consumption, and we will return this notion below. The prohibition on eating other wild species, which might otherwise be regarded as palatable and nutritious, may be largely the result of the changing orientation of increasingly industrialized and urbanized cultures to the natural environment, and this is also an issue to which we return later in the chapter.

Western meat taboos quite obviously do not apply only to wild animals but also to certain domesticated species. The most notable of these prohibited species is the horse which, despite the fact that it has been used as a food animal in many cultures, has long been taboo in Europe. In ancient Greece and Rome, as in Christian Europe, horse flesh was regarded with aversion, only eaten in times of starvation or desperate need. Despite the efforts of nineteenth-century advocates of the hygienic and dietary advantages of horse flesh like the Frenchman Geoffrey de Saint-Hilaire to encourage its use, the prohibition on horseflesh remains as powerful as ever for most Westerners (Toussaint-Samat 1992:98). Similarly, the dog, also a prized source of flesh in a variety of cultures ranging from Polynesia to China, is a taboo species in the West, where the idea of consuming dog flesh would generally be regarded with horror. Indeed, in contemporary Western culture both these animals would be construed as 'pets', although the horse, given its size, is not suited to quite the same level of domestic integration within a human household as a dog. The notion of eating a pet seems self-evidently abhorrent, since such animals can be seen as entering into a social relationship with their human owners. They are given names, credited with personalities and granted quasi-human status in certain limited respects. Anthropomorphism of this kind would thus appear to render the eating of pets, in symbolic terms, almost the equivalent of cannibalism, the focus of the most potent flesh taboo of all.

However, just as he seeks to demonstrate that meat prohibitions in traditional societies may have pragmatic foundations, Harris also suggests that prohibitions on eating horses and dogs may also have sound practical bases, rather than being merely the manifestations of emotional attachment to pets. Indeed, he points out that in New Guinea people frequently become emotionally attached to their pigs, and treat them as pets, but still slaughter and eat them (Harris 1986:176). Horses, given the nature of their digestive system, are not particularly efficient converters of feed into flesh, and thus rearing them for food does not make economic sense when more efficient species are available. The horse is far more useful for transportation and, particularly more recently, as an aid to recreation. Similarly, dogs in a Western setting make little economic sense as food animals, yet can provide valuable services, notably companionship and security (the latter being particularly pertinent in areas of high crime or for vulnerable individuals or households). In short, domestic animals that are more use alive than dead are likely to be the focus of an eating prohibition, according to Harris.

Yet, despite the force of Harris's arguments, the symbolic potency of meat in contemporary thought is self-evident. How, then, can meat be seen as fitting into the broad framework of meaning which underpins Western culinary and nutritional culture? One attempt to provide such a framework takes the form of a hierarchy of status and potency (Twigg 1979). Twigg locates red meat near the top of this potency hierarchy, with white meat and fish below it, other animal products like eggs and cheese below these and vegetable foods lowest of all. What her scheme represents is her conception of the conventional rankings of animal and plants foods in terms of power, status and desirability (see Figure 9.4)

The feature which places red meat in such a high position, she argues, is its high blood content, the same feature which gives it its characteristic colour. It is the compelling and ambivalent symbolic charge of blood which gives red meat its power and its appeal. Blood is seen as bearing the special essence of the person or the animal, and is associated with virility, strength, aggression and

TOO STRONG: (TABOO)	Uncastrated animals Carnivorous animals Raw meat
DOMINANT CULTURE BOUNDARY	
<i>STRONG:</i> POWERFUL/BLOOD	Red meat
LESS POWERFUL/NON-BLOOD	Chicken Fish
VEGETARIAN BOUNDARY	
LESS STRONG: VEGAN BOUNDARY	Eggs Dairy products
TOO WEAK	Fruit Cereals Root vegetables Leaf vegetables

Figure 9.4 The conventional hierarchy of food status and potency Source: Adapted from Twigg (1979:18)

sexuality (Twigg 1979:17). Yet, at the same time, it is a dangerous and potentially polluting substance. Eating red meat is seen, in a sense, as the ingesting of the very nature of the animal itself, its strength and its aggression. However, in Western culture, there is an element of ambivalence present. There is danger involved in the ingestion of too much power. Thus, as Figure 9.4 indicates, there is a cultural boundary near the top of the food hierarchy, and above that boundary are items which are defined as too potent for humans to eat. Raw meat is seen as too obviously charged with the power of blood; it is therefore taboo and has to undergo deliberately induced transformations (cooking, smoking, curing, etc.) to wrest it from the realm of nature and bring it into the realm of culture, where it can be safely consumed. Similarly, the flesh of animals which are themselves flesh eaters is seen as too powerful for human consumption, even when cooked, and is taboo in Western culture. Even the flesh of uncastrated male domesticated animals like bulls and boars is seen as too strong, as tainted with an excess of virility which renders it unpalatable in a conceptual if not a gustatory sense.

However, below red meat comes white meat like poultry. This is 'bloodless' and therefore seen as less powerful, as is fish, which comes immediately below it in the hierarchy. Both these 'bloodless' forms of flesh, when prepared by boiling or poaching, are seen as suitable for those perceived as having a delicate digestion (e.g., invalids and children). Eggs and dairy products, although of animal origin, are even further from the blood-rich summit of the hierarchy and therefore even less potent. Finally, vegetable foods at the bottom of the hierarchy are commonly regarded as too weak to provide adequate nutrition in themselves, or to furnish the stressed or central element of a conventional meal. (As we will see in the next chapter, vegetarian ideology may actually seek to invert this overall scheme.)

We have already noted in Chapter 5 the central significance of the 'cooked dinner' (Murcott 1982) or the 'proper meal' (Charles and Kerr 1988) in twentieth-century British culinary culture. In such meals, which are conventionally seen by many women as the very foundation of the family's nutritional wellbeing, meat is the central feature. Its presence, preferably in roasted form is, in effect, the defining element, and all the other elements (which are mainly of vegetable origin) are subordinated to it and are seen as playing an essentially supportive role in the careful composition which appears upon the plate. Given Twigg's hierarchy, red meat can be regarded as the most desirable and the most prestigious form of this dominant element. What is more, the above authors argue that women explicitly relate the importance of the proper meal, arranged around its definitive core of meat, to the tastes and needs of adult men (in the studies in question, usually the respondent's husband). In this sense, then, meat-based meals are seen as associated with masculinity and with the demands which men make upon women on the basis of what is conceptualized as a dominant and nutritionally privileged position. Indeed, the idea that women's purchasing and preparation of red meat is influenced by their husband's perceived views is given some indirect empirical support by a study of intentions to consume beef carried out in the USA. Zey and McIntosh (1992) interviewed by telephone a sample of 400 women in the state of Texas. Their findings suggest that women's intentions to consume beef are not so much influenced by their own attitudes (e.g., concerning its health implications and gustatory features) as by what they believe to be the attitudes and beliefs of their spouse and, to a lesser extent, of their friends. These findings were largely supported by a similar study by Sapp and Harrod (1989), which was carried out after Zey and McIntosh's field work was completed.

However, perhaps the most radical and far-reaching analysis of the association between meat and masculinity in Western culture is put forward by Adams (1990). Her starting-point is the crucial association in patriarchal societies between meat eating and male power. Not only is meat eating seen as an essentially masculine activity, but the consumption of meat is also seen as strongly associated with virility and male physical strength. She mentions, for example, the importance placed upon feeding beef to American soldiers during the Second World War (Adams 1990:32). Thus, if meat eating is to be symbolically equated with male dominance, men must maintain a privileged access to meat, even though, as Adams points out, women's protein needs may be higher than men's during the crucial periods of pregnancy and lactation. However, she does admit that in times of affluence, gender-related differences in meat consumption may be much less significant than in times of shortage. Furthermore, class-based differences in meat consumption, she suggests, may be of greater magnitude than the differences between men and women in the same class location.

If meat is effectively a symbol of male dominance, then vegetables, defined as 'women's foods', are seen as inherently less desirable and less potent, as secondclass foods fit only for second-class citizens. Adams notes that the word 'meat' has the connotation of 'essence' or 'most important feature' (as in the 'meat of the argument'). On the other hand, 'vegetable' suggests monotony, dullness and inactivity, and the verb 'to vegetate' implies leading a passive, inactive existence. Thus, there emerges a kind of symmetrical symbolism between meat and vegetables, masculine and feminine: men are active and consume foods imbued with power (the power of active animals), and women are passive, and consume foods derived from 'inactive', 'immobile' forms of life (plants) (Adams 1990:36–7). What is more, the responsibility imposed upon women for the cooking of meat for consumption by men is seen as a further expression of patriarchal power and female subordination. On the other hand, men who refrain from meat eating may be regarded as repudiating or undermining conventional conceptions of masculinity.

The whole argument, however, is taken a crucial step further by Adams, who draws a direct analogy between the oppression of women by men and the oppression of animals by (male) meat eaters. Even more disturbingly, an analogy is also drawn between the killing and dismemberment of women and the slaughter and butchering of animals in the process of converting them into meat (Adams 1990:45–61). She notes how in everyday speech the equation of the female body with meat involves processes of objectification and fragmentation which facilitate the occurrence of sexual violence towards women-as-objects (Adams 1990:47). In this sense, she implies, the association between meat consumption and male power reaches its most extreme and potentially most dangerous form of expression.

As we will see in the next chapter, which focuses upon vegetarianism, Adams' exploration of the darker regions of meat symbolism in Western culture also entails a powerful polemic in favour of fundamental changes in Western foodways and the values and ethics which underpin them. Indeed, the argument has been advanced that, in relation to meat eating, such changes may already be under way.

THE MEANING OF MEAT: THE BEGINNINGS OF CHANGE?

If we take the patterns of meat consumption in the UK as our case study, there appear to be a number of clear trends which demand explanation. It will be recalled, for example, that total meat consumption in the UK peaked in 1979, and has since been declining steadily (see Figure 9.1). Even more strikingly, the consumption of red meats has declined quite sharply. As we have seen, the peak year for beef and veal consumption in the post-war period was 1957, and by

1993 consumption had fallen to well under half the peak level. The peak year for mutton and lamb was 1956, and by 1993 British consumers were eating under one-third of the peak level (see Figure 9.2). While significant increases in the consumption of poultry have meant that overall meat consumption has not shown such dramatic falls, it is very clear that there has been a fundamental shift in the demand for red meat. Once wartime and post-war shortages and rationing were over, the amounts of red meat eaten in Britain rose, in line with what would be predicted on the basis of the well-established correlation between levels of affluence and levels of meat consumption. The fact that in Britain the link between rising living standards and rising demand for meat appears to have broken down presents us with a genuine puzzle, particularly in relation to red meat. If we accept the argument that red meat is at the pinnacle of the Western status hierarchy of foods, that it carries a heavy symbolic charge of power, strength, prestige and virility, why does it seem to be falling from favour? What is more, although this phenomenon is particularly marked in Britain, it appears also to be affecting other European countries to some extent. Data produced by the European Commission indicate that, in the European Community, beef and veal's share of total meat consumption fell from 38 per cent in 1961 to 25 per cent in 1991 (Bansback 1993:2). What is more, between the years 1981 and 1991 per capita consumption of beef and veal declined in eight out of the twelve nations which then made up the community, by amounts ranging from 3 per cent in the Netherlands to 33 per cent in the Irish Republic (Bansback 1993:3).

Some empirical evidence concerning the reasons for reduced meat consumption in Britain is provided by Woodward (1988). Woodward's study was based upon a sample of 584 respondents drawn from three cities in the north of England. The findings indicated that, overall, around a third of the respondents who were meat eaters (87 per cent of the total sample) felt that they were now eating less meat than they had in the past. This proportion of meat reducers was fairly consistent across social class groups (Woodward 1988:102). When questioned concerning their motives for reduced meat eating, 51 per cent indicated health reasons, 46 per cent referred to cost, 22 per cent referred to the increased availability of acceptable alternatives and 19 per cent indicated that it was a question of taste. Misgivings concerning production methods were indicated by 16 per cent, and 12 per cent and 11 per cent respectively voiced misgivings about the use of growth hormones and antibiotics. Issues relating to animal welfare were highlighted by 12 per cent of the meat reducing respondents (Woodward 1988:103). These results seem to support the contention that the decision to reduce meat consumption is an essentially instrumental and pragmatic one, dictated largely by economic considerations and by some consumers' acceptance of health education messages which have consistently encouraged the reduction of red meat intake in particular. This interpretation receives further support from attitude survey data published in the United Kingdom. Questioned in 1986, only 66 per cent of respondents classified beef, pork and lamb as 'good for people', and 3 per cent actually characterized them specifically as 'bad for

people'. A follow-up survey in 1989 found that the proportion classifying these three meats as 'good for people' had fallen to 57 per cent, and the proportion classifying them as specifically 'bad' had risen to 6 per cent (Jowell, Witherspoon and Brook 1990:148). The authors also report that health concerns were commonly cited by respondents as reasons for eating less beef, pork and lamb (Jowell, Witherspoon and Brook 1990:156).

However, we must also consider the possibility that trends in meat consumption in Britain, particularly the observed decline in the eating of red meat, are not driven purely by pragmatic factors. Is it also possible that the very meaning of meat is changing, and changing in line with much more fundamental shifts in the very foundations of British culture? This proposition is at the centre of the analysis of the significance of meat as a 'natural symbol' which is put forward by Fiddes (1991). The starting-point of his argument is the claim that 'meat's preeminence in our food system derives primarily from its tangibly representing to us the principle of human power over nature' (Fiddes 1991:225-6). The human need to dominate the natural world and to control the environment is seen as deeply rooted in human history and prehistory, in terms of a desire to mitigate the threats posed by unpredictable natural processes and to maximize security (especially of the food supply). This means that animal flesh, in Fiddes' view, is prized so highly as food, not in spite of the exploitation of animals which it entails but precisely because of that exploitation. Despite the fact that individuals may experience unease, meat eating is approved and encouraged at the cultural level because it effectively demonstrates and symbolizes power over nature. Indeed, as we noted in Chapter 7, individual anxieties connected with such exploitation can be accommodated within a suitably protective cultural framework. It is Fiddes' contention that the significance of meat, both in terms of the quantities consumed and the symbolic charge it carried, began to increase markedly from the seveenteenth-century onwards. This was precisely the period in which the rationalist scientific worldview was placing greater and greater emphasis on the human domination of nature. In such circumstances, where such dominance can be construed as a moral as well as a practical imperative, meat eating could be seen as an even more compelling expression of overriding human authority in relation to the natural order.

