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### The Social Geography of Healthy Aging

The Importance of Place and Space



# **HEALTHY AGING & FITNESS**

# THE SOCIAL GEOGRAPHY OF HEALTHY AGING





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# THE SOCIAL GEOGRAPHY OF HEALTHY AGING

## The Importance of Place and Space

Jasmin Tahmaseb McConatha and Karin Volkwein-Caplan

We would like to dedicate this book to Melina, Lauren, Benjamin, and Helena.

Meyer & Meyer Sport

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THE SOCIAL GEOGRAPHY OF HEALTHY AGING

# INTRODUCTION

Third Spaces and Healthy Aging

# INTRODUCTION

The way we live opens windows and calls in a secret voice to anything still missing

Hafiz Shams-ud-din Muhammad (1320-1389)

Aging is inevitable. How we experience aging is shaped by how, when, and where we live. This book addresses the challenges that older men and women experience in their attempt to have a healthy, fit, and happy life. Our goal is to illustrate that no one can age "well" alone. The responsibility for maintaining health and well being in later life lies with the individual, his or her family, the community in which he or she lives, and the larger culture and society. We address the intersecting influences of neighborhood, community and culture with individual personality. We also discuss how physical and social activity can help older men and women cope with the common health challenges they face in later life.

The number of older adults is increasing around the world. In October 2011, the world population reached the 7 billion mark. These population increases have spurred demographic changes. One hundred years ago, the average life expectancy in the United States was 47.3 years; today it is 77, an addition of almost 30 years. More and more men and women are even living well into their 90s and beyond. Accordingly, the quality of life in later adulthood is an important consideration. In this book, we attempt to explore how older adults maintain a sense of purpose, well being, and happiness in later life.

Studies have found that there are variations in life expectancy and in the quality of life. These variations tend to result from economic and cultural factors. For example, lower life expectancies are usually found in communities that are poor, lack health care, and suffer from political and social instability. In recent years, the United States, still one of the richest countries in the world, fell to 19th in the world rankings for life expectancy. According to the *Guardian* this downward trend results from widespread obesity and a lack of health insurance. More than 40 million Americans do not have health insurance. Almost one third of all Americans are obese. Cultural factors in the United States tend to lend themselves to the promotion of obesity. Weight gain is influenced by the consumption of fatty food, the overuse of technology, and a decrease in physical activity.

An analysis of global demographic trends indicates that beyond national differences, ethnicity, gender, and social class also generate variations in life expectancy, health, and well-being. Looking at the global situation, people tend to live longest in Japan, which has an average life expectancy of 82.9 years. As previously mentioned, the United States ranks 19th in worldwide life expectancy. Much of this slide stems from unequal access—especially in later life—to resources that promote health and well-being. Indeed, African Americans and Hispanics, populations that tend to live in economically challenged communities, tend to have a higher rate of chronic illness and lower life expectancy than European American counterparts.

Gender differences in life expectancy have also been documented. White women tend to live an average of 6 years longer than white men, but these women often struggle with a greater number of health concerns than men. Poverty seems to be a central factor in life expectancy. Those with the lowest income are more likely to struggle with poor health and die earlier than people with more substantial incomes.

As the Baby Boomer generation has aged, there has been a more public emphasis on how to promote a "healthy and successful" aging experience. Rowe and Kahn (1988) conducted a large-scale multidisciplinary research project on health and well-being in later life. These social scientists probed the physical, social, and psychological factors that influence such well-being. They found that in later life it was important to (1) avoid disease, (2) engage with life, and (3) maintain cognitive and physical functioning. While these factors are certainly important, at some point everyone becomes "old" and most of us become "ill." How do age and illness affect the quality of life? In this book, we tell the stories of men and women who, despite their struggles with illness and disability, have managed

THE SOCIAL GEOGRAPHY OF HEALTHY AGIN(



to cope with their chronic illness and maintain their sense of happiness.

This book can be helpful to the millions of people worldwide who are over the age of 60. The Baby Boomers are beginning to enter later life. They have been a generation that has consistently been the object of research and the

recipient of media attention. Now as they age, perhaps they can set new trends in the final challenge that everyone faces. Advances in medical care have not only extended the life spans of contemporary men and women, but have increased the emotional and physical quality of laterlife. Many people assume that old age is associated with a decline in health, a sedentary lifestyle, and a lack of productivity. The reality is very different. In this book, we focus on the importance of physical activity as an important anti-aging factor. Considerable evidence has shown us that physical activity promotes happiness and well-being in later life. Aging brains and aging bodies need activity.

"Age is not a question of numbers. Age is a question of attitude and attitude is what you feel"

#### Bel Kaufmann, 100 years old

In general, people live longer in the industrial societies of Europe and North America than in more traditional societies. In industrialized societies, technological advances, which provide better nutrition, sanitation and health care, in turn, produce populations with high percentages of people over the age of 65. Such an





increase in life expectancy, of course, increases the incidence of chronic disease in industrial societies, which presents a challenging set of social problems. In industrial societies, for example, one in 10 individuals suffers from diabetes, one of the chronic conditions we discuss in the book. How does society confront these social and physical challenges?

Aging is also a cultural phenomenon. Western industrial societies tend to emphasize Calvinist individualism and self-determination. Aging can undermine notions of autonomy and rugged individualisms, causing older men and women to feel inadequate about their aging bodies. While there are benefits to an ethos of self-determination, we suggest that no one can age "well" in isolation. We talk about the importance of place and space in aging well. We discuss the central roles that the availability of walking trails, access to parks, the presence of safe neighborhoods, and the existence of spiritual and social support play in shaping health and happiness in later life. Constructing a happy and healthy life is a complex phenomenon. As we demonstrate in the eight chapters of this book, it results from the dynamic interaction between economic, social, spiritual, physical, communal, and cultural factors.

Throughout this book, we emphasize how physical activity ensures a healthier and happier aging experience. Many studies have proven the benefits of regular exercise. People who exercise regularly feel better and look better. What's more, they are less likely to become obese, one of the greatest threats to health in later life.

As we have already stated, the obesity epidemic presents a challenge to the 21st century. According to the 2007 US National Health and Nutrition Examination Survey, more than 64% of US adults are overweight or obese. There are social class, gender, and ethnic biases in obesity. Women, the poor, and ethnic minorities in the United States have higher obesity rates. Often those who are obese tend to be seen as lacking self-discipline and control instead of lacking access to healthy food or places to exercise.



Obesity is but one issue that presents a challenge to healthy aging. We this hope that book might provide support to aging men and women as they face the social and psychological challenges of later life. What will it take to help these elders maintain a positive quality of life? One way to do it, as we have mentioned, is to stay physically and socially

active. Later adulthood can be an active and productive time of life. In this book, we present the stories of men and women who live active and full lives despite considerable challenges. Along with an increasing number of older men and women, these older adults are able to negotiate their way through the complex matrix of contemporary society. What's more, they are also able to cope with the myriad social challenges prompted by ageism, or age discrimination.

As we will demonstrate in the chapters that follow, older adults today are routinely subjected to multiple sources of discrimination. Among the most prominent of these is ageism, which is widespread around the world. It may seem surprising,



but studies in the United States have found that the majority of older adults say that they have been subjected to some form of ageism. Ageism is a process of systematic stereotyping and prejudice against older men and women. This form of prejudice results from a widespread and deep-seated fear of the aging process, which also compels younger people to distance themselves from older men and women.

Scholars have called this distancing "aging anxiety," which centers on the anticipation of loss as we age. Fear and anxiety about aging usually begin early in life and continue throughout one's life. Being faced with repeated ageism has a negative impact on the self-images of older men and women. It may make them behave in stereotypical ways that decrease their happiness and well-being.

Older women are often subjected to what Susan Sontag called "double jeopardy"—the double whammy of ageism and sexism combined! With the increase in the number of elders with various needs, many of the positive attitudes about age have eroded and ageism has spread from the industrialized world to less industrialized settings. Through the spread of technology—the Internet and television programs—images from the West, which tend to value youth and denigrate age and aging, now have a global reach.

Popular culture shapes images of youth and age. Films, commercials, books, and magazines depict older adults as depressed, unattractive, ill, disabled, lonely, decrepit, and even ready to die. These images reinforce societal attitudes that "old age" is the time of life when one loses physical and mental competence. The

reality of what it means to be older in the 21st century, of course, presents a very different picture. In this book, we discuss stories of diverse men and women who are managing to age well as they cope with health concerns.

The notion of age imagery and ageism brings us back to the importance of exercise in older adulthood. Although only about half of all older men and women exercise regularly, the percentages have increased significantly in the past 20 years. Joggers, bikers, swimmers, and walkers can be seen in every American village, town, and city. In this book, we discuss the benefits of various forms of exercise, particularly walking, the most popular form of fitness activity.

More than 70 million Americans of different ages walk on a somewhat regular basis. The recent changes in activity routines have resulted in healthier lifestyles and a greater public emphasis on health promotion, which have, in turn, led to an increased life expectancy and healthier and happier lives. Indeed, older adults are now challenging the traditional images of old age – as a sedentary period of life, as a time to sit on a rocking chair and relax, and as a time to shrivel up and die. Older men and women are staying physically, socially and often sexually active well into their nineties. They are healthier, happier, and more economically potent than ever before. Of course there is still considerable room for improvement.

Perceptions of age and older adults are not connected to the reality of what it means to be an elder in contemporary societies. Younger people may think older people are ancient and decaying. The economic, social, cultural and political processes that constitute globalization play an increasingly important role in how "society" perceives older adults. These perceptions often become selffulfilling prophecies. Older men and women internalize the negative stereotypes of old age as a sedentary time of decline. As we show through the stories in this book, it is entirely possible to redefine the negative stereotypes of later life. Technological innovations triggered by the flows of the global economy will help redefine the processes of aging as well as the attitudes society holds toward older men and women. Changes in attitudes about aging will positively influence the developmental process and extend to the arenas of employment, health care, and lifelong learning. By the year 2050, demographers estimate that nearly one third of the world's population will be over 60 years old (www.ilcusa.org). Italy, Greece, Germany, Spain, France, and other countries in Europe currently have populations in which at least 16% of the people are over 65 years of age (www.ilcusa.org). With nearly 38 million Americans currently older than 65 years old, health promotion for this population is an important area of consideration in the world (www.census.gov). It is clear that staying active leads to increased well-being and happiness in older adulthood. Physical activity and exercise leads to increased fitness, which has numerous health benefits. People who are physically and socially active seem to be most likely to maintain their physical and psychological health. In this book, we point out the importance of "fitness context" in healthy aging. It is of critical importance that places and spaces where people can be active are available.