However, Fiddes maintains that this long-established orthodoxy, celebrating and legitimizing the extension of human power, is in decline, and that powerful ideological currents are now flowing in the opposite direction (Fiddes 1991:116). The human domination of nature is now seen by many as having gone too far, with the threat of dire ecological consequences. There has emerged a whole range of environmentalist movements and factions dedicated to slowing, or even reversing, this process. Indeed, as Thomas (1983) has pointed out, misgivings concerning the anthropocentric world-view, which saw nature as ripe for human exploitation, were present in embryonic form on the English cultural scene by the late seventeenth century. Such ideas, Fiddes argues, have now assumed a

much more prominent position and are leading to a more generalized acceptance of the view that the relationship of humans to the natural world should be one of sensitivity and stewardship rather than unrestrained power. It is in this context that the meaning of meat (and that of red meat in particular) is seen as undergoing an important transformation. Its consumption is no longer seen as a reassuring and assertive expression of human dominance, but as a potentially disturbing reminder of a more 'barbarous' and insensitive past. Thus, we become more squeamish in relation to meat and meat products, requiring them to be prepared and presented to us in a disguised and sanitized form. There is a parallel here between Fiddes's argument and that advanced by Elias (1978a:120-2), even though the two authors actually operate with rather different conceptualizations of civilization and the civilizing process. In fact, Elias contends that the civilizing process itself entails, among other things, the cultivation of increasingly delicate sensibilities, which in turn generate what he terms an advancing 'threshold of repugnance' (1978a:120). As an example of this advancing threshold he cites the gradual decline of the practice of carving whole animals (or large sections of animals) within sight of those who were to dine upon them, as diners became progressively less willing directly to contemplate the actual origins of their meal.

Thus, for Fiddes, increasing squeamishness, the decline of red meat consumption, the ever more widespread acceptance of the view that red meat is 'unhealthy', the rise of environmentalist movements and the increasing salience of animal rights issues are all interlinked phenomena. They are each, in their own way, manifestations of far-reaching changes in an entire world-view. Indeed, he goes as far as to suggest that eventually meat eating may come to be seen in the same light as smoking and drug addition: as an anti-social and damaging practice attracting general disapproval. Thus, 'the turbulently declining reputation of meat...may be a harbinger of the evolution of new values' (Fiddes 1991:233).

OVERVIEW

In this chapter we have encountered what appear to be, at first sight, two fundamentally opposed views of the role of meat in the human diet. On the one hand, meat's appeal for its human consumers is seen as rooted in its nutritional properties, particularly in its ability to provide a comprehensive range of nutrients. On the other hand, meat's significance is said to reside in its symbolic charge, in the complex meanings relating to power, status, strength and gender which it can be used to convey. Clearly, stated in this stark and uncompromising way, this opposition is a false one. Meat is quite capable of delivering both a nutritional reward and a symbolic message simultaneously. Thus, sociological and other analyses of the role of meat will, in effect, vary largely in terms of the emphasis they place on these two aspects of the issue. However, this does not prevent some authors from quite deliberately and openly overstating their case, for example, in relation to the priority of symbolism over nutrition, in order to press home what they regard as an important and otherwise neglected point (Fiddes 1991:ix). In truth, the nutritional and symbolic properties of meat are inextricably interlinked, the one, metaphorically at least, feeding off the other.

When we consider the changes in the patterns in meat consumption which have been taking place (in the UK and in other advanced Western societies), we are faced with a range of possible explanations. For example, the shift away from red meat might be explained in economic terms, with rising affluence producing an initial increase, and then a decline as an ever wider choice of substitutes and alternatives becomes available. There may also be an instrumental or pragmatic factor at work, as individuals become sensitized to current health education messages and make what they regard as rational choices to improve health or to avoid disease. Finally, as Fiddes claims, this particular trend may be an indication that Western culture's whole conceptualization of its relationship to the natural world is undergoing changes which will transform the entire human food system. Of course, it may well be that only a culture in which the food supply is secure and which can provide good nutritional standards and an extensive range of food choices for the majority of its members could ever afford to develop the kinds of sensibilities which might ultimately transform the meaning of meat from delicacy to anathema. However, at this point we may need to exercise a degree of caution concerning Fiddes's overall argument. Powerful as the imagery and symbolism of red meat may be, we should, perhaps, be wary of loading too much significance onto trends in its consumption as indicators of broader changes in ecological awareness and environmental sensitivity. After all, other forms of consumption which might have an equal or greater claim to symbolize the human domination of nature, continue to be embraced with undiminished enthusiasm.

Speculating about future trends in the consumption of this most ambivalent of foodstuffs, with its heavy symbolic baggage of contradictory and sometimes disturbing connotations, poses considerable difficulties. It might seem reasonable to assume that current trends away from red meat will continue, and that some other Western countries may even begin to follow the trend evident in the UK, with an overall decline in total per capita meat consumption. If this were to happen, the implications for the agricultural, processing and distribution sectors of the food system would be considerable. The deep-seated, 10,000-year-old symbiosis between humans, domesticated plants and domesticated animals would be transformed as the animal participants in this convoluted web of interrelations were progressively removed from the system. Whether such a transformation is actually feasible, given the close interweaving of the relationships that make up the system, is a matter for debate. What is certain is that the unravelling of these relationships would have social, economic and ecological consequences which might be quite unforeseen.

THE VEGETARIAN OPTION

The speculations which concluded the previous chapter concerning the longterm consequences of a possible decline in meat eating generally, or in the consumption of particular types of meat, lead inevitably to our next major topic: vegetarianism. For, if meat eating is replete with symbolism, then the deliberate rejection of meat as a foodstuff must also carry a compelling symbolism of its own. However, as we also noted in the previous chapter (Table 9.1), in many developing countries meat consumption appears to be very low indeed, particularly in the Far East and Africa. Indeed, even when we take into account the whole range of animal products consumed by humans (including offal, fats, milk products, eggs and fish) the number of calories consumed per capita per day from all livestock products in Africa is 111 and in the Far East 151. This compares with 1,255 in Western Europe and 1206 in North America (Grigg 1993:69). Given that within these averages there is a wide range of individual variation, it becomes clear that large numbers of people in the developing world are effectively vegetarian. This vegetarianism, however, is generally not a matter of choice, and the individuals concerned would usually consume more animal products had they the means to do so.

The real challenge for the social scientist, in fact, is the explanation not of involuntary but of voluntary vegetarianism. In other words, the pertinant question is: 'What are the conditions in which vegetarianism can emerge as a viable and attractive option and what cultural forces and individual motivations encourage its adoption?' Any attempt to answer such questions, however, is complicated by the fact that vegetarianism itself is by no means a clear-cut concept and, indeed, the term itself is of relatively recent origin. Individuals who define themselves as 'vegetarian' may have widely differing dietary patterns. Perhaps the most straightforward way of coming to terms with this variation is to conceptualize it in terms of a simple linear scale relating to the strictness of the exclusions involved. At the left-hand, or least strict, end of the scale will be those self-defined vegetarians who may consume eggs, dairy products, fish (or shellfish) and even meat (especially white meat) on rare occasions. Moving to the right, we find those who exclude all meat and fish, but still consume eggs and dairy products. Further to the right are those who exclude one or other of these latter categories and individuals who consume only rennet-free cheese, for example.

Further still to the right we arrive at the boundary of veganism, which requires abstention from all animal products. However, even veganism is scaled according to strictness. There may be controversy among vegans about whether honey should be consumed and whether non-food animal-derived products should be used (for example, leather shoes and certain drugs). At the extreme right of the scale is the fruitarian, who will consume only vegetable products which do not entail killing the donor plant.

Quite clearly, then, vegetarianism is a complex set of interrelated foodways, and in this chapter we look briefly at its historical background as well as at current trends, at the arguments which have been advanced to support it and at the insights into its contemporary manifestations which can be derived from recent empirical studies by social scientists.

THE HISTORICAL AND CULTURAL BACKGROUND

In Chapter 1 we looked in some detail at the origins of human subsistence patterns and noted how the versatility of the human hunter-gatherer, exploiting perhaps the widest range of food sources of any single species, can be regarded as one of the most important factors behind the evolutionary success of the human species and its progressive colonization of an enormous diversity of terrestrial habitats. Of course, survival in demanding conditions necessarily entails making the most of the available food resources, with diversity providing invaluable insurance against the shortages of particular food items which are bound to occur due to natural fluctuations. In these circumstances, it seems highly unlikely that humans would have chosen quite deliberately to exclude a whole class of nutrient sources (i.e., animal products generally, or meat specifically); such voluntary abstention would simply have been too risky for an omnivore to adopt. Of course, this is not to suggest that from the early stages of the development of culture humans did not practice particular avoidances or recognize particular taboos in relation to specific food items. Yet, the decision completely to forego the consumption of all forms of meat, for example, is one which could only have been taken in the context of access to an assured food supply which could provide the required nutritional inputs. This in turn implies that voluntary meat rejection is probably most likely to have occurred first in the context of settled agricultural societies, among individuals or groups in a nutritionally privileged and secure position. Such a rejection would almost certainly have carried a powerful symbolic message, possibly one of dissent from prevailing cultural assumptions.

What little we know about meat rejection in the early stages of the evolution of civilization appears to be consistent with this proposition. For example, the Greek philosopher and mathematician Pythagoras (born in approximately 580 BC) propounded the doctrine that the soul was immortal and could migrate into other living creatures. Thus, the killing and eating of any living creature could be construed as murder, since the transmigration of souls implied a kindred

and common fate for all animals. The teachings of Pythagoras seem to be a fusion of ideas derived from Egypt, Babylon and possibly even from Hinduism and Zoroastrianism (Spencer 1993:59), and imposed upon his immediate followers a strict vegetarianism. Although the actual details of Pythagoras' life are very sparse, he and his inner circle of devotees appeared to have subsisted on a diet of bread, honey, cereals, fruits and some vegetables (Spencer 1993:46). In a sense, this meatless diet, and the doctrine upon which it was based, can be recognized as, in part, a reaction against the emphasis placed by Greek culture on the consumption of large amounts of meat and the linking of such gorging with Herculean strength and athletic prowess (Spencer 1993:38). What is more, Pythagorean teaching also embodied what would now be construed as environmentalist elements, and Pythagoras' opposition to some of the mainstream elements of his society's *status quo* is indicated by the fact that his devotees were essentially outsiders, deliberately seeking solitude and separation (Dombrowski 1985:50).

Among the intellectual elite of the Hellenistic era and of the Roman world, certain key figures stand out for their vegetarianism, developing and extending the arguments advanced in previous centuries. The Roman Seneca argued for vegetarianism on moral grounds, although the fact that this stance probably led him to become politically suspect meant that his public advocacy was relatively muted (Dombrowski 1985:81). The poet Ovid's advocacy of vegetarianism was also morally based, his position on the sufferings of animals being traceable back to the earlier arguments of the Pythagoreans. The Greek biographer and philosopher Plutarch (born around AD 46) wrote a treatise specifically on the issue of meat eating and the moral and philosophical grounds for abstention from this practice. Interestingly, Plutarch argued emphatically that meat eating was a grossly unnatural act for human beings. He sought to demonstrate this proposition by suggesting that those who wished to eat meat should try killing the animal themselves, unaided by any tools or weapons, as carnivorous animals do, and then consume the flesh raw (Dombrowski 1985:93). The average human's inability, or unwillingness, to perform such directly carnivorous acts was taken as an indication of the inappropriateness of meat in the human diet. The only other philosopher of the ancient world that we know to have devoted an entire work to the debates surrounding vegetarianism was Porphyry, who was born in Tyre in AD 232. His great treatise, divided into four books, is remarkable in so far as it examines in great detail not only the arguments in favour of vegetarianism, but also the arguments, both philosophical and popular, against vegetarianism, in order to refute them. However, as Spencer (1993:107) points out, Porphyry died in AD 306, just a few years before Christianity was recognized as the official religion of the Roman world in AD 313 by Emperor Constantine. The Christian doctrine of human supremacy in relation to the natural world became the dominant one, and the Pythagorean tradition of which Porphyry was, in a sense, the heir, with its rejection of the killing of animals for food, was to be effectively suppressed for many centuries to come.

In the Greek and Roman worlds vegetarianism among the elite and the learned was, in effect, a kind of critique of orthodox moral and cultural assumptions. In contrast, in India, vegetarianism developed as a set of ideas and dietary strictures which eventually came to be located at the very core of religious and ethical beliefs. Hinduism's central doctrine of the transmigration of the soul through a perpetual cycle of death and rebirth, holds the promise of release from this cycle only through progressive purification until the soul itself can be reunited with Brahman (or Brahma), the divine life force of the universe from which all being originates and to which it ultimately returns. This doctrine, which embodies the notion of the sacredness of the cow, as we noted in Chapter 9, effectively entails vegetarianism, given the presence of a soul in all living things. What is more, the principle of karma dictates that the act of killing itself will be punished in one's next reincarnation by demotion down the scale of life forms (which has devil at the bottom and cow just one place below human). These Hindu doctrines, of which vegetarianism is an integral part, are very ancient, their origins dating back to teachings which existed in written form as early as 800 BC (Spencer 1993:77).

Buddhism, founded by the nobleman Gautama Siddhartha, who is believed to have been born around 566 BC in northern India, also embraces the doctrine of transmigration. Nirvana, the final release from the cycle of reincarnation and the attainment of absolute blessedness, is only to be achieved through the extinction of all desires and earthly preoccupations. Gautama (known as Buddha or the enlightened one) preached compassion to all living creatures and the avoidance of violence. However, the incorporation of explicit vegetarianism into Buddhist doctrine appears to have come rather later and is laid out most clearly in a text translated into Chinese in AD 430 (Spencer 1993:84). Buddhism was to spread widely outside India (for example, into China, Tibet and Japan). By way of contrast, Jainism, also founded in the sub-continent (by Mahavira, born in 599 BC), with its requirement of total non-violence and strict vegetarianism, has remained largely restricted to western India.

While an impulsion towards vegetarianism or abstention from flesh foods is inherent in Hinduism, Buddhism and Jainism, this is certainly not the case in Judaism and Christianity. In fact, the elaborate list of clean and unclean creatures to be found in Leviticus and Deuteronomy implies that the orthodox will indeed consume the flesh of those creatures whom God has decreed fitting. What is more, given the influence of Mosaic dietary laws on Christian beliefs, and the doctrine that God has granted humans dominion over the natural world, vegetarianism and Christianity appear somewhat at odds with one another. Thus, Spencer (1993:127) points out that in the early Christian Church it was only possible totally to renounce meat eating as an aid to achieving a higher degree of asceticism and spirituality. Indeed, the rejection of meat eating came to be associated with radical heresies which challenged the authority of the Catholic Church. Two notable sects which included vegetarianism in their heresies were the Bogomils, who emerged in Bulgaria in the tenth century, and the Cathars, who flourished first in northern Italy and later in France from the eleventh century to the fourteenth century. Paradoxically, perhaps, the centrality of meat in the Christian's diet was confirmed by ecclesiastical rules which required abstention from this prized food on specific days or in the context of specific religious festivals (Montanari 1994:78). These temporary abstentions could act as clear demonstrations of penitential self-denial.

However, by the time of the Renaissance the ideas of the classical thinkers had once again become influential. Criticisms of the cruelties inflicted upon animals by humans appeared in the works of the Dutch scholar Erasmus and the English statesman Sir Thomas More (Spencer 1993:185–6), as well as in those of the French humanist Michel de Montaigne (Barkas 1975:75–6). The man who is perhaps the leading figure of the Renaissance, retrospectively viewed as its very embodiment, Leonardo da Vinci, was a dedicated vegetarian. However, it has been argued that there is a deep and unresolved contradiction between Leonardo's vegetarianism and compassion for animals on the one hand, and his enthusiastic involvement in the arts of war and the design of weapons on the other (Barkas 1975:72).

In 1558, at the age of 83, an Italian nobleman, Luigi Cornaro, published the first of a series of essays extolling the hygienic and health-giving properties of a meatless diet. Barkas (1975:73-5) regards Cornaro (who lived to be 100 years old) as the first modern exponent of the idea of vegetarianism as a device for promoting health and longevity. In the next century an Englishman, Thomas Tryon, wrote a series of books, including *The Way to Health*, in which he argued vehemently against flesh eating on both moral and health grounds, and passionately argued the virtues of a vegetarian diet. However, Tryon and other advocates of vegetarianism around this time (who included the physician George Cheyne, whom we encountered in Chapter 6), were relatively isolated voices in a general climate within which meat eating was becoming more popular, and in which Henry More could claim in 1653 that cattle and sheep had only been granted life to keep their flesh fresh until it was needed for human consumption (Spencer 1993:213). However, Spencer argues, with the rise of humanism and increasing questioning of the Christian world-view, vegetarianism was able to win over an increasing number of high-profile converts, one of the most eminent and controversial of whom was the poet Shelley, as well as the co-founder of Methodism, John Wesley, and the prison reformer John Howard.

Perhaps the single most important event in the development of vegetarianism as a coherent movement as well as a set of ideas and arguments, took place on 30 September 1847, at Northwood Villa, Ramsgate, Kent. From this meeting emerged the Vegetarian Society, and the term 'vegetarian' was officially adopted. (Although, for convenience, we have used the term vegetarian so far in this chapter to refer to meatless diets in general, the word did not achieve currency until the 1840s, and previously such terms as 'Pythagoreans' and 'vegetable regimen' had been used to refer to vegetarians and vegetarianism respectively.) With the founding of the Vegetarian Society, a wide range of individuals practising meatless diets, for whatever reasons, now had a focus for their beliefs and a forum for debate (Barkas 1975:85). As a direct result of the founding of the British Vegetarian Society, an American Vegetarian Convention assembled in New York in 1850, and in 1867 the German Vegetarian Society was founded, maintaining close links with the British and American movements (Spencer 1993:274). What is more, the international visibility of vegetarianism was further advanced by its espousal by such pre-eminent literary figures as Tolstoy and George Bernard Shaw (although the latter was always careful to point out that his vegetarianism was related to health and economic issues, not to a rejection in principle of the killing of animals). For Spencer, however, it is no coincidence that a coherent vegetarian movement emerged first in England, in the nineteenth century. Urbanization itself brought together vegetarians and concentrated them, while at the same time separating and insulating them from the harsher realities of rural life. Moreover, throughout the nineteenth century and into the twentieth vegetarianism maintained its long-standing links with radicalism and dissent, developing in association with such kindred movements as socialism, animal welfare and pacifism (Spencer 1993:294).

ESTIMATING THE EXTENT OF CONTEMPORARY VEGETARIANISM

In our discussion of the historical roots of vegetarianism it is difficult to avoid the conclusion that this particular set of dietary beliefs and practices has characteristically been an option selected by exceptional or unusual individuals. In a sense, the decision to reject the consumption of meat could be seen as a stance which accentuated and dramatized that individual's distinctiveness, even superiority, in a moral or intellectual sense, in relation to the rest of humankind. However, this association between vegetarianism and the exceptional individual (the intellectual, the artist, the philosopher, the visionary) has, in recent decades, undergone some significant changes. In some Western societies, vegetarianism appears to have broadened its appeal beyond relatively small circles of devotees, to a point where its adherents would no longer be counted in handfuls but in millions. Quite clearly, such a striking change in the popularity of a once obscure and arcane dietary option demands an attempt at explanation, and later in this chapter we will review the kinds of explanations which have been advanced. However, if we are asserting that vegetarianism has now become a 'mass' phenomenon, we do need to have some idea about the numbers involved and the percentage of the population of a country like the UK, for example, that can be regarded as vegetarian. There are considerable difficulties involved in finding answers to such questions. As we have already seen, vegetarianism is by no means a straightforward concept, and it has many varieties which shade into one another. The researcher inevitably faces the problem of whether to generate a set of objective definitions of varieties of vegetarianism, and work in terms of

these or, alternatively, to work with the subjective self-definitions of respondents, which may be somewhat variable and even positively idiosyncratic.

In fact, the data available for countries like the UK and the USA are sparse and rather fragmentary. Perhaps the most consistent set of results for the UK comes from a series of surveys carried out for the Realeat Company between 1984 and 1993 by Gallup (Realeat Survey Office 1993). Over this decade the proportion of respondents reporting themselves as vegetarian or vegan rose steadily, from 2.1 per cent in 1984 to 4.3 per cent in 1993. Over the same period, the proportion of respondents reporting avoidance of red meat rose from 1.9 per cent to 6.5 per cent, and the proportion reporting reduced overall meat consumption rose from 30 per cent to 40 per cent. The next survey in this series was carried out in 1995, using a similar methodology of a sample of 4,237 interviewees aged 16 and over, stratified by region and town size (Realeat Survey Office 1995). This yielded an estimate of 4.5 per cent as the proportion of vegetarians in the adult population. Interestingly, the results also appear to suggest that overall some 12 per cent of the adult population might be regarded as nonmeat-eaters (i.e., as vegetarian, vegan, or as no longer eating red or white meat). The 1995 survey results also appear to indicate that those respondents moving away from meat consumption tended to stress health concerns when questioned about their motivations. The significance of gender also emerges clearly in these data, with women (at 5.8 per cent) showing twice the rate of vegetarianism as men. The influence of age as a contributory factor is indicated by the fact that the highest proportion of vegetarians in the 1995 survey was found in the category which covered women aged 16 to 24, the figure being 12.4 per cent. Indeed, the survey found that no less than 25 per cent of its young female respondents in this age group reported abstinence from meat consumption. The survey also highlighted a distinctive social class gradient in vegetarianism, with the highest rates being indicated by respondents in the 'AB' category (6.2 per cent).

A slightly different picture emerges from a single survey carried out for the Vegetarian Society by researchers from the University of Bradford (Vegetarian Society 1991). The study was based upon a quota sample (designed in terms of age, sex, socioeconomic group and region) consisting of 942 adults (aged over 18) and 2,651 young people aged between 11 and 18 years. Among the 11–18 year olds, 8 per cent of the respondents claimed to be vegetarian, the figure for the sample as a whole being 7 per cent. Among the adults in the sample, women indicated a significantly higher rate of vegetarianism than men (10 per cent as compared to 4 per cent). Interestingly, however, the study did not reveal the kind of class gradient in adherence to vegetarian dietary patterns suggested by the Realeat surveys. In fact, the highest rates of vegetarianism were reported by respondents in the 'C1' and 'C2' categories. What is more, although the Realeat surveys identified health issues as the prime motivations behind a switch to vegetarianism, the Bradford data suggest that, among adults, concerns relating to the treatment of food animals rank equally with concerns about human

health. Indeed, in the 11–18 age group, concern about the treatment of domesticated food animals outranks concern with health as the prime motivation behind a switch to vegetarianism.

Although there are some noticeable differences between the findings produced by these two sources, it does seem reasonable, on the basis of these results, to estimate the proportion of self-defined vegetarians in the UK population (excluding young children) at between 4 per cent and 7 per cent, and to conclude that this proportion is rising steadily. Indeed, an indirect indication of the increasing popularity of vegetarianism in Britain is provided by the membership statistics of the Vegetarian Society itself, which more than doubled from 1980 to 1995 (from approximately 7,500 to 18,550). Of course, such an increase cannot be taken as direct evidence of the rise of vegetarianism (as we will see later in this chapter, research indicates that there is a significant difference between 'joiners' and 'non-joiners' among vegetarians). However, what this increase does highlight is the enhanced visibility of vegetarianism and the complex issues which surround it.

There have been various attempts to estimate the number of vegetarians in the USA. Citing the ASPCA as their source, Delahoyde and Desperich (1994:135) offer a figure of approximately 15 million. Stahler (1994) cites a 1977-8 US Department of Agriculture nation-wide food consumption survey in which 1.2 per cent of the 37,135 respondents reported themselves vegetarian, and suggests that more recent estimates have ranged between 3 per cent and 7 per cent. More interestingly, however, Stahler describes the results obtained from a question on animal products in the diet which was included in a Roper poll carried out in 1994. This poll was based upon home interviews with 1,978 respondents aged 18 and over, the sample being designed to be representative of the adult population of the continental USA. The question posed did not rely upon the self-definitions of interviewees, but asked them to indicate which animal products they never ate, the list they were offered being made up of the following categories: meat, poultry, fish/seafood, dairy products, eggs, honey. On the basis of the results obtained, Stahler (1994:6-9) argues that there is a 95 per cent probability that the proportion of vegetarians/vegans in the US population falls in the interval 0.3 per cent to 1 per cent. This, of course, is a much lower figure than that typically obtained when a more straightforward self-definition approach is used. Such findings provide some empirical support for the proposition that many individuals may regard themselves as vegetarian while still consuming (if only occasionally) animal products other than dairy products and eggs.

We have already noted that vegetarianism and veganism cover a broad spectrum of dietary choices and avoidances. Thus we must always bear in mind the fact that an individual's actual eating patterns and his or her conceptualization of those eating patterns as a dietary stance or lifestyle may not always fit neatly with each other. In sociological terms, the conceptualizations must be as worthy of attention and analysis as the observed or reported patterns. Thus, in effect, self-defined vegetarianism and veganism are the principal objects of analysis in this chapter.

MOTIVES AND RHETORIC

The data we have considered are, admittedly, relatively sparse, but they do appear to indicate that in Western societies like the UK and the USA, selfdefined vegetarians can be numbered in millions. Accounting for the emergence of vegetarianism as a large-scale phenomenon is a process which must operate on at least two levels. Firstly, we must consider the issue of the motives behind individual decisions to adopt some form of vegetarianism. Secondly, we must attempt to describe the broader social and cultural processes or conditions which can facilitate such a shift towards meat avoidance or the avoidance of animal products in general. In this section we will examine the kinds of motives which adherents of vegetarianism describe. However, in such a context, it is not necessarily easy to distinguish between the considerations which may impel an individual to make a particular choice and the arguments that individual may employ retrospectively to justify that choice or, indeed, to encourage others to make the same choice. In a sense, then, the themes discussed here refer both to motivations and to what Maurer (1995:146-7) refers to as the 'rhetorical idioms' which can be employed in the advocacy of vegetarianism. Of course, the thematic headings used below, in some instances, overlap one with another and it should be borne in mind that they are not being offered as mutually exclusive categories.

The moral theme

We have already seen how a moral concern in relation to any animal suffering entailed in obtaining meat was a central feature in the thinking of those classical philosophers who advocated vegetarianism. This same moral concern featured strongly in the arguments of later advocates, and has been developed and discussed in considerable detail by a number of contemporary philosophers. Singer (1976), for example, presents an ethical argument for vegetarianism on the basis of a rejection of 'speciesism', a form of discrimination against nonhuman creatures which he sees as paralleling racism and sexism in the context of human relationships. The capacity of animals to experience suffering and enjoyment implies that they have interests that should not be violated and that they are not simply Cartesian automata, oblivious to pain and beyond the boundary of moral consideration. Thus, the fundamental utilitarian principle of the minimizing of suffering is seen as demanding the adoption of a vegetarian diet. Other philosophers, like Midgley (1983), also reject the view, deeply embedded in the religious and philosophical traditions of Western thought, that animals can legitimately be excluded from moral consideration and can, therefore, be freely exploited as food sources and for other purposes. Indeed, Midgley explicitly argues that the boundaries of moral consideration have,

historically, been advancing continually, and that we must recognize that they can now breach the species barrier to embrace certain non-human creatures.

However, reservations about the problems involved in attempting to use utilitarian concepts to discuss animal rights (as suggested by Singer 1976) lead other philosophers to adopt alternative lines of reasoning to provide a moral basis for vegetarianism. For example, Regan (1984) argues that, even if we accept that animals cannot be moral agents, certain categories of animals can be regarded as moral patients and as therefore having inherent value which demands our respect. This respect principle effectively rules out their use for food. Similar arguments are used by Clark (1984), who lays considerable emphasis on the idea that humans, by their very nature as intelligent beings, bear a special responsibility of stewardship towards the creatures with whom they form a complex community of living things, such stewardship entailing the rejection of the exploitation of animals that is involved in meat eating.

What, in effect, the detailed and sometimes convoluted discourses developed by philosophers like these represent are attempts to elaborate and make explicit deep-seated anxieties and misgivings concerning the use of animals for food (anxieties which were set in a broader context in Chapter 7).

The food production theme

This theme is based upon the premise (discussed in the previous chapter) that the production of meat represents an unjustifiably extravagant use of natural resources. It is argued that the production of vegetable crops for direct human consumption avoids the energy losses involved in feeding livestock with products (like grains) which are suitable for meeting human nutritional needs. This kind of argument has both ecological and moral implications. In ecological terms, meat production is seen as a process which places an unnecessarily heavy load on the natural environment, which is exploited both extensively and intensively in order to maintain or increase the output of animal proteins. Particular attention has been focused on the destruction or degradation of natural habitats, like tropical rainforests, in order to extend the areas available for cattle ranching, and on the long-term environmental effects of overgrazing and overstocking, especially in arid or semi-arid areas. In this way, the concerns of the vegetarian become linked with those of the environmentalist, and vegetarianism is presented as a set of dietary options which involve food production patterns which have a lower environmental impact than modern farming methods and are ultimately more sustainable.