In the pages that follow, we use the term physical activity more frequently than exercise. We stress that running or exercising on a treadmill are not the only ways to get healthy. Functional fitness activities are just as beneficial: walking to the store, climbing up stairs, hiking in the park or strolling on the beach can be just as beneficial as using a gym. Even couch potatoes can become healthier by moving around more. In various chapters of this book, we present stories of how men and women have done just that. We discuss how they have improved their health through various forms of physical activity.

Notions of later adulthood are often linked to the idea that "the golden years" are a long awaited and a hard-earned time of rest and relaxation. Indeed, the social and cultural environment in which older adults find themselves can help – or hinder – their quest for healthful well-being. The ecological, social political resources of countries, cities, communities, and even neighborhoods can determine whether older men and women are able to exercise, walk in the park, get fresh air, eat healthy food, or have access to competent health care.

In the gerontological literature, very few works have attempted to describe why older people in particular places are healthier and happier than those living in other places. Put another way, what is the impact of location on health, well-being and longevity? In Chapter One, we describe a small village in the Andes of Ecuador that is known for the robust health of its elders who often live to be over 100 years



old. What can we learn from the lives of the elders in Vilcabamba, Ecuador? What does Vilcabamba have that other places can also develop?

Countries, cities, communities, and neighborhoods, we suggest, have a responsibility to help people promote their health and happiness. It is important for politicians and community leaders to develop access to healthy food, walking trails and parks, and safe neighborhoods. These are absent in many parts of the United States. Indeed, the absence of such environment features often promotes despair and unhappiness in older adults. Studies of health and aging often bypass what the environment—place and space—has to offer.

Isolated individuals cannot stay healthy and happy. It is important to focus on the historical, cultural, and social psychological factors that shape the quality of life of older women and men. A central premise that we advance is that where we live is vital to how we age. Detailed case analyses and case studies demonstrate this view. In this book, we present the stories of older women and men who are from different cultural backgrounds. Although they live in different places and under different political systems, they somehow manage to successfully negotiate their health and happiness. Place and space prove to be determining factors in their adaptive aging. Are there paradises of aging? If so, where are they located, and what do they look like?

### WHAT INFLUENCES WHETHER SOMEONE WILL EXERCISE OR NOT?

A person's previous life experiences, present circumstances, and social and cultural norms influence how he or she prefers to spend the "golden years." Some theorists have argued that various societies have transformed biological and chronological aging into a social and cultural phenomenon. Perceived differences between older and younger people cannot be reduced to biological causes alone; they are also



socially constructed and maintained—often by ageist attitudes. Older men and women may feel uncomfortable exercising alongside younger adults. They may feel that exercise is undignified. They may live in neighborhoods where it is dangerous to walk for exercise. They may have spent a lifetime in a physical job and now feel that they do not want to be physically active.

The reasons for lack of activity in later life are numerous. Many of these rationales stem from culturally contoured ageist social views. As the Baby Boomers age, in fact, as the world ages, we suggest that it is imperative that programs be made available to help elders stay or become active. The difference between a healthier and happier aging experience depends, to a large extent, on how people are able to successfully engage in important, functional, meaningful, and healthpromoting behaviors.

### **CONSCIOUS AGING**

A contemporary social movement called "Conscious Aging" focuses on the promotion of awareness and acceptance of aging. The movement advocates going beyond the dominant cultural values that promote an obsession with youth, especially in western technologically advanced societies. At its base, the movement is an attempt to acknowledge all the factors that comprise the aging process. Contemporary social and cultural values not only denigrate age but also foster an acceleration of age consciousness, which, in turn, triggers an anxiety of aging. The notion of youth is often idealized. As a result, elders fear the aging process. They fear becoming ill, unattractive, or unable to care for themselves or others. In his classic book, *The Protean Self*, Robert Jay Lifton writes about the human need for personal integrity and a coherent self-image throughout one's



life. This need is especially critical when we are confronted with the confusing flux of changes associated with aging. In Greek mythology, Proteus, who tended the seals of Poseidon, was able to change himself into any shape he desired. Unfortunately as human beings we do not possess this skill. We are more or less confined to our shapes, and when they inevitably age those transformed shapes are still a part of our being.

It is clear that physical activity is central to the successful process of aging. Even so, it is not a cure-all, a panacea for all of our problems. We suggest that older adults are better served if they confront the reality of aging. Can you age with dignity? We suggest that you can. Especially if you are able to live in a healthy environment: clean air, organic food, and lack of time pressure. Does such an environment ensure a healthy and happy older adulthood? Not completely. We suggest that if you feel needed and are well integrated into a social environment in which you stay physically and socially active, the chance of a healthy and happy older adulthood increase exponentially. In this book, we present eight different environments and describe how these various environments intersect with individual characteristics to shape the aging process. The locations include the mountains in South America (Chapter 1), the seaside of the Northeast of the United States (Chapter 2), the lakes in Canada (Chapter 3), the suburbs (Chapter 4), the New Mexican desert (Chapter 5), a city park, and a small retirement-friendly coastal town (Chapters 7 and 8). Each of these chapters presents a case study of men and women who are facing various challenges of personal, social, and physical nature. We discuss how they make positive changes in their lives, how they cope with disability and illness, and how ultimately each person manages to "age" well despite challenges and difficulties.

Chapter 1 - tells the story of Suzanna and John who make a part-time move to a small village in the Andes, Vilcabamba, Ecuador. They chose a place that is known to promote healthy aging and a long life. It has clean air, good organic food, and offers a relatively stress free lifestyle, something that appeals to Suzanna and John. Life in Vilcabamba also requires regular physical activity, which is one of the reasons it is a healthy place. Suzanna, like many middle-aged and older adults in the United States, suffers from chronic back pain. She wants to move to Vilcabamba to lose weight, become more active, and improve her health.

Chapter 2 - tells the story of Mariam who lives by the sea. Growing up near the water has provided ample opportunities for her to swim, boat, fish, and walk on the beach. Her family owns a fishing business, which she still runs in her eighties. The fresh air, salty sea, plenty of functional fitness activities throughout the day, as well as a healthy diet, keep her young. This chapter reveals the secrets of Mariam's happiness and positive outlook on life. It helps to live in an ideal place as you grow older.

Chapter 3 - tells the story of Charles, who grew up in communist Yugoslavia and moved to Canada in his 30s. Growing old, he still engages in tennis, boating, and swimming during the summers on an island in the Georgian Bay and during the winters in Florida. At the age of 86, he considers skiing as too dangerous. Playing tennis throughout his life has helped him to integrate into a new culture, to make friends for life, establish business connections. It also provides a wonderful outlet for him to stay physically fit. The places he has chosen to spend the latter part of his life provide lots of choices for healthy aging. He embraces technology that helps him to stay connected with family and friends all over the world.

Chapter 4 - tells the story of three women who became best friends through exercising. Fitness programs offered through the community help older people to stay fit, make friends, and educate them on how to live healthy lives. This chapter also explores the importance of faith in the healing process and prayer to stay balanced and focused throughout life's challenges.

Chapter 5 - provides insights into the challenges of living with a disability. The story of Eddy gives credit to a "strong mind in a strong body," balancing the physical, mental and social aspects in life. The positive influence of sports and exercise are described as Eddy experiences these benefits throughout his life; as he wins numerous gold medals or fights heart disease and obesity. His passion and drive, as well as his education, are the foundation of living healthy and well no matter what "inconvenience" he has to face in life.

Chapter 6 - discusses the importance of neighborhood parks in promoting physical activity. Lise provides care for Ari, her husband of many years. The stressors of care-giving have threatened her health. She needs to take action and find a way to become more active, lose weight, and manage her stress. Like 70 million other Americans, Lise begins by walking for exercise. Walking is America's most popular fitness activity. While any walking is beneficial, regular walking (2 to 3 miles, 3 to 5 times a week) helps improve cognitive skills, problem solving, memory, and the management of emotions.

Chapter 7 - discusses the impact of age on self-image, especially body image. Age is important in how men and women view themselves and how others see them. Idealized cultural standards of attractiveness and fitness are based on the bodies of prepubescent, thin, and young adults, especially young women. As women age, these cultural ideals can threaten how they feel about themselves. Tina is a woman of a "certain age" who faces challenges when she looks in the mirror. She does not recognize her aging self. We discuss how she overcomes these challenges and learns to feel comfortable with who she is.



THIRD SPACES AND HEALTHY AGING



Chapter 8 - focuses on what it means to retire. How do we have a happy and healthy retirement? What factors influence this? We present the case of Bill and Sara who are about to retire. They are excited about the prospect. They feel that they are finally free to spend their time as they wish. They want to relax, engage in creative pursuits, exercise, travel, and do the things that they always wanted to do. In the chapter, we discuss what retirement means in the 21st century, and address both the challenges and joys of this later life transition.

# **CHAPTER ONE**

The Importance of Place and Space - My Aching Back

# **CHAPTER ONE**

### The Importance of Place and Space - My Aching Back

Suzanna and John are planning to move to Vilcabamba, Ecuador. They have visited this little village nestled in the foothills of the Andes several times. They love the clean air, healthy food, and beautiful surroundings. Suzanna has been studying Spanish, and on their most recent trip they found a small house on top of a hill with a view of the surrounding valley. They plan to renovate the little cottage and live in it for several months each year. They hope that in this place they can regain their well-being. The case of Suzanna and John illustrates how our neighborhood, community, and culture can help or hinder us in our struggle to stay or become healthy as we age.

Vilcabamba is a place long known to promote healthy aging and a long life. It has clean air, good organic food, and offers a relatively stress-free lifestyle, something that appeals to Suzanna and John. The fact that life in Vilcabamba also requires regular physical activity is one of the reasons it is a healthy place. Elders work every day, raking coffee, cutting sugarcane, or harvesting fruits and vegetables, hauling the produce to the markets. Most people routinely walk from their homes to the village square, often requiring a trek of several miles. Some of these hikers are more than 90 years old. A few of them are even centenarians, over 100 years old.

The terrain is mountainous and the roads and trails are steep. The village is situated in a valley reached through a winding mountain road. The Rio Chamba River snakes its way among steep beautiful slopes covered with a green carpet of trees. The village is small, a few blocks, a village church, a town plaza with shops and cafes. It is a place where locals and expatriates come to relax and, perhaps like Suzanna and John, regain their health.

Life for older men and women in Vilcabamba is very different from John and Suzanna's fast paced and mostly sedentary life in the United States. The routine of daily life in Vilcabamba changes slowly. People live very much the way their THE IMPORTANCE OF PLACE AND SPACE - MY ACHING BACK



parents and grandparents lived. They engage in hard physical labor as long as they are able. Most elders are proud of their ability to maintain their daily routines, to make a contribution to the life of the family. They are happy to walk to the market, visit with their friends, and make their way back home, chores accomplished and supplies purchased. Many studies have indicated that an active lifestyle results in fewer chronic conditions and aches and pains. This is part of the appeal of Ecuador for John and Suzanna. They hope that a life of active fitness will give them both a new lease on life. They hope that spending part of each year in Vilcabamba will make them healthier and happier.