The moral dimension of the food production theme is not related to animal rights and interests (as in the first theme) but to the interests of humans. The argument here is that clear global inequalities in nutritional status are due, at least in part, to the diversion of resources towards the production of meat for the benefit of consumers in the most affluent economies. In this connection, vegetarianism is conceptualized as a way of reducing what is perceived as the distorting effects of meat production on the global food system, freeing crucial resources for the production of vegetable foods. Such increased production, it is then envisaged, could be used to alleviate hunger and malnutrition in those areas where food shortages are endemic.

The religious/spiritual theme

The religious or spiritual element in vegetarian ideologies is very ancient, and can be traced back, as we have seen, to doctrines relating to the transmigration of souls found in ancient Greek thought and in such major religions as Hinduism and Buddhism. In medieval thought, abstention from flesh foods was often associated with spirituality, purity and asceticism, since such foods were seen as embodying all that was carnal, worldly and corruptible. Meat was also associated with animal passions, and its avoidance was seen as enhancing the individual's control of his or her appetites and sexuality. Twigg (1979) maintains that in the context of contemporary vegetarianism similar ideas have persisted, but in a somewhat modified form, entailing what she terms a 'mis-worldly form of mysticism' (Twigg 1979:26). Concern is not for the wellbeing of some disembodied soul or spirit, but for the 'spiritual body' itself, the body as 'an immortal, youthful temple of the spirit' (Twigg 1979:27). Such beliefs entail a kind of revulsion for the carnal and the physical, for the processes of digestion and elimination. The adoption of a vegetarian diet and the rejection of meat are characterized as key features of the quest for an ageless and uncorrupted body.

The 'New Order' theme

As well as discussing the spiritual element in contemporary vegetarianism, Twigg also seeks to demonstrate how vegetarian ideologies can embody a critique of what is regarded as the conventional social order, and a vision of a new, alternative mode of patterning social relationships. Thus, for example, vegetarian dishes commonly violate the highly structured form of conventional meals and are presented in a mixed, undifferentiated form. This repudiation of the structure of conventional eating can be seen as symbolic of a repudiation of wider patterns of hierarchy and power, in which the symbolism of meat carries such a positive potency. Nature itself, Twigg argues, is redefined and reconceptualized as a realm characterized not by conflict, competition and suffering, but by harmony and beneficence. This harmonized model of nature is then used as a yardstick against which to measure the deficiencies of contemporary human society, which is seen as having lost touch with the natural, becoming distorted and artificial (Twigg 1979:22). The vegetarian diet, as a more 'natural' mode of eating, is seen as a device for restoring contact with harmonious nature. Even more ambitiously, however, vegetarian beliefs may entail a quest for a 'New Moral Order' (Twigg 1979:29), and a vegetarian diet becomes a manifestation of a commitment to reform and social change. Indeed, a particularly radical example of such thinking can be found in the feminist arguments advanced by Adams (1990), for whom the practice of vegetarianism is advocated as a challenge to the male power symbolized by meat and as a means, ultimately, of achieving what she terms the 'destabilizing of patriarchal consumption' (Adams 1990:186–90).

The health/physiological theme

Issues of health in vegetarian ideologies are closely related to concepts of diseaseprevention. Non-vegetarian diets are seen, in effect, as pathogenic. The primary feature of this view is the idea that meat itself is hazardous as a foodstuff, replete with substances or agents, both naturally occurring and artificial, which pose threats to human health. The second, less specific, feature of this view is the idea that modern diets are inherently unhealthy in so far as they rely upon food items which are deficient in crucial nutritional properties as a result of excessive processing and refining. Additionally, such food items are seen as possibly contaminated with a whole range of synthesized additives whose purpose is commercial rather than nutritional, and which also pose potential health threats. In contrast, vegetarian diets, by eliminating meat products, avoid the hazards associated with them. What is more, the emphasis commonly laid upon the consumption of fresh fruits and vegetable products, subjected to minimal amounts of processing, is seen as a means of restoring the diet to a form more closely matching human nutritional needs and of avoiding the ingestion of dangerous substances. (There are clear parallels here with the health food beliefs discussed in Chapter 6.)

The conceptualization of meat as a hazardous food item may, in fact, be taken a stage further. A recurring theme in vegetarian discourse is the view that meat is not a 'natural' component of the human diet at all. It is argued that human physiology (e.g., dental and digestive) is quite unsuited to a carnivorous diet, and that meat eating, by implication, is likely to be deleterious rather than beneficial in health terms.

The aesthetic/gustatory theme

Revulsion in relation to the appearance, tactile properties and taste of meat also figures prominently in vegetarian concerns. Meat may be characterized as an object of disgust rather than as an object of appetite and gustatory enjoyment. The conventional positive symbolism of meat (particularly red meat), with its connotations of virility, strength and power, is rejected—and in its place a highly negative and pejorative symbolism occurs consisting of notions of violence, death and decay. In contrast, vegetable foods are described in highly positive language, not only in terms of their gustatory properties, but also as being charged with life, as opposed to the death associated with meat (Twigg 1979). What is more, underlying concepts of purity (vegetable foods) and contamination (flesh foods) form a highly emotive refrain in vegetarian beliefs. The themes discussed above can in no sense claim to be exhaustive, although they do describe the main components of contemporary vegetarian ideologies. In fact, Maurer (1995) suggests that there is a deeper underlying rhetorical structure underpinning these themes. Drawing upon the work of Ibarra and Kitsuse (1993), she is able to identify two basic rhetorical idioms which are used to support the claims inherent in vegetarian discourse. The first of these idioms is that of 'entitlement', which emphasizes freedom, justice, choice and liberation, and which, in vegetarian rhetoric, can be applied to selected animal species as well as to humans. The second idiom is that of 'endangerment'. Here the emphasis is on health and the physical welfare of the body, and in vegetarian discourse the consumption of meat is construed as an irremediably 'endangering' activity.

Inevitably, of course, a whole range of much more personal or idiosyncratic motivations and justifications may figure in the experiences of particular individuals. For example, the adoption of vegetarianism may reflect a desire to conform with the expectations of those whom the individual concerned respects. Conversely, vegetarianism may be used as a means of demonstrating distance from individuals or groups towards whom there is a sense of antagonism or resentment. Or, perhaps more straightforwardly, a move towards vegetarianism may reflect simple curiosity and an attraction towards novelty. What is more, the motivations which an individual experiences or the justifications which he or she employs frequently combine and interact with one another. Although some individuals may identify a single dominant motive, others may be unwilling or unable to do so. Such variations will be discussed further when we consider a number of empirical studies of vegetarian beliefs, attitudes and practices.

The thematic strands of contemporary vegetarianism are not without their contradictions and tensions, however. Perhaps ultimately the most contentious of these themes is the moral one. Certainly, the argument that comprehensive moral considerations should be extended across the barrier between humans and other species inevitably involves both ethical and practical conundrums, which have been explored by such philosophers as Townsend (1979) and Frey (1983). Particular problems may arise when the argument shifts from a concern with animal welfare to a concern with animal rights. Whether animals can have rights, which animals should have rights and how those rights could be respected and protected, are issues which pose awkward questions for reflective vegetarians. In direct practical terms, for example, vegetarianism which entails the consumption of dairy products generates questions about the treatment of dairy cows and their fate when aged and unproductive, and about the disposal of unwanted male offspring. Indeed, in Western economies, the ready availability of reasonably priced cow's milk is bound up with the meat production industry. Similar problems are posed by the use of eggs in vegetarian diets, particularly the disposal of unproductive birds and unwanted males. Depending on their level of ethical sensitivity, some vegetarians may choose to ignore, or at least to

set aside, such questions, whereas others may seek solutions. However, even veganism, with its more or less strict avoidance of animal products, does not provide a complete solution. The vast majority of the food items eaten by vegans are the products of farming, and farming itself inevitably entails the initial destruction of pristine ecological systems and their original plant and animal inhabitants. What is more, such processes as pest control, ploughing and harvesting inevitably involve the destruction of large numbers of small invertebrate and vertebrate animals, which have to be ruled outside the boundaries of moral consideration if food production is to continue. In this sense, the pursuit of what might be termed a 'blameless menu' looks to be a daunting task for the vegetarian and even the vegan.

Similarly, other pro-vegetarian arguments related to food production may present certain problems. The contention that the direct consumption of vegetable products by humans is a more efficient use of natural resources than using agricultural produce to feed livestock is not quite as straightforward as it appears. Vast areas of the earth's surface occupied by humans are quite unsuited to the growing of arable crops and can only be exploited by using browsing and grazing domesticated herbivores. In fact, the argument applies largely to the agricultural sectors of the developed economies, where intensively produced crops are fed to intensively reared food animals, and is, therefore, by no means universally applicable. What is more, we should be cautious about accepting the view that vegetarianism, were it to become the dominant dietary pattern in the developed economies, would automatically increase food availability in the Third World countries. As it stands, the argument does not address crucial problems of distribution. These problems refer not only to the practicalities involved in the transportation, storage and allocation of foodstuffs, but also to questions concerning the distribution of wealth and income. Those who suffer malnutrition and starvation tend to be those people who lack the resources to produce, or the purchasing power to buy, the food that they need. Such structural inequalities, and their political, economic and cultural roots are at least as significant as any notion of a global pool of foodstuffs that would be increased by vegetarian consumption patterns.

The spiritual dimensions of contemporary vegetarian ideologies also contain inherent tensions, for example, between a deep-seated asceticism on the one hand, and an emphasis on the care and cultivation of the body on the other. Even the vegetarian espousal of 'nature' and the 'natural' is fraught with difficulty, as the more brutal and ruthless manifestations of the interactions between individuals of the same or different species are masked with images of harmony and unity. Similarly, the radical or reformist dimensions of vegetarian thought may be said to suffer from a tension between, on the one hand, a stress on individual wellbeing and personal development and, on the other, a view of vegetarianism as a collective phenomenon, as a movement with broader political and moral aims. However, despite such tensions, the underlying themes discussed above, in various forms, figure strongly in the pro-vegetarian literature (e.g., Amato and Partridge 1989) and in the thinking of practising vegetarians and vegans.

EMPIRICAL STUDIES OF CONTEMPORARY VEGETARIANSIM

Although there is an ever-lengthening list of books and articles advocating vegetarianism or providing advice and guidance for practising or aspiring vegetarians, there are comparatively few studies in this area carried out from a social scientific stand-point. In this section we will examine examples of such studies in order to gain some direct empirical insight into the everyday realities of vegetarian belief and practice.

Research published in the 1970s (Dwyer, Mayer, Dowd, Kandel and Mayer 1974) provided detailed information on the attitudes and dietary patterns of 100 young American adults who had converted to vegetarianism after maturity. Using a battery of interviews, questionnaires and dietary histories, the authors explore a range of issues, including reason for dietary change, attitudes to diet and health, abstinence patterns and religious, ecological and ethical views. The most frequently cited reason for conversion to vegetarianism was related to health, followed by ethical concerns. Spiritual or 'metaphysical' concerns were ranked next, followed by ecological issues, ranked equally with gustatory or aesthetic preferences linked to a distaste for meat. The authors make an important distinction between what they term 'joiners' (who had affiliated themselves to wider movements like macrobiotics, health foods and yoga) and 'loners' who were not affiliated in this way. They also distinguish between circumscribed avoidances (that is, where the diet excluded only quite a small range of items) and far-reaching avoidances (where the diet entailed the exclusion of a wide range of items). Some significant differences appeared to emerge on the basis of these distinctions. For example, the 'loners' with circumscribed avoidances tended to isolate their dietary patterns from other aspects of their daily lives, and many had gone to considerable lengths to devise a personal dietary system, often in the light of advice from health professionals. In contrast, the joiners with far-reaching avoidances tended to exhibit attitudes and practices similar to those found in extremist factions of sects or cults. These included rigidly observed abstinences, the performance of rituals and a sense of mission impelling them to seek to convert others (Dwyer, Mayer, Dowd, Kandel and Mayer 1974:534).

A later study (Freeland-Graves, Greninger and Young 1986) attempts a direct comparison between vegetarians and non-vegetarians. The researchers studied a response group consisting of 150 vegetarians and 150 non-vegetarians living in Austin, Texas. The non-vegetarian group was created by matching each vegetarian respondent with a non-vegetarian respondent of the same sex and a similar age. While there were many overall similarities between the two groups, there were some interesting contrasts. Only 26 per cent of vegetarians were practising followers of traditional religions, as opposed to 59 per cent of non-vegetarians, and vegetarians' involvement in more exotic sects and non-Western religions was relatively low, leading the authors to suggest that the link between vegetarianism and 'cultism' is in decline. What is more, the vegetarians in the study showed a higher tendency to join clubs and organizations, went out more frequently with friends and entertained friends at home more frequently than did the nonvegetarians. There was evidence to indicate that vegetarians, and especially vegans, tended to form supportive networks of family and friends who were also vegetarian. In fact, 44 per cent of the vegetarians respondents reported that other family members also practised vegetarianism. Coupled with the fact that vegetarians tended to live in larger households (especially vegans), the findings suggest that collective social support may be an important component of the maintenance of vegetarian dietary practices for this particular set of respondents.

Strikingly, however, parental influence did not appear to have been a strong factor influencing the decision to become vegetarian. The authors argue that the choice of a vegetarian lifestyle may often involve the deliberate rejection of the meat-based dietary practices of parents. Indirect evidence for this proposition comes from the study's finding that, on average, vegetarians lived at greater distances from their parents and visited them less frequently than did nonvegetarians. It is perhaps ironic, then, that the majority of the vegetarian respondents (indeed, all the vegans) anticipated that their own children would remain vegetarian in adulthood, that is, would conform to parental expectations (Freeland-Graves, Greninger and Young 1986:910).

Further information concerning the ideas and practices of American vegetarians is provided by Amato and Partridge (1989). Although their work is primarily concerned with making a case for vegetarianism and with providing guidance and support for existing or would-be vegetarians, the authors did engage in the collection of some pertinent data. Respondents were recruited by placing notices in the newsletters of vegetarian organizations, and 209 responses were received. A further sixty-one individuals were sent detailed questionnaires for completion. The authors accept that their response group, being essentially self-selected, cannot be regarded as in any sense statistically representative of all vegetarians in the USA; indeed, they admit, for example, that it is biased towards those holding professional or managerial positions in the occupational structure. Nevertheless, the authors argue that the group is sufficiently broadly based to provide valuable insights into the motives and experiences of vegetarians. The motivations of this group leaned heavily towards concerns about animal suffering or animal rights (mentioned by 67 per cent) and health concerns (which were mentioned by 38 per cent). Spiritual or religious factors were mentioned by 17 per cent of respondents, and aesthetic factors or dislike of meat by 12 per cent (Amato and Partridge 1989:34). In fact, 43 per cent of respondents stressed a single reason for becoming vegetarian, whereas the remaining 57 per cent gave multiple reasons. The single-reason respondents were mainly those motivated by animal rights issues. What is more, motivations tended to change over time,

with, for example, individuals who originally made the change for reasons based on self-interest (such as health concerns) gradually becoming aware of the ethical dimensions of vegetarianism. The authors also provide insights into the dynamics of the conversion process, describing how the decision may be influenced by friends, relatives, vegetarian literature or mass media coverage of the issues. They also give graphic accounts of instances where the individual's conversion was prompted by some dramatic and often distressing experience, for example, the witnessing of animal slaughter (Amato and Partridge 1989:74–6). Less extreme instances may involve a sense of repulsion or disgust when the individual suddenly makes a previously unadmitted or suppressed connection between flesh food and the animal from which it came, particularly if that is an animal which would otherwise be accorded affection or regard.

The impact of the individual's conversion to vegetarianism upon his or her personal relationships is also analysed by Amato and Partridge. Parental reaction to the conversion of a son or daughter was reported by many respondents to be a very negative one. While this negative reaction was sometimes related to parents' concerns about the health and dietary implications of vegetarianism, it also appeared to emerge out of a sense that the rejection of the parents' eating patterns implied a rejection of the parents themselves and of their values and priorities. Conversely, however, some parents were approving and supportive. Most significantly, perhaps, the authors argue that the conversion to vegetarianism of a family member can lead to major changes in family relationships, which may be strengthened or, at the other extreme, may break down completely (Amato and Partridge 1989:181-2). What is more, the stresses and strains which can be introduced into the family setting may be present in other forms in other settings. Workplace relationships, eating out and socializing with non-vegetarian friends may all become potential sources of tension or embarrassment with which the practising vegetarian has to learn to cope.

There are striking parallels between the findings presented by Amato and Partridge and a qualitative study of vegetarians, their motives and experiences carried out in the UK (Beardsworth and Keil 1992a). The UK study was based upon interviews with seventy-six respondents, recruited on a 'snowball' sample basis in the East Midlands region. The interviews themselves were open-ended and discursive in nature, in order to provide respondents with an opportunity to present their own accounts and experiences in their own terms as far as possible. All interviews were taped and fully transcribed, generating several hundred thousand words of transcript material, which was then analysed by being sorted into a series of emergent thematic categories. The response group generated showed a higher level of average educational attainment than the general population, and this is reflected in the fact that twenty-three out of the seventysix respondents were in professional or managerial occupations. There was a roughly equal balance between the sexes, although the age distribution showed a marked clustering in the ranges 26–30 years and 31–5 years, and the majority of the respondents were without dependent children.

The motivations for conversion to vegetarianism (all but one of the respondents were converts; just one had been brought up vegan) were classified as moral, health-related, gustatory and ecological. A total of forty-three respondents maintained that, for them, moral motivations were primary; health-related motivations were reported as primary by thirteen respondents. Priority was allocated to gustatory factors by nine respondents, and only one indicated ecological concerns were paramount. However, from respondents' accounts it was clear that although primary motives could be readily identified in most cases, motives were interwoven and tended to support each other. What is more, the balance of motivations could change over time, with the emphasis shifting significantly. There were examples of individuals who had set out with primarily health-related concerns and who had subsequently moved towards a preoccupation with animal rights; there were also examples of individuals who had undergone the reverse of this process.

The actual conversion to vegetarianism also proved to be a decidedly variable experience. For example, some respondents described a protracted process of conversion, during which vague concerns and misgivings, which might reach back even as far as childhood, gradually came into focus and eventually prompted the progressive initiation of dietary changes. In contrast, some respondents reported undergoing a dramatic 'conversion experience' (Beardsworth and Keil 1992a:257), which literally shocked them into an abrupt switch into vegetarianism. Such experiences could involve acute sensations of revulsion while eating meat (in which it is suddenly perceived as 'dead flesh', for example), being confronted with the sight of the remnants of slaughtered animals or even viewing a particularly powerful and disturbing television programme.

The implications of a move into vegetarianism for the individual's social and personal relationships drawn out by Amato and Partridge (1989) also came to the fore in the UK study. Significant contrasts emerged, for example, between situations where relatives (e.g., parents, siblings, in-laws) were reasonably approving and supportive of the convert and situations involving more or less severe disapproval. In the latter case, serious tensions could emerge, leading to the attenuation or even breakdown of the relationships in question.

The study also sought to analyse the powerful ideological currents present in vegetarian beliefs and priorities. Interestingly, for this group of respondents, at least, what might be termed the 'anti-meat theme' appeared to be more potent than the 'pro-vegetarian theme' (Beardsworth and Keil 1992a:272–6). That is, anti-meat sentiments related to moral outrage, repulsion, disgust or to a sense of meat as wasteful of economic resources or as a food unsuitable or even dangerous for humans, seemed to dominate respondents' nutritional conceptualizations. Indeed, the vocabulary employed in expressing these ideas was often extreme and disturbing, conjuring up images of blood, slaughter and dismemberment. In contrast, respondents' discussions of the virtues of vegetarian dietary regimes were much more muted and less emphatic. In addition, the study also uncovered examples of respondents who were all too aware of the moral tensions involved

in the vegetarian's use of dairy products or even of non-food products like leather. Vegan respondents tended to be critical of vegetarians in this respect, while often themselves acknowledging the difficulties involved in following a strictly vegan regime and the virtual impossibility of a totally harmless diet (Beardsworth and Keil 1992a:282–3).

EXPLAINING THE RISE OF VEGETARIANISM

If we accept the contention that vegetarianism now represents an increasingly significant dietary option in countries like the UK and the USA, we are faced with the problem of trying to explain the rise in popularity of a dietary regime which was previously followed only by a tiny minority. In this chapter we have already examined the rhetoric of vegetarian ideologies, a rhetoric which permits the individual to think through his or her own priorities and concerns and to arrive at a decision as to whether or not to embrace vegetarian preferences and prohibitions. Of course, this is not to suggest that such a decision is necessarily a purely rational one, as a whole range of emotional and, indeed, gustatory factors may also be involved. Nevertheless, such rhetorical resources allow the decision to be formulated and, if necessary, described and justified to others.

However, merely citing such rhetorical themes does not in itself constitute a viable attempt to explain the rise of vegetarianism. What is required, in addition, is some grasp of the changes (sociological, cultural and economic) which have created the conditions in which vegetarian ideologies can thrive and can attract increasing numbers of adherents. In Chapter 9, the argument put forward by Fiddes (1991) to account for long-term falls in the consumption of red meat was described in some detail. It will be recalled that Fiddes maintains that the trend away from red meat is the result of an underlying cultural shift in that particular food item's symbolic significance. Whereas the production and consumption of red meat have traditionally acted as powerful expressions of the human ability to dominate and exploit the natural world, our collective perceptions of our relationship to that world have recently undergone a transformation. We no longer confidently celebrate our ascendancy over nature through a kind of triumphalist consumption of the flesh of large and powerful creatures. Rather, says Fiddes (1991:219–23), an ideology of care and responsibility is replacing the doctrines of exploitation. In such a cultural climate, the adoption of a vegetarian diet and the avoidance of all meat can be construed as an expression of environmental concern and sensitivity, and thus perceived as having a clear logic behind it, a logic in tune with increasingly widely held values. In this sense, the contemporary increase in the popularity of vegetarianism is conceived of as but one component in a complex package of recent developments, which include the mounting salience of ecological and conservation issues, the emergence of environmentalist movements and the rise of 'green' politics and ethics. The implication of this view is that vegetarianism as a dietary option has, effectively, become more appealing because of its fit with deeper cultural trends.

The argument put forward by Fiddes that the reduction or avoidance of meat consumption, or the adoption of vegetarianism, are features of an underlying cultural shift is consistent with the concept of the 'civilizing of appetite' employed by Mennell (1985). This concept, which we have already encountered, refers to the process by which the celebration of gluttony and the indulgence of 'gargantuan' appetites characteristic of medieval culture, was progressively replaced by an emphasis on the refinement of taste and the exercise of selfrestraint in relation to food consumption. Mennell (1985:38-9) actually suggests that this cultural fixation on self-control in relation to appetite may well be implicated in eating disorders like *anorexia nervosa*, which formed a major theme in Chapter 8. However, it is also quite possible that it forms a component of vegetarian ideology. The symbolism of meat, as we have seen, is replete with the imagery of physical strength, animal nature, passion and power. All of these features are antithetical to notions of self-restraint and refinement. The vegetarian appetite, then, might be characterized as one strongly influenced by this civilizing process. Even where an affinity for 'nature' and the 'natural' is expressed, this is, as Twigg (1979) has pointed out, based on a conceptualization of nature which has been harmonized and sanitized, indeed, in a sense, civilized. The concept of an underlying civilizing process originates, of course, in the work of Elias. This author himself suggests that the advance of the civilizing process may also entail an advance in what he terms the 'threshold of repugnance' (Elias 1978a:120). The culture of refinement and restraint means that individuals are less and less willing to confront the potentially disturbing and distasteful aspects of the production and processing of animal-derived foods. As a result, such features of the food system are increasingly concealed from public view. However, vegetarianism may represent an attempt to repudiate these features, at least partially, and veganism an attempt to repudiate them totally.

There also exists the distinct possibility that recent cultural and ideological changes which have begun to affect the balance of power in the realm of sexual politics may also have contributed to the emergence of a climate more congenial for vegetarianism. The arguments put forward by Adams (1990) concerning the complex symbolic and metaphorical associations between meat eating and male power over women (which were discussed in Chapter 9) lead her to exhort women to adopt a vegetarian diet as part of a challenge to male dominance. In fact, she sees vegetarianism, not only as historically associated with feminism but as a virtual obligation for the truly committed feminist. References to feminist values and priorities do not appear to figure significantly in the findings of the limited number of empirical studies of vegetarianism which are available, although this may be due in part to the original design and concerns of the studies in question. Certainly, the fact that what data we have suggest that rates of vegetarianism tend to be higher among women than among men, and especially among women in younger age groups, may provide some indirect support for the contention that the recent rise in the salience of feminist ideas could be a contributory factor in the increased popularity of this particular dietary option.

On the other hand, the empirical material does provide much more direct evidence that changing views of the links between diet and health have influenced the level and incidence of vegetarianism. Health concerns consistently appear in the accounts of vegetarian respondents, and some accord them overall priority. Health education messages and dietary guidelines promoted by government agencies, stressing the need to increase intakes of dietary fibre and fresh fruit and vegetables, can also be seen as contributing to a general climate more sympathetic to vegetarianism. In addition, given the continuing significance of common-sense conceptions of the connections between diet and health (see Chapter 6), vegetarianism may increasingly be seen as a strategy for the individual to exercise a degree of personal control over his or her health outcomes and physical well-being.

In a sense, this line of thought brings us back to the arguments developed in Chapter 7 concerning the ways in which the potential anxieties created by the underlying paradoxes of food and eating can be coped with or managed. Thus, vegetarianism may be one of the more significant emergent cultural devices for dealing, for example, with health-related food anxieties. Within the framework of vegetarian belief, the exclusion of meat from the diet is, in effect, the exclusion of a health-threatening substance. These threats to health are seen as arising from meat's supposed unsuitability for the human digestive system, its fat content, its proneness to bacterial infestation or its contamination by artificial additives and residues. Additionally, and even more obviously, vegetarianism can provide some sort of solution to the anxieties and the sense of guilt which may be generated by the killing of animals for food. As was suggested in Chapter 7, as traditional modes of coping with such concerns go into decline, their place is likely to be taken by alternative practices, conceptualizations and rhetorical devices. Thus, vegetarianism (and, perhaps to an even greater extent, veganism) is both a practice and a discourse well suited to the needs of the contemporary anxious eater. It is certainly significant that, in the transcript material reported in Beardsworth and Keil (1992a:287), vegetarian respondents repeatedly stressed the idea that their dietary stance was, in part, an attempt to regain what they explicitly referred to as 'peace of mind'.

While it is perfectly feasible to itemize the kinds of factors which can be seen as making some contribution to the widening popularity of vegetarianism, it is far more difficult to try to rank them in order of importance. Indeed, any attempt to weight the relative contribution of any given factor is bound to be complicated by the possibility that these ideas may interact with each other in complex ways. Evidence for these interactions at the personal level is provided by the empirical studies discussed above, which show how respondents' own accounts interweave the various motivations they describe, and often portray them as supporting and confirming each other. At the social level, given the variety of themes and causes that can be accommodated beneath the vegetarian umbrella, it is open to question as to whether vegetarianism itself can be conceptualized as a reasonably coherent movement. Certainly, the findings in the empirical literature which point out an important distinction between 'joiners' and 'loners' suggest that the adoption of vegetarianism does not necessarily entail a sense that the individual should become involved in collective attempts to promote its values or to convert others to its dietary practices. Yet, the distinct possibility exists that the emergence of vegetarianism as a dietary option with a following counted in millions may well be one manifestation of a broad spectrum of underlying cultural shifts and reassessments.

In fact, if we seek to assess the position of vegetarianism in the modern food system, it becomes apparent that this system actually facilitates a vegetarian regimen. The sheer range of vegetable-based foodstuffs now available to the affluent Western consumer, a range largely free from the restrictions of season and locality, makes feasible the creation of a vegetarian cuisine characterized by variety and novelty. Variety and enjoyment are features of food which many vegetarian respondents emphasize (Beardsworth and Keil 1992a). In contrast, adhering to a vegetarian diet in the context of a more localized and seasonal food supply would be an altogether less appealing prospect. For example, a vegetarian diet based solely on the produce of traditional northern European temperate agriculture could prove somewhat monotonous and restrictive.

If we accept the contention that the ideological levels of the food systems of Western societies are increasingly characterized by menu pluralism, there are clear implications for our understanding of contemporary vegetarianism. In a menu-pluralistic setting, the availability of a variety of menu principles (rational, moral, hedonistic, etc.), provides the individual with a good deal of flexibility (within certain social and economic constraints, of course) when it comes to the construction of his or her own personal dietary regimen. In such a climate, the adoption of vegetarianism is increasingly likely to be seen as just one more diet and lifestyle choice from among the many options on offer, and less likely to be construed as a form of dietary deviance or non-conformity. While this may actually render vegetarianism rather less attractive to those seeking ways of demonstrating difference or expressing protest, it will enhance its attractiveness to a wider range of potential converts.