Suzanna is in her mid-6os, and in the past few years she has gained twenty pounds. She does not like her aging self, she is not happy with the way she feels and looks. Until she turned 50, she had always felt good about herself. She followed the guidelines of an active person. She exercised 3 to 5 times a week. She ran two miles, played tennis, and worked in her garden. Five years ago, she hurt her back while pruning bushes. Her back hurt so badly that she began taking pain medication. The medication made her tired. She stopped gardening, stopped running, and could no longer play tennis. She also began eating more. She gained weight and began to feel depressed.

Suzanna, like many middle aged and older adults in the United States, suffers from chronic back pain. She has visited several physicians for her back pain and they have recommended surgery. Suzanna is afraid of back surgery. She has decided that she needs to make changes in her life; changes she hopes will make her back feel better, changes that will make her healthier and happier.

Most people have experienced back pain sometime in their life. The causes of such pain are numerous; some are self-inflicted due to a lifetime of bad habits. Other back pain causes include accidents, muscle strains, and sports injuries. Although the causes may be different, most often they share the same symptoms.

### **IMPORTANT INFORMATION ABOUT BACK PAIN**

#### The symptoms for back pain are:

- + Persistent aching or stiffness anywhere along the spine, from the base of the neck to the hips.
- + Sharp, localized pain in the neck, upper back, or lower back especially after lifting heavy objects or engaging in other strenuous activity.
- + Chronic ache in the middle or lower back, especially after sitting or standing for extended periods.
- + Back pain also radiates from the low back to the buttocks, down the back of the thigh, and into the calf and toes.
- + Back pain results in inability to stand straight without having severe muscle spasms in the lower back. http://www.webmd.com/back-pain/ guide/understanding-back-pain-symptoms

Lower back pain is very common in later adulthood. In fact, almost 80 % of adults experience lower back pain at some point in their lives. Although more serious illnesses, such as malignant diseases can cause the pain, this is only the case in about 7% of those who suffer from back pain. The possibility of developing back pain increases with age. Of the 36 million Americans 65 or older, approximately half report experiencing one episode of back pain in a calendar year. Nearly 20%

report multiple episodes. For the majority of these men and women, back pain results from lifestyle factors such as weight, inactivity, and stress.

#### ADDITIONAL CAUSES OF LOWER BACK PAIN

Lower back pain can be caused by overuse, strain, or injury. People can hurt their backs playing sports, working in the garden, or lifting.

As people age, bones and muscles lose strength increasing the risk of back pain. The spongy discs between the bones of the spine (**vertebrae**) may suffer from wear and tear and no longer provide enough cushioning between the bones. A disc that bulges or breaks open (**herniated disc**) can press on nerves, causing back pain.

In some people, low back pain is the result of **arthritis**, broken vertebrae (**compression fractures**) caused by bone loss (**osteoporosis**), illness, or a spine problem you were born with.

Often doctors don't really know what causes low back pain. But it is more likely to become long-lasting (chronic) if the person is experiencing stress or is depressed. http://www.webmd.com/back-pain/tc/low-back-pain-topicoverview

For many people, back pain may compromise an already marginally functional status, threatening independence in later life. The most common causes of chronic back pain are a degenerative disk and joint diseases often associated with a sprain. Unfortunately, treatment options are limited and treatment is often directed at relief of symptoms and improvement in functioning. Pharmacological and non-pharmacological approaches may be combined for best results with least risk of toxicity. Chronic back pain can often lead to anxiety and depression, treating associated depression can help improve pain and mood. Back surgery is often recommended as was the case with Suzanna, but it is rarely the most appropriate option.

Exercising a minimum of 3 to 5 times a week for at least 30 minutes and maintaining a healthy weight are the two best ways to reduce or prevent low back pain. Exercises include:

- + **Aerobic exercise**, to condition your heart and other muscles, maintain health, and speed recovery.
- + **Strengthening exercises**, focusing on your back, stomach, and leg muscles.
- + **Stretching exercises**, to keep muscles and other supporting tissues flexible and less prone to injury.
- + **Yoga** can incorporate all three of these methods. Make certain you have your doctor's approval before starting.

As previously stated, back pain, especially chronic lower back pain, is most often associated with lack of activity and excessive weight. When people gain weight, there is a tendency to avoid exercise and physical activity, which further weakens back muscles. Weight loss can improve the condition, alleviating lower back pain. The best approach for losing weight is a combination of a well-balanced diet, exercise and lifestyle changes. Weight loss can improve chronic back pain almost immediately; most people feel more energy and can move more freely allowing them to resume their physical and social activities while also reducing depression.

#### **EATING RIGHT**

Eating the right foods is the first step to weight loss. Suzanna hopes that the healthy organic diet common in Vilcabamba will help her lose the 20 pounds she has gained in the past few years.



THE IMPORTANCE OF PLACE AND SPACE - MY ACHING BACK



### **A HEALTHY DIET**

The typical Ecuadorian diet is very healthy. It primarily emphasizes grains rice, maize, quinoa and plantains, vegetables, beans, and fruits such as mangos and papayas.

The traditional diet tends to be simple, and mealtimes are important times when family and friends sit together, visit and relax. Unlike the United States, food is usually not eaten on the go. Sitting down with others and making time to eat leads to mindful and slower eating, decreasing the likelihood of overeating. Studies have found that when people take time to sit down and eat they are less likely to be overweight.

It is of course impossible to sit down to meals everywhere and take time to eat slowly, but Suzanna and John hope that living in a culture where others are eating healthy meals in a relaxed atmosphere will help them be healthier and eat better also.

### THE IMPORTANCE OF PLACE AND SPACE IN PROMOTING ACTIVITY

Where we live plays an important role in people's ability to engage in physical and social activity. Not everyone chooses or wishes to move to another state or country. But sometimes moving to a healthy place can motivate people to change their sedentary and unhealthy lifestyles. Suzanna and John had always wanted to spend part of the year in a different culture. This year they finally decided to make the part-time move to Ecuador. In making a choice to move to a different place in later life, Suzanna and John are also following an old tradition. Throughout history people have traveled to remote places in search of the fountain of youth. Although there is no evidence that points to the existence of a "fountain of youth," there are places around the world, often remote places like Vilcabamba, where people tend to live significantly longer than the average person.

Sometimes a particular place can offer a naturally healthy lifestyle. Good climate – in Vilcabamba the temperature varies year round from 55 to 75 degrees F, it feels like spring every day of the year. Clean air – there is very little pollution in Vilcabamba. Good food and water – the rivers flowing into the valley down the eastern slope of the Andes are known to have high mineral content including calcium, magnesium, copper, and zinc. Vilcabamba is also a beautiful place; there are mountains, rivers and a wide range of flora and fauna in the valley. Given Vilcabamba's reputation as a place known for health and well-being, people from all over Ecuador and other parts of the world visit each year especially for Carnival, the festival of health and life. Vilcabamba is a place that can be called a "Blue Zone."

Dan Buettner (2008) published a book titled, *Blue Zones: Lessons for Living Longer from the People Who've Lived the Longest*. Although Buettner does not mention Vilcabamba, he and his colleagues visited several Blue Zones, in Sardinia, Okinawa, California, and Costa Rica. According to Buettner, the elders he interviewed have, for the most part, remained physically active well into their later years. Buettner and his colleagues noted, for example, that life in Costa Rica had several distinct factors that can be associated with longevity. For one, elders in Costa Rica are revered by their community, they are socially active, visited regularly by family and neighbors, and incorporated into social and cultural events by the family and the community. In sum they are valued members of their society. The elders Buettner interviewed, like the elders in Vilcabamba, felt that they had a sense of purpose; they felt needed by their families. Studies have shown that feelings of worth have considerable positive health consequences.

Do John and Suzanna need to move to a remote and healthy place like Vilcabamba to feel better? Certainly not. But where we live influences the quality of our lives and it influences our health and happiness. If you live in a dangerous neighborhood where you cannot walk safely, where you do not have access to healthy food, and where you live in fear, these factors will make you less healthy and happy no matter what you do. The importance of the place should not be underestimated. Places like Vilcabamba have a relatively stress-free life. They promote, in fact, require daily physical activity and make healthy aging easier. On the streets of the village, men and women of all ages walk up the mountainside, up and down steep roads and paths, in order to go to the market, see the doctor, and attend church. Every outing usually involves physical activity. There are options, taxis, neighbors and family members who can help, but most of the elders enjoy their independence and their ability to go where they want to when they want to. They walk, talk, and joke with their friends, sit on a stoop and chat in the shade before making their way home.

#### HAPPINESS AND EXERCISE: THE FOUNTAIN OF YOUTH

Exercise not only promotes physical health, it also promotes happiness. Physical activity improves and heals the body, and it makes us feel better about life. It



is surprising that more people do not exercise. According to studies, 60 % of Americans are overweight, 30 % percent obese. Only 25 % of men and women over the age of 65 exercise regularly. Such a sedentary lifestyle leads to many preventable medical conditions, one of which is Suzanna's concern, chronic back pain.

Physical activity that is built into our day-to-day activities can serve a functional purpose in addition to improving our health. Walking up stairs, cleaning the house, gardening, walking to the market, walking the dog, going for a swim; these functional activities are sometimes the easiest way to become more active. It is never too late to start, staying or becoming active even in one's 60s, 70s or 80s can heal chronic conditions such as back pain and other conditions common in later life.

### THE BENEFITS OF PHYSICAL ACTIVITY

- + Physical activities make us feel happy.
- + They make us feel more in control of our bodies and our lives.
- + They also help us stay independent as we age.
- + They improve self-esteem and body image.
- + Help us cope with stress and anxiety.
- + Help prevent depression.
- + Help prevent or reduce chronic conditions like back pain.



Inactivity, on the other hand, leads to a decline in functional abilities, an increase in anxiety, depression, and chronic illness. Exercise is free; it makes us healthy and

happy, it makes us look good, and in order to get these benefits one only has to exercise 30 minutes five times a week. Why is it then that so many men and women are sedentary? The single most important determinant of our happiness is our health. At some point, as we age, we all begin to experience a physical decline. But if we exercise, we can postpone our decline, maintain our health, and live a happier life. Doing something tends to be better than doing nothing.

### A THEORY OF HEALTHY AGING

Robert Havighurst (1963) proposed activity theory. This theory simply states that as we age it is important for older people to stay physically and socially active. This theory emphasizes the importance of ongoing activity as a "normal" part of aging. It suggests that our sense of self is tied to roles and activities, and it is detrimental to our health and happiness if we disengage from meaningful roles. If we lose a role or are no longer able to engage in an activity, it is important to substitute another one that is important and meaningful to us.