This conclusion presents us with an interesting paradox, however. The rhetoric of vegetarianism tends to place considerable emphasis on the idea of a challenge to conventional foodways. Such a challenge, as we have seen, may be couched in ethical terms, in nutritional terms, in terms of concepts of 'nature' and the 'natural', and so on. Yet it can be argued (Beardsworth and Keil 1993a) that this challenge to the conventional food system is, in practice, in the process of being re-incorporated into it. For a capitalist, market-based food system, vegetarian tastes and requirements present novel marketing and profit-making opportunities. Thus, specialized products and services aimed at vegetarian consumers are created to respond to the demands of a significant new minority niche. These developments are explicitly recognized by many respondents who have been vegetarian for some decades, as they comment on the improvements they have experienced in the availability of vegetarian dietary items, restaurants,

etc. (Beardsworth and Keil 1992a). As vegetarianism is absorbed into the capitalist food system and converted into one more routinely available dietary option, its threshold of entry will effectively be lowered. In this way, the current following is likely to be maintained, or even significantly extended, as potential recruits are offered a progressively more straightforward process of conversion.

OVERVIEW

In this chapter we have traced the path which has led vegetarianism from its position as a long-established, but in a sense deviant, nutritional regimen to a position of being an increasingly popular dietary option among an array of other options on offer. The analysis of the shifting cultural, social and economic conditions behind this transformation might push us towards the conclusion that, in some senses at least, contemporary concerns, priorities and anxieties may be evolving in ways which are bringing them more and more into line with the preoccupations of vegetarianism. For these reasons, what was once a quintessential nutritional heresy is now becoming a kind of nutritional orthodoxy, with a substantial and expanding nucleus of adherents and a larger periphery of sympathizers and potential converts. This process is aided by the commercial dynamics of a food industry willing, indeed eager, to cater for novel forms of demand.

Predicting the future of vegetarianism in Western societies like the UK and the USA might seem to be a simple matter of extrapolating from existing trends. On this basis, it might even be anticipated that vegetarianism, at varying levels of strictness, would eventually become the dominant dietary pattern, with meat eating confined to a deviant and furtive minority. However, the data upon which we might base our views of overall trends in vegetarianism are currently far too fragmentary to generate much predictive confidence. What is more, these fragmentary data suggest that trends in meat consumption and meat avoidance are somewhat variable, even between the nations of Europe, for example. Even if clear trends could be established, their ultimate directions would still be shrouded in mystery. Could we expect vegetarianism to continue its inroads into conventional foodways on a steady basis? Would it, on the other hand, reach a kind of plateau, a level of penetration beyond which it could not extend? On the other hand, would it eventually begin to contract, losing ground to other priorities and nutritional ideologies as the cultural and economic frameworks of food production and consumption undergo changes as yet unforeseen? Or should the future of vegetarian cuisine simply be seen as one more culinary option which individuals can employ as and when they feel inclined?

While such questions are, for the time being, unanswerable, there is a pressing need for more empirical research in this area. More extensive and comprehensive survey data are needed to provide a clearer idea of the underlying trends. Survey work based on a comparative approach is also required to provide a clearer indication of the important contrasts which appear to exist between different, albeit neighbouring, societies. Additionally, as a complement to such data, more qualitative material is required, derived from small-scale, intensive studies, in order to enhance our insight into the subjective dimensions of vegetarianism. In particular, vegetarian biographies require attention, in order to reveal the ways in which motivations and accounts vary over time, as well as the patterns of conversion, adjustment and lapsing which commonly occur. Only through such work will we achieve the insights necessary to place the contemporary vegetarian phenomenon in its sociological and historical context.

SUGAR AND CONFECTIONERY

Sweetness in the human diet

James (1990) writes of the Baka of the Cameroons who, once a honey comb is located in the topmost branches of the rainforest canopy, spend time and effort in order to obtain it. 'They will quite literally go to enormous heights and put their lives at risk to obtain the honey' (James 1990:632). She also draws our attention to a television advertisement in our own society which portrays a man undertaking a series of dangerous and acrobatic feats to deliver a box of chocolates to the woman he admires. What have these accounts in common? They are, argues James, just two examples of the extent to which sweet foods are valued. In each culture the source of sweetness may vary, as will the kinds of food, but the preference for sweet tastes remains a constant. There are many discussions about the biological basis and physiological functions of this preference for sweetness. However, for sociologists it raises questions about the social organization of the production, distribution and consumption of such highly valued foods and about the part which sweet foods play in society.

Any superficial account of the increase in the accessibility and consumption of such foods as sweets, confectionery and chocolate gives an impression that here is yet another success story involving human ingenuity in processing natural raw materials and, in relatively recent human history, the application of sophisticated technology to produce and distribute quantities of sweet foods on a scale unknown in previous historical periods. However, it is also relevant to recognize that, whichever aspect of the story of sweetness is considered, there are also contradictions and conflicts and a more complex account to be given. There are many examples, amongst the most revealing about social processes and relationships, of the consumer's ambivalence about a food which is, at the same time, both desirable and 'bad', and of the human as well as the economic price to be paid for the increase in the production of such sweet foods as sugar.

THE PHYSIOLOGICAL BASIS FOR THE PREFERENCE FOR SWEETNESS

Cultural analyses of food preference emphasize the fact that, of all the potentially edible foods available, human beings select relatively few and that these choices

are shaped by social experiences, each society building up a set of food resources appropriate to its physical and social environment. By way of contrast, the preference for sweetness is said to be innate. It is assumed to be linked to the fact that sweetness is the characteristic taste of many attractive energy sources, such as fruits (Rozin 1982:228). Although we do not have a complete understanding of the biological function of the human preference for sweetness (Booth, Connor and Marie 1987:156), there is agreement that 'Sweetness is the most neurally distinct of gustatory qualities' (Scott and Giza 1987:28). The sensory receptors for detecting the chemicals associated with sugars appear to have emerged very early in primate evolution and to have persisted in modern primates including humans (Beidler 1982:5). Human infants have been shown to prefer sweet solutions immediately after birth. As children grow up and become adult, the specific sweet foods chosen, together with their quantity and quality, are constrained by social and economic factors. Beauchamp and Cowart (1987:136) review the available data on the development of sweet perception and draw the following conclusions. Newborn babies and young children demonstrate an avid taste for sweetness, which seems to be largely independent of the degree of early exposure to sweet tastes. However, the nature of dietary exposure to sweet tastes that the child experiences does appear to shape the expectations and the degree of acceptability of particular sweet foods. Strikingly, however, the taste for sweetness appears to decline with maturity, with adults judging lower levels of sweetness to be most pleasant as compared with the levels preferred by children.

This preference for sweetness is argued to be so powerful that, according to Rozin (1982:228–9), it is in sharp contrast to many other foods in that it provides an example of one of the most straightforward links between biology, individual and culture. He suggests that there exists a relatively straightforward progression between the biological fact of the innate human liking for sweetness and the development of behaviour patterns designed to seek out sweet foods in the environment. Once such items are discovered, Rozin argues, they are readily incorporated into culture and, more specifically, into cuisine. Once incorporated, their presence provides the opportunity for further exposure to sweet tastes, thereby reinforcing their role in the human diet. Rozin sees these steps to the incorporation of sweet foods into culture as far simpler and more direct than the much more complex processes which may be involved in learning other flavour principles which are not so closely tied to any discernible physiologically innate taste preferences.

THE HISTORY OF SUGAR

Most of the historical studies of sweet foods (examples are Abbot 1990; Deerr 1949, 1950; Lees 1983; Mintz 1985; Toussaint-Samat 1992) tend to focus on the discovery and deliberate cultivation of plants, such as cane and beet, which produce sugar, with most attention on the development of sugar cane. However,

these authors also give some insight into other sources of sweet foods. For example, Deerr (1949, 1950) in a two-volume history of sugar begins by indicating the importance of honey and fruits as sweet foods for 'primitive man' and reproduces a rock painting of neolithic honey gathering (Deerr 1949:5). Sources such as honey and fruits have remained important but may have received less attention because they have never been the focus of the same level of sociopolitical intervention in their production and distribution as sugar cane and beet.

Although the large-scale consumption of sugar is relatively recent in Europe, there is evidence that sugar produced from cane on a commercial basis was widely available in India and China from ancient times. The cane is said to have originated in the south Pacific region and been transferred, first to India and later to China, into those areas where it was possible to find the right conditions for its growth: rich, moist soil for planting and great heat and ventilation for ripening (Toussaint-Samat 1992:552-63). The ancestors of the Buddha were said to have come from 'the land of sugar', or Bengal, and Toussaint-Samat records a reference to a banquet in 1200 BC 'with tables laid with sweet things, syrup, canes to chew' (Toussaint-Samat 1992:552). This fact, together with evidence of sugar prepared on a commercial basis for food preparation in China, is of particular interest in that it supports the notion that sugar was available in these societies as part of the general cuisine. This contrasts with evidence from other geographical areas and historical periods in Europe and the Middle East (for example in ancient Egypt and later amongst the Greeks and Romans) which suggests that sugar was only available in very small quantities and that its use was restricted to medicinal purposes. The Persians were said to have discovered the reed 'that gives honey without the aid of bees' (Toussaint-Samat 1992:552) when they invaded the Indus valley, and it was they who first established the routes which brought sugar to Europe as part of the spice trade. In medieval Europe the crystallized sap of sugar cane was initially called 'Indian salt'. Its use gradually spread as it established itself as an exotic luxury food or medicinal substance available only to the wealthy. The large sums of money exchanged in the operation of the spice trade accounted for much of the prosperity of ports such as Venice during this period. However, sugar prices rose even higher as this precious commodity was distributed inland from the ports. Indeed, Toussaint-Samat illustrates the value placed on this substance by citing a thirteenth-century example from Burgundy in France, where sugar changed hands on the basis of its weight in silver (Toussaint-Samat 1992:554).

The voyages of exploration of Christopher Columbus and others constituted the turning-point for sugar production and initiated its transformation from a medicine and a luxury into a more widely available and ultimately cheap food. These explorers discovered, in the 'New World' of the Americas, land that provided the particular conditions in which sugar cane would grow. Entire continents were claimed in the names of European sovereigns. For the first time, European societies such as Spain, Portugal, France, and later England and the Netherlands (in the East Indies), had access to sources of sugar over which they had political control. The plantations which were established continued the traditional, labour-intensive ways of growing cane, although the scale of production expanded. The main developments were in processing and it became the pattern to export unrefined sugar from the colonies for capital-intensive refinement in the European countries which controlled the plantations. Lees (1983) provides an account of the scientific (particularly chemical) and technological developments which made possible the wide range of sweets, chocolate and other confectionery, as well as refined sugar itself, which have been available to the British consumer since the middle of the nineteenth century. After an uncertain start and variable success, the Caribbean islands had become the world's leading producers and suppliers of sugar by the eighteenth century (Abbot 1990:11), with production and trade expanding at a pace which accelerated in the nineteenth century, along with constant improvements in the reliability and predictability of supplies.

It is interesting to note that sugar cane production became so well established and the initial concerns about the security of supplies so diminished that there was little interest in exploiting knowledge of the high sugar content of a type of beet grown in Italy which had been documented as early as 1575 (Toussaint-Samat 1992:560). That waited until the nineteenth century when countries such as France, when at war, could no longer be confident about supplies from their colonies. Compared with sugar cane, beet had the advantage that it could be planted as part of crop rotations and could be processed directly into refined sugar in on-site factories. These characteristics made sugar beet a highly profitable commodity and it was so successful that production continued when the political reasons for its development no longer obtained. Ironically, successful production of beet sugar in Europe contributed to uncertainty in the market overall. The proportions of cane and beet sugar have varied over time but cane sugar has remained at over half of the total supply (Abbot 1990:12). By the 1970s the combination of sugar cane and beet production outstripped the demand for sugar as a foodstuff and experiments began for using sugar in other ways, for example, as a raw material for the production of fuel.

Any history of sugar which emphasizes the development of increasingly efficient production and the growth in consumption may give the impression that the history of sugar is merely one of the commercial and industrial adjustment between supply and demand. However, there is another story, that of the exploitative social relations involved in the use of sugar cane by Europeans who might not be able to grow the cane in their own temperate climate but who wielded power over both the peoples and the processes involved in sugar production in their colonies overseas. As Toussaint-Samat puts it dramatically: 'So many tears were shed for sugar that by rights it ought to have lost its sweetness' (Toussaint-Samat 1992:560). According to Mintz (1985), an understanding of the history of sugar demands an analysis of power relationships between the 'Old' and the 'New' worlds.

The beginning of Mintz's account is familiar. As we have seen, the early status of sugar was as an expensive medicine, sold along with spices in apothecaries or pharmacies. It was regarded as beneficial but powerful, so that it was important not to eat it inappropriately (i.e., when not sick) or to excess. The production of sugar from cane grown in tropical or sub-tropical conditions in the Nile valley and some parts of the Mediterranean was highly labourintensive, which explains the expense. However, Mintz argues that Columbus's second voyage to the New World in the late fifteenth century would transform the scale of sugar production when the explorer recognized the West Indies as offering the ideal conditions for growing sugar cane. However, in the newly established plantations the processing of the cane remained labour-intensive. It is in the provision of forced labour for the sugar plantations that power relations are revealed. Since a large proportion of the indigenous population of the West Indies had been taken to work the gold mines in South America, labour had to be imported. Since the aim was also to keep the cost of working the plantations as low as possible, already established links with the coastal peoples of West Africa were brought into play, as these peoples could provide slaves drawn from the African interior. The first of these were transported to the West Indies in 1505.