### FINAL WORDS ABOUT EXERCISE AND BACKPAIN

- + Make certain your weight is in a reasonable range.
- + Follow exercise guidelines (i.e., exercise at least thirty minutes, three times each week)
- + Protect your back. Make certain that you do exercises that help ease back pain.



Exercise may be difficult with lower back pain, but appropriate exercises will improve muscle condition, contribute to weight loss, and will gradually improve the back. The recommendation is to start with three 10-minute exercise regimens and gradually build up to a 30-minute session every day.

Staying in good physical condition after weight loss requires a lifestyle change. A short term approach, such as a fad diet, will not help the condition in the long term. Fad diets restrict calories excessively and are difficult to sustain. A balanced diet that allows for snacking and healthy meals is more likely to result in longterm changes to diet habits.

### **PREVENTING BACK PAIN**

As we have stated from our exploration of the lives of the elders of Vilcabamba, building exercise into one's day-to-day routine is the best way to maintain a degree of activity. Numerous examples of how this can be done are found in Vilcabamba, Ecuador – walking to the market, gardening, cooking, raking coffee beans just to mention only a few. Such exercises promote day-to-day competence as well as physical activity. According to studies in the United States, gardening and walking are two of the most common activities that healthy older adults engage in. With care and awareness (i.e., lifting from the knees instead of the back, avoiding heavy lifting, stretching before and after exertion, walking appropriately, making certain shoes are comfortable and appropriate) these
THE IMPORTANCE OF PLACE AND SPACE - MY ACHING BACK



activities may continue even in the case of someone who is suffering from mild to moderate back pain.

Common chronic conditions, such as the back pain Suzanne experienced, are not only tragic, they are also costly. In the United States alone, 11% of those 65 years of age and older consumed 29% of the United States health care expenditures (www.census.gov, 2009). As the number of older men and women continues to grow, it becomes increasingly important to address health promoting behaviors, such as physical activity, and to focus on lifestyle factors that affect health and happiness of older adults. Studies of the lifestyle of long-living elders in Vilcabamba can help identify ways in which older women and men can increase the probability that they remain healthy and happy for as long as possible. What can Suzanne and others suffering from chronic back pain do?

Living an active lifestyle and staying fit can be accomplished simultaneously while one is also taking care of day-to-day tasks. Engaging in "functional fitness" activities is one of the best ways to maintain physical activity and remain socially integrated. Functional fitness can improve one's sense of competence and control. Productive and culturally meaningful activities are particularly effective in maintaining a positive and/or competent sense of self.

The importance of a sense of continuity in our life experiences can be understood by exploring Atchley's (1976) continuity theory. In this model, Atchley argues that patterns of living develop early in life. If we have active childhoods and an



active early adulthood, we are more likely to remain active as we age. Most of us maintain a sense of continuity about who we are and how we live our lives. This continuity is both internal and external. Internal continuity refers to satisfaction and meaningfulness in life. External continuity, by contrast, refers to making sure that we engage in activities that are enjoyable and worthwhile. It is important to note that we also must maintain flexibility as we age – both in our goals and in the way we live our lives. We must accept aging as a normal part of life. However, regardless of our age, it is never too late to begin to make healthy changes.

Will moving to a "healthy" place help my aching back? If one can live in a "health promoting" place like Vilcabamba, the struggle to stay or become fit may be easier. But it is not essential to live in a place that has clean air, healthy food, views, and good places to walk. We can do this almost anywhere. It is important to realize that where we live does have an impact; it does help shape our health and happiness. No one is immune to one's surroundings. John and Suzanna chose to move to Ecuador for 5 months a year. It worked for them. They started hiking; they walked into the village every day (a round trip of 3 miles up and down hills). They met other Americans living in the area; they spent time in the square relaxing at cafés drinking beer and coffee. The cheap cost of a massage made it possible for them to get regular back rubs. They found a yoga class and started going

once a week. They felt healthier and happier than they had in years. Vilcabamba worked for them. But it is not necessary to move; not everyone wishes to or can move to a different place.

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THE SOCIAL GEOGRAPHY OF HEALTHY AGING

## **CHAPTER TWO**

Staying Active and Busy in Later Life -Happiness by the Sea

# **CHAPTER TWO**

## Staying Active and Busy in Later Life -Happiness by the Sea

Mariam is the proud owner of the "Viking Village" and a fleet of 17 fishing boats, specializing in the harvest of the famous clams on the northeastern shore of the United States. In her 80s, she oversees an operation that has been in her family for three generations. Her parents came to the United States from Norway at the turn of the last century and built a growing enterprise on the shore of a charming island near the Atlantic coast. She starts her day with a bike ride to a local coffee shop, operated by her granddaughter, where she meets with her friend Lisa and the local movers and shakers in town. Her son Kirk, the mayor of the little town, stops by as well to greet the locals before their busy and full day starts. Having raised seven children and almost 20 grandchildren and great-grand-children, she is happy with her life and proud of all the accomplishments of her family. Since they all live in the area, the family owns practically half of their hometown.

After leaving the coffee spot, Mariam checks in with the arriving fishing boats and the packing and selling of the catch. The locals buy their fresh fish right here where



the catch arrives. Mariam can be found either behind the counter selling fish or making deliveries to "The Fish Grill," operated by her daughter, which serves lunch and dinner with the best local fish recipes.

Mariam's diet is full of Omega 3, which is found in fish and oil and promotes health and prolongs life.

Her pleasant nature and curiosity in people, whether they are visitors to the island, or local friends and family, stimulates her mental health. Belonging to the



"St. Peter's Church by the Sea" parish supports her spiritual health. Mariam's holistic approach to life has brought her happiness, success, and fulfillment. She has aged well and is a role model to her family and community. Everyone knows this local legend. How did she do it?

According to the literature and the latest scientific research about healthy aging, Mariam does it all: she stays fit by being involved in the daily operations of her business (functional fitness); she eats healthy food (provided by the sea and the catch of her boats); she stays mentally alert through all of her social interactions and her interest in what is going on around her (starting each day with the latest news of the town and beyond); and her spiritual involvement (being a member of a religious group and her meditations on her extended beach walks in the evening).





### **FUNCTIONAL FITNESS**

We defined and introduced the important concept of functional fitness in Chapter 1. Functional fitness is a key component in staying active and healthy. Many people think that they have to work out in a gym or exercise on a treadmill in order to improve their fitness. This approach is very limiting and does not take into consideration all of the physical moves people are engaged in on a daily basis. Thus, the term functional fitness best describes where the health benefits are derived from: moving your body, whether it is lifting weights in the gym or lifting grocery bags and walking home with them. Working in the garden is another good example of how the body is physically challenged by digging, hauling, lifting, cutting, bending, raking, etc. It is the amount of energy that is expended and the muscles that are used, which determines the level of intensity of the workout. All amounts to the improvement of physical fitness.

Participation in regular physical activity is critical to sustaining good health. Regular physical activity has beneficial effects on most (if not all) organ systems, and consequently it helps to prevent a broad range of health problems and diseases. People of all ages, both male and female, derive substantial benefits from physical activity. Regular physical activity reduces the risk of developing some of the leading causes of fatal illness in the United States.

Regular physical activity improves health in the following ways (US Department of Health and Human Services, 1996):

- reduces the risk of dying prematurely from heart disease and other conditions;
- + reduces the risk of developing diabetes;
- + reduces the risk of developing high blood pressure;
- + reduces the risk of developing colon and breast cancer;
- + helps to maintain a healthy weight;
- + helps to build and maintain healthy bones, muscles and joints;
- + helps to build strength and increases mobility
- + reduces overall depression and anxiety; and
- + promotes psychological well-being.

Regular physical activity is associated with lower mortality rates, regardless of age. Even those who are moderately active on a regular basis have lower mortality rates than those who are least active. Regular physical activity leads to cardiovascular fitness, which decreases the risk of cardiovascular disease mortality in general and coronary artery disease mortality in particular. High blood pressure is a major underlying cause of cardiovascular complications and mortality. Regular physical activity can prevent or delay the development of high blood pressure and reduces blood pressure in persons with hypertension.

Regular physical activity is also important for maintaining muscle strength, joint structure, joint functioning, and bone health. Weight-bearing physical activity is essential for normal skeletal development during childhood and adolescence and for achieving and maintaining peak bone mass in young adults. Among post-menopausal women, exercise, especially muscle strengthening (resistance) activity, may protect against the rapid decline in bone mass (Centers for Disease Control and Prevention, 2011). However, data on the effects of exercise on post-menopausal bone loss are not clear-cut and the timing of the intervention can influence the response. Regardless, physical activity, including muscle-strengthening exercise, appears to protect against falling and fractures among

the elderly, probably by increasing muscle strength and balance. In addition, physical activity may be beneficial for many people with arthritis, as explained in the previous chapter.

Regardless of where people live and which exercise they perform or functional fitness activities they are engaged in, a minimal amount of physical fitness has been prescribed in order to receive health benefits (Website of the National American Sport Medicine Association). Globally, these standards have been agreed upon.

#### PHYSICAL FITNESS PRESCRIPTION FOR HEALTH

Scientists have prescribed the following minimal amounts of fitness activities:

- Minimal Exercise 3-5 times per week for 20-30 minutes
- + Cardiovascular and strength training are the most important components for the aging population. This trains the heart and skeletal muscles, which would otherwise weaken with age. Keeping the heart and muscles in good condition will lead to greater independence for a longer period of time.

During the last two decades, the influence of sports and the quest for physical fitness has grown tremendously in the Western world. On average, Americans annually spend more than \$10 billion on health and fitness products (Lellness & Nation, 2006). The popular success of televised sports and the ever-increasing participation of men and women of all ages in organized and unorganized sport and fitness activities attest to this importance. This development has led to changes in the relationship between sport, fitness and society; it has also brought into focus the relationship of body and culture. There are many indications that changes in the area of sport, including fundamental forms of human movement and physical activity, go hand in hand with changes in the way of life in highly industrialized societies.

In the US the roots of the ongoing fitness movement go back to the 1970s. This movement has successfully spread to other highly industrialized nations in the world. Fitness and functional fitness have become an integral part of modern life. The rise of the fitness movement is both culture specific and global. However, the fitness movement is still rooted in the home culture, immediate surroundings, and the place and space they occupy.

Although culture is experienced personally, it represents a shared system, "a program for behavior" (Hall & Hall, 1990). Traditions, values, and worldviews differ from culture to culture. Culture is an ever-changing process, that crosses national boundaries. Individual differences within each culture are reflected by race, ethnicity, gender, social class, education, age, personality and the environment. Additionally, regions have their own "mini-cultures," just like the seaside village in which Mariam lives. As a result of migration and globalization (or more specifically Westernization), cultural values and traditions are shared, exchanged, changed, and transformed. Thus, within a given country, numerous cultures can be represented and exist simultaneously.

Income, gender, age, race/ethnicity and the environment have also been identified as variables that determine who participates in a fitness movement and why (Volkwein-Caplan, 2004). However, the place and space one inhabits seems to be the key factor that determines daily physical activity.

Mariam is active in a seaside community. She is very fortunate that she does not even have to think about joining a fitness club to stay active and engaged. Thus, with functional fitness built into her daily routine, Mariam can stay physically active without making time for it elsewise. And the good news about fitness as you are aging is that no matter where you start, as long as you can still move some parts of your body, you can improve your physical fitness level. "Fitness is my medicine," Mariam confesses.

Fitness includes the following five components: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and agility. Mariam's daily routine includes many of these components without her even thinking about it. She has made the right choices in her life without the scientific knowledge, partly because her environment provides a healthy lifestyle. Let's analyze Mariam's choices in greater detail.

Mariam's daily routine includes the following aspects of **physical fitness**:

- Biking in the morning for 10 minutes to the coffee shop and back. That comes to 20 minutes of cardiovascular activity per day.
- Working in the fish store and making deliveries, often by foot, involves muscular strength (lifting and hauling) and muscular endurance activities (carrying weight for 5-15 minutes at a time).
- Walking, stretching and relaxing at the beach in the evening for about
  20 minutes accounts for more cardiovascular fitness activities, as well as flexibility.

### **HEALTHY DIET**

A healthy diet includes the intake of Omega-3, which is also known for countering the effect of aging. By eating fresh fish, Mariam's diet is full of everyday-Omega-3; she does not need to take a supplement to fulfill that portion of a healthy diet. Mariam also loves fresh fruits and vegetables. The "Viking Village" operates a fruit and vegetable stand with the freshest local produce that is in season. This produce is harvested when ripe, not before, and brought to the store for sale within 24 hours. Mariam's son owns and operates that store with his wife. And again, Mariam is at the

right place at the right time to benefit from it, because her son makes sure that this fresh produce also ends up on Mariam's table.

With the information we receive on what is the right diet for healthy living, we would like to sum up the most important aspects of a healthy diet. Whether it is called the "Mediterranen Diet" or the latest food guide logo like "The Food Circle" (Fogt, 2011), we need to consume many foods in moderation.



### HEALTHY DIET: "FOOD CIRCLE"

- + **Fruit and vegetables** (the best is what is in season): half of your daily food intake should be fruit and vegetables. Drawing a line halfway through the circle represents this portion of food intake.
- + **Protein** (fish, chicken more than red meat, eggs): A quarter of the circle should consist of protein.
- + **Carbohydrates**: A quarter of the circle should be whole grains.
- + Another little plate sits next to the big plate or circle that represents **dairy**.
- + Sugar and salt needs might vary for the aging individual. Best to verify with your physician.
- Vitamins: a healthy diet includes most vitamins; thus, additional supplements are not recommended, unless specified by your physician.
  A general rule of thumb: a multi-vitamin for specific gender needs over 50 years of age, if necessary, is enough per day.

#### An example of a healthy diet includes the following:

- + 6 ounces of Omega-3 fish at least twice a week, such as wild salmon from Alaska, Arctic char, Atlantic mackerel, sardines, black cod and farmed rainbow or golden trout.
- + 9-11 servings of fruit and vegetables, especially those that contain high antioxidants like citrus fruit and dark green vegetables.
- + Eat healthy fats (mono unsaturated fats) such as olive oil, canola oil and sunflower oil. And fats high in Omega-3, such as walnuts and ground flax seeds daily.
- + Choose whole wheat, oatmeal or brown rice over simple "white" grains for more fiber.
- Include a daily source of calcium such as yogurt, low fat cheeses, kefir, almonds and dark greens. (Source: Environmental Nutrition, vol22, no10).



**A special note to women:** The statistics predict that one in eight women will be diagnosed with breast cancer in her lifetime. Here are five important healthy breast nutrition tips for women (www.komen.org).

- Maintain a Healthy Weight and avoid weight gain. Being overweight increases the risk of postmenopausal breast cancer. The more overweight a woman becomes, the higher the risk for breast cancer. The Nurses' Health Study showed that just a mere 22 pounds increase in weight since age 18 years resulted in a 30% higher risk of breast cancer compared to those women who just gained 5 pounds. In addition, obese women have a 50% greater risk of breast cancer (www. channing.harvard.edu/nhs).
- 2. Limit Alcohol Consumption: Studies show that just having one alcoholic drink per day increases the risk of breast cancer by 9%. The Center for Disease Control Guidelines suggest that women not exceed more than one drink per day and men not more than two drinks per day (www. cdc/alcohol/faqs.htm).
- 3. **Breastfeeding is Best**: A history of breastfeeding a child decreases the risk of getting both pre and postmenopausal breast cancer (www. breastcancer.about.com/od/riskfactorsindetail).
- 4. Exercise: Daily brisk walking is recommended. The Nurses' Health Study found that breast cancer patients who walk or do other kind of moderate exercise for three to five hours a week are about 50% less likely to die from the disease than sedentary women. Other studies from the National Cancer Institute show that exercising may decrease hormone levels and help lower breast cancer risk (www.komen.org).

Maintain a Healthy Diet: See above for healthy eating example.



## **MENTAL FITNESS**

Being interested in your community and talking to friends and neighbors keeps people alert. Of course, reading books, magazines, newspapers or listening to the news is essential to mental health as well. Mariam starts her day by listening to National Public Radio. Then she talks to her friends at the coffee shop about the local, national, and international news. Staying connected with everyone who crosses her path keeps her alert and sharp. She loves to laugh, another key component to wellbeing.

Mariam also likes to write, and has many interesting family stories to tell. "However, if you share your writings with others, it is much more fun." She belongs to a writing group that gets together once a month. They read and criticize each other's work. Last year, a retired English professor joined the writing group, and now, the group is on the brink of publishing their first combined volume of short stories, which they have been working on over the past ten years.

While all of the group members share a passion for writing, each member has a unique motivation for joining the group. Often people join because they want to





write a memoir. One member wrote a love letter as a way of expressing his sorrow about missing his wife. Mariam, who was the group leader before the English professor joined, has learned not to tiptoe around sensitive subjects, as group members seem eager to share even their most personal experiences. "There is a sadness to some of these stories, but they are so lovely at the same time," says Mariam.

The reason the writing group is such a success with the older population of this little seaside village is that they have a good time together. They are connecting with each other through this process. And even more importantly, this group helps its members share terrific stories and create narratives, which they can pass on to their descendants. Although the range of writing differs widely, the goal of this group is not becoming a terrific writer, but rather sharing and building a community through the medium of writing.

There are other groups with the same purpose, whether the medium is art or music, or reading books - they all keep you mentally alert. The old saying, "If you don't use it you will lose it," is even more important for the latter part of people's life.

STAYING ACTIVE AND BUSY IN LATER LIFE - HAPPINESS BY THE SEA



Mariam's **mental** checklist includes:

- + Listening to the news in the morning on National Public Radio.
- + Daily talks/exchange with friends and family members.
- + Reading in the evening: newspaper, magazine or books.
- + Mastering the art of e-mail exchanges. Mariam's grandson set up a computer for grandma to go on the internet.
- + Being a member of a writing group.
- + Volunteering in her local church.

### **SPIRITUAL FITNESS**

One does not have to be a member of an organized religious group to practice spiritual health. Meditation, staying focused on the tasks in which one is involved (mindfulness) or simply taking a deep breath and savoring the moment, all gives people a welcome and needed break in our fast-paced society.

Mariam believes in the power of prayer. Even when people come from different cultures and different faiths, they can usually agree on one thing: prayer helps. But why?

Why does prayer seem to help, even if it goes unanswered? Prayer is the opposite of multi-tasking. "For me, prayers are just emotions trying to make peace with reality and with what we cannot control," Mariam says.

Researchers in the 1980s asked older people how they cope with stress. The overwhelming answer they received was that they relied on their religious faith (Koenig, Duke University Medical Center). In the 1990s, Koenig's research found a link between higher rates of faith and lower rates of depression. He found that people who pray daily and attend services weekly tend to have lower blood pressure. And further, people who attend religious services regularly are almost 50% less likely to have a poor immune system (they have lower interleuken-6 levels). In essence, the more religious you are, the less stressed out you tend to be.

In 2007, the Archives of Internal Medicine published a survey in which 54% of doctors said a belief in a supernatural being sometimes affects a patient's health. Mariam also describes an experience of deep relaxation when she meditates or prays. Such experiences lower high blood pressure. Other people swear by the power of yoga, "It slows me down." Even taking short reflective moments during the day help one to slow down and reflect. A rather new field known as Neurotheology looks at the biological basis of religion and spirituality. When scanning the brains of Buddhist monks and Christian nuns in their deepest state of relaxation (meditation or prayer), researchers found that these individuals were in a state of intense concentration, in which the boundaries between their bodies and the world became blurred. They felt connected to the universe. In this state worries and stress faded away.

The benefits of prayer and relaxation make you realize that you are not able to control everything around you. "The brain only has so much processing power before it hits 'cognitive exhaustion'" (Ladd, 2010, Indiana University). Mariam says, "I let God be in charge and I feel better."

Mariam's recipe for **spiritual health** includes:

- + Going to the local church on a weekly basis.
- + Being involved in the parish through volunteer work delivering consecrated wafers to the sick and elderly who cannot make it to church.
- + Personal prayers/meditation in the evening when she walks the beach.

#### HAPPINESS

Mariam considers herself a very happy person. In fact, she says that she enjoys every moment of the day. "Living in the moment" is her secret to happiness. Recent research stresses the principle of mindfulness, focusing the mind on one thing (not multi-tasking) and tuning into the frequency: "savoring the moment." Mariam knows lots of unhappy people. "Making comparison can spoil your happiness." There are always people who have more or who have it better, but focusing on "keeping up with the Joneses spoils your own happiness."

"People also think that money can make you happy." While it certainly can help in many respects, and Mariam is fortunate enough not to have to worry about it, research has shown that wealth does not necessarily lead to happiness. People who are only concerned about making more money think that they will be happy once they have reached their goal, but the goal keeps shifting. Many people see happiness only in their future and think that it comes from more money and more power. Mariam cites an old monk, who suggested: "The basic mistake people make is to think that happiness is a goal" (Lelord, 2002, 38).

Happiness comes from social time with friends. Mariam meets with her friends every morning, and thus, starts her day on a happy note, even if they discuss problems. The simple act of sharing, listening to one another and getting support through compassion gives her the strength to face whatever the day will bring.