Other countries soon entered the competition for control over the New World, and the control of sugar became a political and military, as well as an economic, struggle. The first slaves reached an English colony in the West Indies in 1619 and, from then onwards, the English became the major and most successful players in the struggle. The sugar trade can be regarded as part of an economic investment where production and demand expanded together. The slaves themselves were rarely considered as human. They were treated as commodities in the two 'triangular trades' which hinged on sugar cane growing. The first of these trades involved the export of British finished goods to Africa, the transportation of slaves from Africa to the West Indies and the shipping of sugar from the West Indies to England. The other trade involved the export of New England rum to Africa, the transportation of slaves from Africa to the West Indies and the shipping of molasses from the West Indies to New England. These trading patterns were highly profitable activities from their beginnings, bringing at least three benefits to the home economy: firstly, returns on the initial investment; secondly, the export of machinery, cloth and even instruments of constraint and torture to plantations; thirdly, the import of a low-cost food for the labouring classes. The entire system of production was supported by the political and military strength of the British Empire, which shaped the asymmetrical power relationships between the home economy and the colonies. In such a context, it is easy to explain Britain's initial reluctance to abolish slavery and the fact that, even when West Indian slaves were given their freedom, their role continued to be limited to that of labourers in the sugar industry. Indeed, it was the government's deliberate policy to deny them the opportunity of becoming as rich as their previous masters from the production and export of

sugar. Ironically, however, the exploitative conditions and relationships which characterized sugar production in the West Indies provided what can only be described as a bonanza of sweetness for the working classes in Britain.

Mintz (1985) argues that the pattern of consumption in Britain showed two characteristics: 'intensification' and 'extensification'. By intensification he means that the lower classes emulated the upper classes in the use of sugar, for example, in having elaborate wedding cakes which, until the availability of cheap sugar in the nineteenth century, had been unachievable luxuries even for the middle classes. By extensification, Mintz means that new ways of using sugar were developed, aimed at all social levels. Such products included condensed milk, chocolate, sherbert, sweets and biscuits, which meant that, increasingly, sugar was 'pumped into every crevice in the diet' (Mintz 1985:188). The link between high levels of production and high levels of consumption in Britain is emphasized by contrast with the situation in France. The French too had colonially based sugar plantations but never exploited them to the same extent. As a consequence, sugar remained only a limited part of French cuisine and contemporary sugar consumption in France is only about one-tenth of that in Britain.

TRENDS IN SUGAR PRODUCTION AND CONSUMPTION

Focusing on the twentieth century in particular, Abbot (1990:17–29) presents data on world sugar production and consumption. In discussing production he describes the ways in which the desire for self-sufficiency had the consequence of increasing the numbers of countries producing sugar. He calculates that by 1990 there were more than 120 sugar-producing countries. Production seems to follow a cycle which runs for between six and nine years and which is linked to fluctuations in demand and consequent prices on world markets. None the less, the pattern after a major expansion in the 1960s has been 'of alternating peaks followed by troughs with each peak higher than the last' (Abbot 1990:17). The developing countries appear to be the major contributors to this overall rise in production (Abbott 1990:17–20).

The figures for sugar consumption are also documented by Abbot. They show that the world consumption of sugar has increased almost fourfold in the first fifty years of the twentieth century, despite wide fluctuations in world prices. Abbot's detailed data are for the years 1972 to 1986 inclusive and document separately the consumption in what he defines as the 'developed', 'developing' and 'centrally planned' economies. The greatest increase in consumption was in the developing countries, whose share of world consumption rose from 34 per cent to approximately 45 per cent. However, there was a decrease in the total annual consumption in the developed countries, possibly because consumers in richer countries have become more calorie-conscious. However, the developed countries still consume the highest per capita quantities of sugar, for example, per capita consumption in Europe and North America is roughly twice the world average figure. In addition, there is evidence to suggest that any decline in sugar consumption in Western economies is not necessarily a decline in the overall demand for sweetness. A whole range of alternative sweeteners has been developed and the production and consumption of these is largely located in the developed world.

More refined data concerning per capita sugar consumption trends in the UK are available from the Household and Food Consumption Expenditure Survey which we have already encountered in Chapter 9 (Ministry of Agriculture, Fisheries and Food 1991). The data published here cover approximately five decades and document a steady rise in per capita sugar consumption from a level of 8.41 oz per person per week in 1942 to a peak of 18.49 oz per person per week in 1963. After this peak, a decline set in and by 1990 the level of consumption had fallen below the 1942 figure, having dropped to 6.04 oz per week. In parallel, certain other high-sugar foods also show this pattern of peak and decline, for example, preserves (including jams, honey and syrups) were consumed at the rate of 4.93 oz per person per week in 1942 and peaked in 1950 at 6.30 oz. Consumption of these foods then began to diminish consistently so that by 1990 only 1.69 oz per person per week were being consumed. Other sweet foods like cakes and pastries show a similar pattern of decline, although the consumption of biscuits, which peaked at 5.84 oz per person per week in 1958 has not fallen so markedly, the value in 1990 being still as high as 5.26 oz per person per week (Ministry of Agriculture, Fisheries and Food 1991:96). However, the same source shows that within these figures there are wide variations by social class. For example, at the beginning of the period studied, the rationing of sugar resulted in very little difference in consumption levels by households in different income groups. However, over time, consumption in income groups 'A' and 'B' fell to below the average and that of groups 'D', 'E' and pensioners rose above it. Indeed, by 1990, pensioner households were consuming 82 per cent more sugar and preserves than the average, whereas group 'A' households were consuming 30 per cent less than the average (Ministry of Agriculture, Fisheries and Food 1991:46).

In contemporary societies, the taste for sweetness can be satisfied by the consumption, not only of refined sugar, preserves, cakes and biscuits but also by the consumption of a very wide range of confectionery. Indeed, the demand for confectionery in the developed economies appears to be high and this is particularly true of the UK. For example, figures provided by James (1990:668–9) indicate that the UK confectionery market in 1988 was worth £3,285 million, more than bread (£2,375 million) and cereals (£650 million). She adds that a 1990 survey indicated that about 95 per cent of the population ate chocolate confectionery at least once a day, with an average of 9.2 oz of confectionery being eaten per person per week in 1988. This is much higher than most other European countries, with only West Germany matching the British capacity for consuming confectionery including boiled sweets, chewing-gum, liquorice and mints) is eaten vast in quantities in countries like the UK, whose consumption

of such high-sugar items rose from 286,000 tonnes in 1987 to 302,000 tonnes in 1991 (Market Research Great Britain 1992:83–101).

THE SYMBOLISM OF SWEETNESS

The data we have examined above demonstrate clearly the sheer scale of consumption of sweet foods in contemporary societies such as the UK. In one sense, this might be seen simply as a reflection of an innate human craving for sweetness which is indulged more and more frequently as sweet foods become increasingly available. However, in sociological terms, such an observation can only ever be a partial explanation. Just as we have had to consider the geopolitical background to historical increases in sugar production, we must also consider the cultural and symbolic context in which sweetness is consumed. For example, in spite of the cheapness and ready availability of sugar and other sweeteners in the Western world, Western cuisines rarely, if ever, contain sweet main courses. Since there is no nutritional reason why a main course could not be sweet, we are compelled to consider what kind of cultural or symbolic charges sweetness may carry which define this particular taste experience as one which is appropriate in some contexts and not in others.

The high intake of sugar in the British diet provides the main focus of the study by James (1990). She addresses the issue of why, in spite of what she terms the 'body technocrats' who warn us about the dangers of overinduigence, sugar and confectionery continue to play such a prominent part in our everyday eating. For James, the key lies in the place of confectionery in our system of food classification. In a sense, confectionery is regarded as both food and non-food. As such, it can take on meanings relevant to either identity and sometimes may even be assigned qualities which go beyond the properties of 'ordinary' food. She gives the example of Kendal Mint Cake, which is not in fact a cake but a mint-flavoured sugar bar, which has come to be regarded as an essential component of any mountaineer's survival kit (James 1990:674). Culturally, confectionery itself is never regarded as part of a conventional meal, given its 'in-between' status as food and non-food. However, the flexibility created by this duality allows confectionery to take on a wide variety of social meanings. There are many examples: confectionery as a gift for mediating and repairing relationships between individuals; confectionery eaten on ritual occasions such as birthdays, Christmas and Easter. In addition, expensively packaged chocolates, presented as an extravagant gift within a framework of sentimentality and romanticism are seen as a particularly suitable gift for women (Barthel 1989). In other words, confectionery constitutes a kind of generalized symbolic currency acceptable to all. For most of us, to use 'ordinary' foods which do not have this dual status (for example, vegetables or cuts of meat) would seem inappropriate and even eccentric. However, there is also an element of ambivalence here, in that the pleasurable nature of chocolate and confectionery can become associated with self-indulgence and guilt. In contrast, 'goodness' and 'virtue' can become

associated with 'dull' food. James illustrates this argument by pointing out the way in which parents may sometimes encourage children to eat 'dull/ virtuous' foods by rewarding them with limited amounts of 'pleasurable/bad' foods like sweets and chocolate. In fact, she concludes that the symbolic significance of confectionery in the British diet is so powerful that it provides a serious challenge to attempts by officials and professionals to bring about an overall reduction in intake. As this author puts it: 'An apple a day may keep the doctor away but it does little to promote social relationships. That is the role of sweets, as a root symbol for all that is "naughty but nice" in the world of food' (James 1990:685).

This moral ambivalence associated with sugar and confectionery is explored by Rozin (1987), who speculates about the relationship between sweetness, sensuality and sin. Rozin points out that, although refined sugar is one of the few chemically pure substances that are regularly consumed, and is an important source of gustatory pleasure, it has nevertheless become associated with 'sin' and 'danger'. He seeks to explain this association in a number of ways. The first of these explanations is based upon sugar's links with other self-indulgent substances, such as coffee, tea and sweetened alcohol. The second explanation relates to the set of 'Puritan values', which he sees as prevalent in the USA in particular, which suggests that anything that is extremely pleasurable must be bad. In some cases, he argues, this has reached the extreme that only the consumption of sugar-free food that is non-fattening and non-toxic can permit the consumer to occupy the moral high ground (Rozin 1987:100). The third reason is that sugar is linked with obesity and, in a society where obesity is believed to be a moral failing, this may also contribute to the notion that sugar consumption is sinful. Rozin also speculates that the strength of feeling about sugar may be explained by the operation of powerful traditional beliefs, for example, that we are what we eat (so that by consuming sugar we become sinful) or that some foods, either on moral or health grounds, can simply 'taste too good to be good for you' (Rozin 1987:101). Interestingly, in connection with the point made by James about the use of sweet things as a reward for eating 'dull' foods, Rozin argues that the outcome of such a strategy is somewhat unpredictable. In some instances, individuals rewarded with sweetness in this way come to develop an enhanced liking for the 'dull' food, whereas other individuals may experience a reduction in their liking for the food in question (Rozin 1987:108). Thus, although the human taste for sweetness appears to be innate, the role of sweetness in particular dietary contexts can be complex and variable.

The increase in sugar consumption is also the focus for the analysis by Fischler (1987). As consumption increased, so reservations about the use of sugar began to appear, becoming, according to Fischler (1987:86–7), ever stronger as the 'vulgarisation' of sugar occurred. It was almost as though sugar became more dangerous as it became more accessible to the lower classes. In a review of the literature on contemporary attitudes to sweetness, Fischler identifies what he terms 'saccarophobia' and illustrates this by citing studies which relate sugar

consumption to a range of individual and social problems, including criminal behaviour, depression and divorce as well as diabetes, obesity and hyper activity in children (Fischler 1987:87-9). For Fischler, such condemnation has its origins in modern society's ambivalence about the social management of pleasure. Sweetness is, on the one hand, both gratifying and it makes for emotional security yet, on the other, it generates a sense of danger and feelings of undeserved gratification. This ambivalence is handled by socialized and ritualized consumption, which (in parallel with potential pleasures such as alcohol and sex) is more acceptable than individual, solitary use. To be socially acceptable, the consumption of sweet foods requires a clear social context and legitimization. If this is the case, Fischler argues, sweets and chocolates can only be given to children under supervision and if they behave well. There is some support for this contention from James (1982), who writes about the special category of children's sweets which are bought and eaten away from the supervision of adults. Such sweets are often considered 'rubbish' by adults and are eaten in ways which disobey adult rules, for example, they are not wrapped but are handled directly and they may be removed from the mouth and passed on to other children. In a sense, these violations of adult rules can be interpreted as a child's way of defining self and a rejection of the adult control which, Fischler argues, is so important for adults to exercise in this context.

The ambivalence of sugar and sweetness within culinary culture and within our gustatory experience is recognized by those responsible for marketing sweet food products. Whereas some of these products may make a direct and explicit appeal to our taste for sweetness (whether as nourishing snacks or as luxurious indulgences), other sweetened foods may be marketed in a more indirect way. For example, some products which tend to have a relatively high content of added sugar are not marketed explicitly in terms of their sweetness in order to avoid connotations of being highly calorific or unhealthy (Schutz and Judge 1987). Indeed, these authors also point out that in marketing foods for weightconscious consumers, manufacturers may attempt to break the association between sweetness and high calorific content and may also distinguish between 'natural' sweetness and sweetness produced 'artificially' by the use of added sugar or synthetic sweeteners. In effect, food manufacturers and distributors are responding to the market opportunities generated by the powerful human preference for sweetness, sometimes through explicit appeals to our cravings and sometimes through the less publicized inclusion of sweetness in a wide range of everyday foods.

The fact that sweetness, particularly in the form of refined sugar, is so readily available and penetrates our culinary culture so pervasively raises an interesting question. What are the implications for individuals who, for health or social reasons, find themselves denied what most of us have come to regard as taken for granted, ready access to sugar and sweetness? Perhaps one of the most dramatic examples of the experience of sugar deprivation is the study by Posner (1983) which investigates the social dynamics of the management of the diabetic diet. Such a diet requires the avoidance of sugar no matter what foods it may be incorporated into (for example, sweets, jelly, ice-cream, biscuits, cake and chocolate). However, although the removal of such 'bad' foods from the diet might conventionally be construed as a move to a healthier pattern of eating, Posner makes the point that the consumption of such items is so deeply engrained in cultural terms that many diabetics may be reluctant wholly to give them up. Thus, in order for the diabetic to continue to be as 'normal' as possible and to have access to these symbolically significant items, a whole range of diabetic versions of sweet foods has been developed. In a sense, then, the consumption of synthetic sweetness permits the diabetic to attempt to hold on to the conventions and taste sensations of the sweetness culture.

Other kinds of consumer may also find it difficult to participate in the sweetness culture, but for very different reasons. This emerges strikingly in the study of low-income families carried out by Dobson and her colleagues which was discussed in Chapter 4 (Dobson, Beardsworth, Keil and Walker 1994). The study uncovered instances where mothers had gone to considerable lengths to manage a very tight family food budget in such a way that their children were still able to take chocolate bars or other sweet snacks to school. Superficially, this may appear to be an almost perverse use of very limited resources, particularly as food expenditure was one of the areas that these families had to control very rigorously. However, in sociological terms, the inclusion of such marginal or nutritionally dubious items in the family budget is not as puzzling as it might first appear. Given the cultural and symbolic power of these items, their significance is clearly much more than a merely nutritional one. Their consumption could allow an otherwise deprived child to retain a sense that he or she was still able to participate in the mainstream of consumer culture with its cornucopia of distinctively branded and heavily advertised products. What is more, such a child could also avoid any loss of face in the eyes of his or her peers that might arise from an inability to consume as others consume.

OVERVIEW

The consumption of sweet foods provides yet another example of the fascinating intersection of the biological, the psychological and the sociological dimensions of human activity. What appears to be an innate human preference has provided the foundation for the development of an enormous international apparatus for producing, manufacturing and distributing sweetness. Certainly, the special conditions required for the production of refined sugar (particularly from sugar cane) have meant that from the very beginning this has been an essentially delocalized crop which has been particularly susceptible to political control and manipulation. Consequently, sugar has been, historically, a particularly significant commodity within the emerging system of world trade. In this context it has also been associated with the extension of colonial domination and the exploitation of slave labour.

The pervasiveness of sweetness (based mainly on sucrose) is perhaps one of the most distinctive features of Western culinary culture. Yet, as we have seen, such sweetness is charged with ambivalence. Sweet foods are seen, on the one hand as delicious and attractive, and on the other as self-indulgent and potentially harmful. This good/bad duality is nowhere more apparent than in the case of chocolate and confectionery. Yet, in sociological terms, the ambivalence of those two items is of particular interest because they are seen both as foods and nonfoods, and exist on the margin between the nutritious and the harmfully indulgent. But it is for this very reason that these products can be used as currency in patterns of gift giving which express a great variety of social relationships. Since they are in one sense non-foods and 'luxuries', they can be given by one individual to another without the implication that the recipient is in any way deprived or in need of the support of gifts of 'real' food. However, since, in another sense, they are also foods, they can be consumed by the recipient and will provide a degree of gustatory pleasure. The fact that such gifts are consumable may also be relevant since they do not accumulate and can be used to express relationships from the most permanent to the most ephemeral. It seems clear, therefore, that sweet foods in the multiplicity of manifestations in which they are available in Western society will continue to play a significant if controversial role in contemporary nutritional culture despite, or perhaps even because of, their symbolically paradoxical character.

In the course of the previous eleven chapters we have threaded our way through a maze of issues, studies and sources all related, directly or obliquely, to the search for a better understanding of the social and cultural dynamics of food and eating. At this point it is time to take stock, in order to attempt to provide some sort of overall appreciation of just what it is that emerges from this broad spread of material, and in order to begin to speculate about the possibilities for the future.

Of course, the core aim of this book, around which all the other aims laid out in the introduction revolve, is to introduce the reader to the main themes in the literature and to provide a reasonably full account of the ways in which these themes have been dealt with by the authors who have sought to address them. Inevitably, however, we have not necessarily been able to do full justice to the detailed arguments contained in our chosen sources, largely because we have been primarily concerned to extract the specifically sociological implications of the material. Furthermore, there are, inevitably, significant gaps in the existing literature, gaps produced by a lack of theoretical formulation, empirical research, or both. Thus, in a sense, the themes upon which this book is based are shaped as much by what is not available as by what is available in terms of knowledge. Drawing out the connections between the themes and the ways in which they are interwoven with each other is clearly important. Yet, the understandable desire to see some explicit, all-embracing framework within which these interconnections can be formalized in an integrated fashion is one which, at this stage in our knowledge, is likely to be only partially fulfilled. The very diversity of the material we have encountered is at the same time the source of its richness and a barrier to the creation of a single, authoritative synthesis.

Nevertheless, a brief recapitulation of the main themes we have encountered can serve to highlight deeper, underlying refrains which have expressed themselves repeatedly in the foregoing pages. The arguments discussed in Part I concerning the origins of human patterns of food production and consumption were, of necessity, somewhat speculative ones, given the difficulties of producing reliable data on the prehistory and early history of our species. In examining the emergence of the modern food system, however, we were on somewhat firmer ground, with a much clearer and more highly developed historical perspective to hand. Certainly, two major transformations can be seen as of central importance to any understanding of human foodways:

the emergence of domestication and agriculture, beginning up to 10,000 years ago, and the intensification, industrialization and globalization of food production, which began much more recently and which has proceeded so rapidly.

In Part II we examined food preparation and consumption in two contrasting settings: the private domain of the household and the public domain of the inn, restaurant or fast food outlet. Here again, the emphasis was on change. While the household setting may well continue to reflect relatively long-standing assumptions concerning age and gender differentiation, we noted that the distribution of household types is changing and that the social organization of eating within these various types is unlikely to remain static in the near future. Meanwhile, eating out, the consumption of food in the public domain, continues to expand and to form an increasingly important component of the experience of eating in contemporary Western society. In Part III the insistent refrain of change was also present, as we considered the ways in which conceptions of the links between diet and health have been strongly influenced by the processes of rationalization which are such central features of modern societies. Yet, running parallel with the increasing emphasis on the rational regulation of diet to promote the maintenance of health, we noted other, more sinister developments: the emergence of food-related anxieties, the periodic occurrence of major food scares, and Western culture's increasing 'fat phobia', plus an emphasis on the restriction of food intake in order to control weight, an emphasis which in extreme cases can take the form of a clinically recognized eating disorder. Finally, in Part IV, attention was directed towards two classes of food items (animal products and products characterized by high levels of sweetness) which are both, in some senses, problematical. It has been argued that humans may have some kind of 'innate' taste for both classes of foods, and yet both are loaded with powerful cultural and symbolic connotations which have potent negative as well as positive aspects.

Of course, the refrain of change is the one which reappears most frequently. Indeed, as was indicated in the Introduction, this refrain provides the central thread linking together the diverse contributions that make up the subject matter of this book. Changes in food production, food consumption and, indeed, in food symbolism, have all been linked to broader processes of change involving industrialization, rationalization, globalization, labour market restructuring, long-term modifications in gender roles and gender expectations, and farreaching ideological and cultural shifts in the ways in which we view our relationships with other humans and with the natural world.

Yet, if the refrain of change is one whose importance was anticipated from the start, a second refrain emerged during the course of the writing of this book whose significance was not initially so clearly recognized: the refrain of ambivalence. For example, in Chapter 4 the essential ambivalence of women's general responsibility for carrying out the preparation and presentation of food

in the domestic setting emerged clearly. On the one hand, the successful completion of such tasks might conventionally be seen as an expression of the caring and nurturing aspects of feminine gender roles. However, on the other hand, the imposition of these responsibilities, which may well be perceived as unwelcome and onerous, might be construed as a component of the cultural apparatus which serves to perpetuate the subordination and control of women within a patriarchal context. The refrain of ambivalence is even more salient in relation to the questions of diet and health linkages which were raised in Chapter 6, in the sense that rational/medical models of healthy diet may be at odds with many individuals' gustatory habits and preferences. Thus, the following of what is prescribed as a healthy diet may come to involve a burdensome element of self-denial and self-discipline. A similar form of ambivalence concerning food intake figured significantly in Chapter 8. For many individuals, particularly women, food is seen both as a source of pleasure, gratification, reward or compensation and as an enemy, a threat to one's ability to achieve and maintain a desired weight or body shape.

Indeed, in Chapter 7 the concept of ambivalence took centre stage, as the fundamental paradoxes inherent in the very act of eating were subjected to detailed analysis. The fact that eating potentially provides both pleasure and discomfort, is both a source of sustenance and of danger, both maintains life and entails its destruction, generates deep-seated anxieties which, we have argued, require effective forms of masking and management. In this connection the ambivalence of meat as a source of nutrients was given particular attention (in Chapter 9), given its conflicting connotations of strength, power, vigour and masculinity on the one hand, and of suffering, death and decay on the other. Of course, the moral ambivalences that can be linked to the consumption of meat are not limited to concerns about the animals eaten but, as we saw in Chapter 10, may also extend to issues relating to global inequalities in nutritional standards and to the impact on the environment of what are seen as destructive or non-sustainable forms of animal husbandry. Even the human taste for sweetness, perhaps superficially to be viewed as a source of unalloyed pleasure, turns out to have ambivalent implications in the modern context of sucrose super-abundance: sugar itself comes to be viewed as both desirable and dangerous, as a treat and a sinful indulgence, as a food and a nutritionally vacuous non-food.

Pondering on these two recurrent refrains of change and ambivalence leads almost inevitably to speculations about possible future trends in the context of the food system and of eating patterns. For example, are we likely to witness a continuing expansion in the range of choice of food items, dishes, flavour principles and menus available in contemporary Western societies, all located within an increasingly pluralistic framework within which variety and flexibility become the dominant values? Are we to anticipate the continuing expansion of the practice of eating out and will this necessarily be accompanied by a decline in long-established patterns of domestic eating and commensality?

Does this, in turn, imply the continuing increase of the use of convenience foods in the domestic setting and will this lead to a decline in the culinary skills required for more 'traditional' forms of food preparation? Should we also anticipate fundamental changes in the gendered nature of foodwork as women's participation in the labour market changes and as the distributions of household types and life cycle patterns shift significantly? Can we expect to see the continuation of official attempts to set dietary targets and to promote current rational/ medical conceptions of healthy diets? Are such attempts likely to result in the establishment of a clear consensus and to continuing modifications of national dietary practices? Pursuing an alternative line of thought, we might ask whether the ethical dimensions of food and eating are set to rise in importance. Will there be a trend towards increasingly 'humane' diets, based upon foods produced in ways seen as minimizing animal suffering? Are vegetarianism and veganism established on a consistent upward trend or will they reach a plateau or go into decline in terms of numbers of adherents? Along similar lines, should we expect to see the emergence of 'ecologically sensitive' dietary patterns?

Of course, any attempt to make actual predictions would be foolhardy, which is why the preceeding paragraph is composed of questions rather than statements. However, beneath all these questions there is, perhaps, a deeper underlying question. Are we about to witness (or indeed, are we now witnessing) the emergence of what might loosely be termed a 'postmodern' food system and 'postmodern' eating patterns? Can we say that the monolith of the modern food system, with its emphasis on large-scale, intensive production and standardized manufacturing, on mass marketing and retailing, is in the process of giving ground to a more diversified and fragmented situation in which idiosyncratic, even 'playful', combinations of aesthetic, ethical, culinary and gustatory preferences can be assembled by individual consumers or groups of consumers? Or, are the foundations of the modern food system so deeply entrenched, and now so indispensable, that they must continue to underpin what are merely superficial fads and fashions?

The very fact that this book, in attempting to provide the reader with an overview of what we currently know about the social and cultural aspects of food and eating, leads us towards these types of questions is, in itself, highly significant. It provides a clear indication that a sociology of food is feasible, either through the application of established sociological concepts and perspectives or through the posing of novel questions about such biological and social processes. We are participating in the beginning of an important and distinctive sociological project which offers a wealth of opportunities for theoretical development and empirical research. Such opportunities include, for example, the design and implementation of effective longitudinal studies in order to document evolving trends in the domestic organization of eating and in domestic foodwork arrangements (particularly in respect of their gendered nature). Such a longitudinal approach would also be a valuable device for

monitoring significant changes in patterns of food preference and avoidance, and for investigating the motivations behind them or the accounts, agendas and explanations provided by those whose diets exhibited such changes. Data generated in this way could potentially allow us to gain clearer insights into the ways in which such factors as health concerns, ideas of preferred body shape, ethical preoccupations and the drive for gustatory pleasure and novelty interact with each other and shift in terms of their relative weightings. Such an approach could be effectively complemented by studies focused more specifically on issues of food and identity. This particular focus would serve to extend our understanding of the ways in which such factors as class, ethnicity and gender shape our tastes while framing and constraining our experiences of eating.

In addition, there is enormous scope for the further development of the sociological analysis of the supply side of contemporary food systems. Supply side processes and institutions have not really attracted a great deal of attention from sociologists so far, and this fact is reflected in the structure and content of this book. Food production, processing, distribution and retailing are all areas of human activity which are worthy of a sustained effort to add a sociological perspective to complement those already offered by such disciplines as economics, agronomy, geography and history. Thus, the sociological gaze might be focused upon the multiplicity of occupations which make up the labour force of the food system-the farmer, the abattoir worker, the supermarket manager, the chef, the food technologist, the food co-operative organizer are just a few examples. At a quite different level, the globalization of the food supply has begun to generate food branding and marketing strategies which transcend local cultural differences, a process which is driven by the activities and interests of multinational corporations which contain extensive food producing, manufacturing or retailing divisions. These strategies, and the organizational and commercial ideologies which underpin them, also deserve the scrutiny of the sociologist.

The political dimensions of the food system also represent a fertile area for further sociological enquiry. The constantly evolving role of the state, and its various agencies, in the creation and elaboration of frameworks of regulation for the food industry is a topic of crucial interest. Similarly, the state's continuing attempts to set dietary targets for the general population and to achieve health improvements through the modification of eating patterns raise questions of direct sociological significance. Of course, the state is not the only player in this particular political arena, and the sociologist will also need to pay attention to the parts played by a plethora of commercial interests, pressure groups and professional bodies, each with its own goals and priorities.

Finally, there remains the challenge of extending and refining the theoretical apparatus through which we can apprehend and explain the cultural and symbolic levels of the food system. In a very real sense, these dimensions cross cut all aspects of this system, but equally they form an object of analysis in

their own right. Describing the complex and changeable nuances of meaning in the realm of food symbolism promises a fascinating prospect for future sociological endeavour. This is particularly true in situations in which the availability of food, in abundance and in great variety, has become a taken-forgranted fact of life. In such settings the enjoyment of food may come to consist more and more of the consumption of images, representations and ideas of food, subtly crafted and 'fed' to us through advertisements, sumptuously illustrated cookbooks, newspaper features and a seemingly endless stream of television cookery programmes. We may need to ask whether, in such circumstances, we are quite literally eating ideas, experiencing gustatory pleasure directly with the mind, without the need for the participation of the mouth and the stomach!

The above paragraphs are intended to provide a guide to future possibilities, not an exhaustive list of topics for investigation or a definitive programme of research. Yet it is our hope that, in writing this book, we have provided, not only an insight into the present state of knowledge in the sociology of food but the stimulus to go further, to pose new and more searching questions. For the professional social scientist, we may have succeeded in encouraging him or her to make a direct contribution to this expanding area of scholarship. Equally importantly, we would like to think that we may have helped a much wider readership to begin to think critically about the apparently mundane and unremarkable act of eating and all that it entails. For when we do begin to think in this fashion, we find that on the intellectual menu there are insights, surprises, puzzles and paradoxes that all of us can savour.

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