Feeling good about your family can also make you happy. Mariam's parents worked hard to establish the fishing business she has inherited. But keeping it



up and making changes to "stay alive" is no easy matter. She has worked hard her whole life. As a little girl she helped her father in the business. When you own your own business, there is no 40-hour work week. Sometimes you work seven days a week. But there are many perks that come with it. The most important factor is knowing that your work provides for your family.

#### Mariam's **principles for happiness** include:

- + Compassion for others and life.
- + Mindfulness as living in the moment.
- + Money helps, but does not make you happy per se.
- + Being with friends and family.
- + Knowing that family is provided for.

Mariam has found out what makes her happy through reflecting on her life and discovering her passions. That was not always easy to do, especially while raising a big family. But now that she is in her later years she has the time and freedom to reflect on her life. She always comes back to her childhood. Whatever made her happy as a little girl, she finds, makes her happy still.

Growing up in a large family and being surrounded by people she has known her whole life makes life sweet for Mariam. Although she lives by herself in an apartment, she does not feel lonely because her children check up on her and she sees them throughout the day. Mariam is extremely lucky that she grew up in the right place at the right time, which has promoted her health and provided for much happiness in her life.

Inhaling the fresh air from the sea every day is an additional bonus that comes along with living near the ocean and loving the outdoors. Exercise has been proven to being a mood booster and an antidepressant because of the increase in endorphins flowing through the body. A study conducted last year by the University of Essex showed that exercising in nature for just five minutes a day can significantly boost a person's mood, self-esteem, and mental health. Researchers have analyzed the effects of activities such as walking, gardening, cycling, fishing, boating, horseback riding, and farming on over 1000 people and found that all natural environments produced healthful results, and environments that contained water showed even higher advantages. Whether it is the sunshine, the fresh air, or the vibrant, growing life that surrounds the outdoors, there is just something about spending time in nature that can naturally enhance your mood (Archives of Internal Medicine, 2010). Outdoor activities are also a great way to get the whole family away from the computer/internet. Researchers at the Annenberg Center of the University of Southern California found that an increasing number of people declare that internet usage is interfering with the time they spend with their families. This number has tripled since 2006. Going outside is fun and uplifting. Mariam does it all the time. In fact, she spends more time outdoors than indoors.Her recommendation: "If you do not live near the sea, you can visit any time. But do not tell too many people, because we do not want to be run over by tourists." Mariam sets a wonderful example of healthy and happy aging.

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# **CHAPTER THREE**

Tennis in Paradise – Ojibway and the 30,000 Islands

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### Tennis in Paradise – Ojibway and the 30,000 Islands

Tennis and his positive attitude brought Charles far in life – from Communist controlled Yugoslavia to the paradise of *Ojibway Island* in the Georgian Bay in Canada; a place where the air is crisp and fresh and the waters crystal clear and full of fish, and where life is simple and relaxing. Every morning in the summer, Charles gets up early and leaves his cottage in the Georgian Bay to ride his boat over to Ojibway, a Club where he plays tennis with his tennis partners. At 84 years of age, he is the oldest player, but an integral part of this unique Canadian tennis community.

Charles started playing tennis when he was 11 years old on a dilapidated tennis court in Belgrade, where he was born to a Russian mother and a Serbian father. Tennis was not a sport that the Communist regime supported because it had the reputation of being a "gentleman's game." But Charles liked it. Since he could not buy a tennis racket, he used his mother's old wooden racket that she had brought from St. Petersburg many years before. And the balls he had came via care packages sent by his aunt from the United States. These clay tennis courts, once the pride of the city's best-known tennis club before World War II, were falling apart, but Charles did not care. He went on pursuing what he loved, not what the government dictated. Similarly, after graduating from university with a law degree, he could not find a job since he was not a member of the Communist party. That did not discourage him; "I found an even better job working in foreign affairs."

The job in foreign affairs eventually brought him to live in Baghdad for several years, where he was "enjoying normal life," away from Communism, as he describes it. Experiencing that "free" lifestyle finally convinced his wife that it was time to leave their home country, Yugoslavia, in order to provide their two children with a better life in America. But that was easier said than done. Applying for the appropriate papers proved to be more difficult than they anticipated. Finally, after two years of trying, they were granted permission to leave for



the USA. Not telling anyone, he left with his family in their car, a Citron Palast, which was filled to the top with whatever would fit. Boarding a boat in Hamburg, Germany, Charles managed to arrive in New York City twelve days later. Greeted by his 60-year-old aunt, who looked so young in her red velvet suit, she convinced him that there were greater opportunities in Canada than in the USA. April 4, 1968 became the most celebrated holiday to the new "Todd" family, who had changed their name from Dodorowitch, because no one would hire Charles with the old name. Under "Todd," he faired very well, working for the Canadian government until he retired in 1994.

All through his life, tennis has always provided a safe haven for Charles, who would later play 5-7 times a week at the most prestigious Tennis Club in Toronto.

# *"It clears my mind and keeps me grounded and focused, contemplating my next move."*

Upon arrival, many decisions and moves had to be made by the immigrant family. They could not get a loan from a Canadian bank to buy their first home. But Charles knew what to do. He sold his house back in Yugoslavia. Although he might have gotten only 20% of the value, this money provided the important down payment for their starter home in Toronto.



Charles passed on his love of tennis to his two children, who would go with him to the club and become very good tennis players themselves. Charles introduced his children to various sports growing up in the greater Toronto area. Like many Canadians, Charles and his family love the outdoors, making use of what was available to them. The tennis club also had a swimming pool, where the children learned how to swim. During the summers they would go to nearby lakes to canoe, boat and swim. And during the winter time, they would go to nearby mountains to ski.

Being outdoors and physically active saved Charles' life years later, when he needed quadruple bypass surgery. The doctors told him that because he had been very active and physically fit, the blockage was not as bad as it could have been. He emerged from the surgery in good shape. He was about 70 years old.

When Charles discovered Ojibway with its tennis, swimming, and boating, he dreamed of owning a cottage in paradise. That would enable him to stay physically active all summer. In winter, he would do downhill skiing and cross-country skiing. In 1986, his dream came true and he fell in love with the life in paradise, enabling him to play tennis– his number one sport – every day as well as boating and swimming. Through tennis he has enjoyed the companionship of many people, constantly making new friends, staying informed, and generally making some important connections. Still speaking with his Serbian accent, Charles stands out when he speaks, but he has become an integral part of the Canadian culture, not missing his home country at all. Since his mother has passed away, and the many changes that Yugoslavia had endured, the place where he grew up no longer exists. Sometimes he goes to Serbia to show his children where he came from.

In his older age, Charles is fortunate enough to have the liberty to choose where he wants to spend his time. He has come up with a yearly schedule making the most of every month, avoiding the cold and snow. After inheriting some money from his aunt in New York, he bought a little place in Florida where he and his wife now spend the winters. There, his joints do not hurt and there is no risk of slipping and falling. They also downsized from a house to a condominium in Toronto, where they just turn the key and leave no worries about the place in their absence. In the summers, he lives in Ojibway, where he plays tennis every day with his friends. Ever since they discovered this little island, his family has been in love with it. The lifestyle on the island demands activity, whether it is taking care of your boat, fixing the cottage, preparing meals (since there are no restaurants nearby), or playing with the grandchildren and, not to forget, his passion, tennis. Yes, there have been setbacks in his life, but a positive attitude gets you far. *"And as long* 

as you believe...," is one of Charles' favorite sayings. He lives by the Buddhist conviction "something to believe and something to hope for." And his advice to all for a long and healthy life: "If you want to live long, play tennis. Start early in your life and never quit."

Of course, Charles is also concerned about his diet; he avoids overeating. In fact, the evening meal is his lightest, and he eats



early so that he has at least four hours without food before going to bed. "...And no snacking in front of the TV. In Ojibway, we do not have a TV anyway. I love to read books to keep my mind occupied." When in Toronto, he loves to go to museums and art shows. In fact, "art is a pleasure everyone can enjoy no matter how old and how able they are."

### EAT RIGHT ON THE GO – BALANCING A HEALTHY LIFE

Physical activities often require eating away from home. After playing, Charles often eats breakfast with his tennis partners and friends to refuel his body after the workout. He packs a snack that provides high amounts of nutrients and proteins. Drinking enough fluids is also essential to keep hydrated. This often is a problem for the older population. Thus, Charles is never without his own water bottle to ensure that he will not end up in the hospital because of dehydration, which has happened to him before. It is important to know what nutrients and hydration one needs for various activities.

The American Dietetic Association has come up with guidelines for eating on the road (see www.eatright.org).

#### **GOALS FOR EATING ON THE ROAD**

- + Carbohydrates at each meal and pre- and post-exercise, for fuel and to replenish muscle energy stores
- + Protein moderate amounts of lean protein at each meal, small amounts in pre- and post-exercise snacks, to speed recovery and repair muscles
- + Fat healthy fats at each meal to meet needs for energy balance and help replace muscle energy stores
- + Fluids enough to maintain hydration and replace fluids lost during exercise and travel

When one is faced with only fast food restaurants, what would be a healthy choice? Selecting high-performance food options and nutritious foods is the key. For example, in a Mexican restaurant, a good choice would be a burrito or soft tacos with grilled veggies, chicken, fish, or steak. In a fast food restaurant, a grilled chicken sandwich, a hamburger, or a veggie burger with tomato and lettuce, or grilled chicken salad with reduced-fat dressing would be good choices. In a sub sandwich restaurant, chili and a side salad or turkey sandwich; and in a

bakery, low-fat garden vegetable soup and a veggie sandwich or smoked turkey breast are healthy selections.

Healthy travel pack snack ideas can also be found on the American Dietetic Association website.

#### Healthy Snacks on the Go

- + Trail mix with dried fruits, nuts, and seeds
- + Fresh fruit, sliced vegetables
- + Bagel with nut butter, dry ready-to-eat cereals, sport bars
- + String cheese, yogurt
- Hydrating beverages such as water, sports water, sports drink, 100% juice

### ENJOYING FAMILY AND GRANDCHILDREN THROUGH TECHNOLOGY

Through the use of internet and Skyping, Charles stays connected throughout the year with his daughter, his son and the grandchildren. His son has even set him up on Facebook, so that he and his wife can be closer to the families and especially the grandchildren. And when the families gather together for the holidays, they all play Nintendo Wii. There is a great deal of research that suggests that technology, the internet, and especially the Wii benefits the elderly in more than one way.

The Nintendo Wii offers many games for people of all ages, including bowling, tennis, shooting games, and thinking games. One program in particular addresses physical fitness. The "Wii Fit" features various activities including yoga, push-ups, strength, balance and aerobic exercises. This program, in particular, can improve older people's balance. It comes with a balancing board and other "tools" to hook up to the gaming system to help measure productivity as well as accuracy. Most importantly, it then records the movements and gives feedback on the performance.



BOATING, HIKING AND A PICNIC WITH THREE GENERATIONS

Although standing on one's head is not required, it certainly increases blood circulation to the head and heart, and is a wonderful balance activity as well. Balance and coordination are very important as people get older.

Dr. Marie Fraser states that: "Falls are the most common cause of accidental injury in older people and the most common cause of accidental death in 75-year-olds and over" (in Lorie, 2009). Research suggests that agility and balance are the two most important goals any exercise program should focus on when dealing with older adults in order to help them to stay independent as long as possible.

The University of Aberdeen, Scotland and the UK's National Health Service have embarked on a four-month study on people over 70 to observe any changes in balance after the regular use of the Wii Fit. Dr. Steward designed this research project while working in the Department of Osteoporosis at the University after seeing a large number of fractures in old people who had fallen. A lack of funding for medical fitness devices that improve balance inspired this research. The Nintendo Wii was very similar to these devices and was less expensive. "The fact

#### **TENNIS IN PARADISE - OJIBWAY AND THE 30,000 ISLANDS**

that the Wii Fit is enjoyable makes the compliance rate higher" (Lorie, 2009).

Another study conducted in Australia considered the benefits of the Wii to help Parkinson's sufferers (CNN, 2009). The study compared older people with Parkinson's disease who engaged in playing the Wii up to ten times a day with those who did not. The findings indicate that computer games are beneficial in supporting the development of muscle strength and coordination, thus reducing the risk of serious harm. Since people with Parkinson's disease are more likely to fall than those without the disease, any exercise that improves balance, coordination and strength that is conducted in a safe environment, is most beneficial to the older population in general and to Parkinson's sufferers in particular.

Overall, the Nintendo Wii benefits older citizens in every way. It is less expensive than traditional exercise equipment and can be performed in a safe environment. It is also appealing and appears to be more enjoyable than actually working out. This exercise not only helps to keep older people physically active, regardless of where they live or what the weather is outside, it also becomes a social equalizer and represents a physical activity that all ages can participate in and enjoy together.



Retirement often causes people to isolate themselves from others and the past activities they had enjoyed. Incorporating the Wii Fit into the residences of older people has promoted group activities. Participating in group activities elevates the mental health of older people. The Wii Fit can also help to reshape the idea of how older people are perceived by others and how they feel about themselves. "I always loved sports, particularly tennis, but after my open heart surgery, when I could not participate in any sport, I used the Wii to get in better shape. It helped my rehabilitation process," said Charles.

#### **BENEFITS OF NINTENDO WII**

- + Physical exercise
- + Focus on balance, coordination, muscular strength, muscular endurance and flexibility
- + All age groups can participate
- + Social interactions lead to social health
- + Mental stimulation
- + Fun
- + Fits in any home, does not need a lot of space
- + Can be enjoyed regardless of the weather
- + Can be placed in senior citizens homes, rehabilitation centers, and hospitals
- + Anyone can participate regardless of fitness level or age
- + Group activities directly influence happiness

#### **EXERCISE AS MEDICINE**

Charles knows first-hand that "exercise is medicine." The American Council of Sports Medicine promotes exercise to the general population, regardless of age. Sadly only 20-25% of the US population exercises on a regular basis, and over 60% are overweight and obese (Volkwein-Caplan, 2004). People who exercise regularly, which has been defined in previous chapters as three times a week for 20-30 minutes, generally enjoy greater health than those who live more sedentary lives.

Numerous studies have shown that exercise counters the effects of aging (Cherkas, et al, 2008; Mascarelli, 2011; Blair, 2009). "As we age, our bodies change in ways that challenge athletic ability. But exercise can slow down and in some


cases even prevent some of the physiological ravages of time" (Mascarelli, 2011). When people are nearing their mid to late 30s maximal oxygen consumption also known as VO2max starts to decline, 10% per decade, or close to 1% every year. VO2max is subsequently dependent upon heart rate, which also decreases about 5-10 beats per minute every decade. Additionally, blood vessels in our bodies, including the large ones like the aorta and the carotid artery, become stiffer with age. This decrease in elasticity can cause blood pressure to rise, causing the heart to work much harder. Unfortunately, the narrowing of arteries and the increased work of the heart directly contribute to America's number one killer: cardiovascular disease. The aging process increases the wear and tear of joints. Elastic tissues become less elastic and the fluids that lubricate our joints subside as well, all of which makes aging individuals more susceptible to injury.

However, research strongly demonstrates that exercise is a means to counteract and, in some cases, even prevent the effects of aging. Michael Joyner (2011)



from the Mayo Clinic in Minnesota summarizes research that suggests lifelong physical activity aids in keeping joints strong and intact. Furthermore, exercise can prevent blood vessels from hardening, because physical activity facilitates blood flow and other regenerative pathways that may activate stem cells to help the body repair itself.

Engaging in sports is a great way to stay healthy and slow down the aging process. The necessary amount of physical activity varies with each individual based on size, weight, physical health and caloric intake. According to the United States Department of Health and Human Services (2011), anywhere between two

and a half hours to five hours of moderate exercise per week will help weight maintenance. A higher level of training, such as vigorous activity, can promote weight loss. People can choose what level to engage in for maintaining or losing weight. For example, playing doubles is less taxing and not as intense as playing singles.

In summary, participating in sport or regular exercise helps with:

- + Weight maintenance
- + Cardio-respiratory health
- + Muscle and bone health
- + Decrease risk of cancer
- + Physiological/mental health (Cohen, 2011)

Some researchers even argue that the greatest public health problems are not heart disease or cancer, but physical inactivity. Living an inactive lifestyle, for example being a "couch potato," increases the risk of health problems and early death (Blair, 2009). Extensive research with over 80,000 people has shown that the fitness level of the research participants has turned out to be a significant predictor of lifespan. This study concluded that a poor fitness level accounted for about 16% of all deaths in both men and women. They were all considered deaths that most likely could have been avoided if the participants had simply spent about half an hour per day walking. The research also found that men who were only somewhat fit lived six years longer than men who would qualify as couch potatoes (Blair, 2009).

Hence, the greatest health risk is lack of exercise. Walking for only half an hour per day can help prevent many diseases and other health concerns. Exercise also increases brain health and helps beat breast cancer. "Over the past few decades, we have largely engineered the need for physical activity out of the daily lives of most people in industrialized societies" (Blair, 2009). Thus, it becomes very important for us to make the most important commitment to ourselves by exercising regularly. Doing your own yard work or walking the dog or playing tennis or walking to the grocery store will improve your quality and length of life.



#### **HEALTHY AGING TIPS**

- 1. Healthy Aging Tips for coping with change
- + As we get older, there will be periods of both joy and stress. It is important to build your resilience and find healthy ways to cope with challenges
- + Focus on the things you are grateful for (appreciate what you have; don't focus on the losses)
- + Acknowledge and express your feelings (talking to a friend or writing in a journal)
- + Accept the things you cannot change (focus on the things you can control, take limitations with a dose of humor)
- + Look for the silver lining (challenges can also be opportunities of growth)
- + Take daily action to deal with life's challenges (ignoring the problem does not make it go away. Even a small step reminds you that you are not powerless)
- 2. Healthy Aging Tips for staying connected and finding activities that you like
- + Pick up a hobby/passion
- + Play with grandchildren or pets
- + Learn a foreign language or a muscial instrument
- + Get involved in your community (volunteer or attend local events)
- + Take a class or join a club
- + Go on a weekend trip to a place where you have never visited
- + Spend time in nature (take a walk, gardening, fishing)
- + Enjoy the arts (visit a museum, go to a concert/play)

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- 3. Healthy Aging Tips for boosting vitality
- + Healthy eating (high fiber fruits, vegetables, and whole grains. Fiberrich food provides energy!)
- + One glass of red wine per day
- + Stay hydrated (drink plenty of fluids even when you are not thirsty. If you are not getting enough water, you are not going to be as sharp and your energy will suffer)
- + Exercise regularly (start with talking to your doctor, start slowly and increase, find an activity that you like; walking is the easiest way to get started)
- 4. Healthy Aging Tips for keeping your mind sharp
- + Try variations of what you already know
- + Work on something new every day
- + Take on a completely new activity (Healthy Aging Tips, 2001-2011)



Charles made wise and healthy decisions throughout his life. Place and space are important elements that support an active lifestyle. Technological advancements can overcome some of the insufficiencies that a certain environment does not offer. For Charles, enjoying good health and enjoying family have been partially enhanced by technology.

A final word of advice for healthy living and a graceful aging process points to Charles' holistic approach to life:

"To feel the grace of God in a painting whether it is a city or landscape, abstract or representational, has been my savior. The world always needs another painting, another story or poem about the ordinary world, which then turns it into something un-ordinary, something special, that can be enjoyed..... Art helps me to reflect, not only on my life, but on issues that need clarification. And a clear mind is as healthy as a strong body."

Exercising gets more important with age (Painter, 2008); don't get discouraged:

- + It is never too late to get started with an exercise program
- Any amount of regular physical activity, whether small or large, can result in better health (US Departments of Health and Human Services, 2011)

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## **CHAPTER FOUR**

Exercise and Community Building -Best Friends through *SilverSneakers* 

# **CHAPTER FOUR**

### Exercise and Community Building -Best Friends through *SilverSneakers*

**Get fit – Have fun – Make friends** – that's what the *Healthway SilverSneakers Fitness Program* is all about. Elaine, Stephanie and Polly met 5 years ago when the *SilverSneakers* fitness program was offered to the senior citizens in their community in the greater Philadelphia area. This program is the leading fitness program in the USA that is designed especially for older adults. It is offered through a nationwide network of participating fitness locations such as the YMCA, Curves, and other gyms and wellness centers.

Although these three best friends have very diverse interests and backgrounds, seeing each other three times a week and exercising together has created a very special bond between them. All three say that their bodies have changed for the better. They feel stronger, more toned and more physically capable. They report greater energy and a more positive outlook on life. On Mondays, Wednesdays, and Fridays after the 1-hour aerobic and muscular endurance/ strength exercise session is over, they often go out for coffee to share their stories. Over the years, they have become best friends, although each of them socializes with other community members, friends, and families.

Elaine is 73 years old and a retired elementary school teacher. She loves to garden, plants her own fruit and vegetables, and enjoys cooking with her husband. She often gives the extra food they cook to people from her church who are in need. She is very busy with social activities, including bocce ball, sports, gardening, and bus trips offered through the community center and church. She is very health conscious and watches what she eats. She also enjoys knitting, watching TV and being with her grandkids. "And I am always open to something new."

Polly is 74 and looks at least 10 years younger. A retired nurse with more than 50 years of experience, she volunteers in her church, so much so that her husband complains about seeing her less now than when she was working as a nurse. "I am so busy, so over-booked, I hardly see my husband," she says. In the morning, she



ELAINE, STEPHANIE AND POLLY EXERCISING TOGETHER MONDAYS, WEDNESDAYS AND FRIDAYS

exercises with the *SilverSneakers* fitness program, including yoga and weightlifting, and in the afternoon she helps elderly persons with chores they cannot do themselves. She also volunteers in a hospice, as well as for the program Meals on Wheels.

I feel good and have more energy now that we have this community center and I can exercise regularly for FREE because I am a senior citizen and my health insurance pays for this program, SilverSneakers. We have had this available to us since 2006 – it is a blessing in the sky.... Research has shown that people who exercise in this program, versus those who do not, are healthier and cost the insurance company less. That's why the insurance company is happy to pay for anyone and encourages them to sign up.

Polly is very happy in her community, "It is diverse, middle class, has lots of parks and shopping. I can walk in my neighborhood SAFELY!"

Stephanie, in her early 80s now, still drives and takes care of her ailing sisters. She works part-time in her apartment complex, showing clients apartments that are for rent. Doing that three times a week is extremely tiring because of the walking that is involved among the twenty-one buildings that make up her territory. Stephanie attends to the elderly who cannot receive communion at church and delivers the Eucharist on Sunday mornings. Stephanie has been through a lot. She grew up without a mother, lost her husband at a young age, raised her son alone in the city. She then lost him, the youngest Major in the US Air Force, in a training flight accident when he was only 32 years old. But her faith keeps her going and so does her support group. Her best friend at the time, Shirley, did not let her quit and gave her "gentle orders." For example, showing up for holiday dinners was not an option: "I am not cancelling dinner, and you will come!" To this day, Stephanie is very adamant about staying engaged, physically as well as mentally. Having a group of best friends is the key to her mental health. "I really believe the process of aging is a choice. I am too busy to be old." She believes in rising early in the morning and accomplishing the tasks she sets for herself for the day. But what would she do if she could no longer drive? She could not participate in any of her activities, including the *SilverSneakers* Fitness Program. She could also not walk from where she lives to do her shopping.

We need sidewalks and safe crossings, so that I can walk to the community center instead of driving. That would be part of my exercise program. I would love that because I like being outdoors.

Elaine and Polly on the other hand live across from the community center where the fitness program is offered. They can walk to exercise. Although they have to cross a busy street, there are sidewalks in their community as well as traffic lights that make it easy to walk to the nearby shopping centers, including food markets. They have picked up Stephanie numerous times and driven her to exercise class; and sometimes Stephanie has taking the bus, which is free for senior citizens. Being younger and still enjoying better eye sight, her friends are there to assist Stephanie so that she does not have to miss out on exercise and the social fun that goes along with it when there is snow on the ground. However, it shows that the place you live determines how active you can be without a car.

Elaine and Polly also have parks nearby, including tennis courts, a swimming pool and a public golf course, all of which help and support their greater access to physical activity. They love to be outdoors. As Elaine says, "My dad was a physical education teacher, and he instilled in me the importance of physical activity early on in life!"

### HEALTH PROMOTION AND ILLNESS PREVENTION FOR OLDER ADULTS

Living in a community that offers senior citizens exercise and fitness classes for free is the best prevention against illnesses in later life – if you can get to it. How lucky that the women who joined the program also became best friends. Several have lost their husbands and live by themselves. But making new friends and seeing them on a regular basis through the exercise and fitness programs limits the loneliness. At *SilverSneakers* everyone sits in a circle at their own special place. When the spot is empty someone asks, "Where is Carol? Have you seen her?" And another person will know this person is sick or in the hospital. They all look out and support one another. "This is not only on the surface, this goes deeper," and has led to what the three best friends have experienced – "true friendship."

Being at the right place at the right time, the *SilverSneakers* Fitness Program is the "leading population health management solution, delivering innovative physical activity and preventive health interventions designed specifically for the older adults" (Healthways, 2007). This program originated in California in the 1990s and has spread through the United States, currently with over 200 locations.

The innovative design helps people maintain or improve their health and, as a result, reduce the overall health care costs of an aging population in the United States. Helping individuals to stay healthy and fit slows down the progression of disease associated with family and lifestyle risk factors. Advocating healthy lifestyles not only through regular exercise routines, but also through education and social programs, results in keeping senior care costs under control. The social programs include lectures on topics of interests to the older population, such as healthy eating, bingo nights, bus trips, and more.

The leading causes of death in the United States in the past century have shifted from infectious diseases and acute illnesses to chronic disease and degenerative illness. Research has shown that 88% of people over age 65 have at least one chronic health condition and 69% are burdened with multiple conditions (Medicare Health Outcome Survey, 2002).

#### DISEASE PREVALENCE AMONG OLDER ADULTS

(Medicare Health Outcome Survey, 2002)

Condition	Prevalence
Hypertension	59%
Angina or Coronary Artery Disease	16%
Congestive Heart Failure	8%
Myocardial Infarction	11%
Other Heart Condition	22%
Stroke	9%
Emphysema, Asthma, or COPD	13%
Crohn's, Ulcerative Colitis or Inflammatory Bowel	5%
Arthritis of the Hip or Knee	41%
Arthritis of the Hand or Wrist	34%
Sciatica	22%
Diabetes	19%
Any Cancer (except Skin Cancer)	15%

Most Americans over 65 years of age suffer from at least one chronic disease; 66% report multiple chronic conditions, such as arthritis, diabetes or heart disease. Such conditions often result in disability, affecting an individual's quality of life.

Numerous studies have shown that reducing modifiable health risks, such as smoking, overweight/obesity, and inactivity can positively support independence later in life, including performing daily living activities. Regular physical activity as well as weight management (healthy eating) can postpone the onset of disability (Healthways, 2002).

#### **CHAPTER FOUR**

EXERCISE AND COMMUNITY BUILDING - BEST FRIENDS THROUGH SILVERSNEAKERS



Poor health is not necessarily an inevitable consequence of aging. Making healthy lifestyle choices, especially regular physical activity (as defined earlier in this book as at least 20-30 minutes 3 times per week) can dramatically reduce a person's risk for most chronic diseases, including the leading causes of death. The Centers for Disease Control and Prevention have identified physical inactivity as a serious and costly public health issue. Poor diet and physical inactivity rank second only to tobacco use as the leading risk factor for all causes of death. Therefore, programs that assist sedentary individuals in sustaining physical activity behavior changes play an important role in the prevention of disease and chronic conditions.

Researchhasshownthattherole of physical activity extends beyond better health to improved functioning and increased quality of life for the individuals participating, as for example the *SilverSneakers* Fitness Programs do. Furthermore, these programs help reduce health care costs significantly. Milliman and Robertson (1995) report 8% higher claims costs among older adults who exercise less than once a week due to 7% more hospital inpatient days/1,000 and 21% higher utilization of physician services. "There is an annual reduction in average health care charges of \$2,200 per person per year from individuals who were sedentary



or physically active once or fewer days per week) and became physically active three or more days per week. Twenty-nine percent of SilverSneakers members report this level of sedentary behavior before SilverSneakers. After joining, 58% of this group (17% of entire population) report increasing their activity to three or more days per week" (Healthways, 2007).

What if there are no offerings of *SilverSneakers* or an equivalent fitness programs where older people can safely exercise under guided supervision and in agreement with their physician? There are









programs available that can be accessed either on TV or through the internet, which also support physical exercise, but they are done at home. Examples of such programs include the "Steps-Program" (offered through *SilverSneakers* for those living further than 10 miles away from the nearest offering location) or the Wii Fit, which has also proven to get the older population physically active, sometimes with their kids and grandchildren joining in. Of course, the social aspects of fitness programs are greatly reduced by exercising at home. The motivation to stay with a program offered online or accessed through TV might also lag. However, research has shown that any exercise at whatever level is beneficial. Although such offerings might not be as ideal as those described above, they are getting people to be physically active and improve their health.

The Centers for Disease Control and Prevention (2008) have conducted studies on the outcomes of the *SilverSneakers*, as well as the Steps-Programs, and have found the following:

- + participants experience a positive impact on their functional health status;
- + a positive impact on chronic diseases, such as diabetes and depression;
- + high-risk sedentary behavior was reduced by 59% with *SilverSneakers*' participation;
- + programs offer lost-saving benefits for health care and reduce members' health care costs: fewer hospitalizations, lower in-patient care costs, significant reduction in overall costs.



### **EXERCISE AS HEALTH PROMOTION**

The positive impact of physical activity (light, moderate, or vigorous) for older adults has been widely published and publicized. They include:

- Sedentary older men who become active have a significant decrease in all-cause mortality compared to their sedentary counterparts.
- Cardiovascular disease is the leading cause of death for women.
  Walking and vigorous exercise are associated with substantial reduction in risk of cardiovascular disease, irrespective of race, ethnic group, age, and body mass index.

- Physical Activity strengthens the immune system, and thus, plays a significant role in the prevention of certain site-specific cancers, in particular colon and breast cancer. A study by Lee (2003) found that 30-60 minutes a day of moderate to vigorously intensive physical activity decreases the risk of developing colon cancer by 30-40%. Post-menopausal women who engage in 1 to 2.5 hours per week of brisk walking have an 18% decreased risk of getting breast cancer (McTiernan, et al., 2003).
- + Diet and exercise have been shown to effectively **delay the development of diabetes** by 71% in people age 60 and over, who have nearly 20% prevalence of diabetes (National Institute of Diabetes, 2001).
- + Regular exercise helps improve physical health, **optimize functional independence, and reduce blood pressure** for up to 24 hours after each aerobic session (Taylor-Tolbert, 2000).
- + People with joint problems are limited in what they can do; however, several studies have shown that well-regulated exercise does not produce or aggravate joint symptoms or **osteoarthritis** and may actually **improve** them (Coleman, et al., 1996).
- + Older individuals who engage in running and vigorous activities have **slower development of disability** than more sedentary individuals (Fried, et al., 1997).
- + Increased physical activity is also important in managing cardiovascular disease.
- + Treatments for depression include exercise. Several studies show that exercise is equally as effective in **reducing depressive symptoms** as pharmacological treatment (Blumenthal, et al., 1999).
- + Weight-bearing activities are especially beneficial for people suffering from osteoporosis. **Physical activity can prevent bone loss and improve balance, coordination, and confidence**, and thus, prevent loss of independence, hospitalization, and early death (Kenny, 2000; Henderson, 1998).
- + Exercise has also helped people to quit smoking, lose weight and improve cognitive vitality.

#### SPIRITUAL HEALTH

Physical activity is not the only requirement for healthy aging. Polly told us "Faith is very important in my life and has helped me through hard times. I am a cancer survivor. I am also the chairperson of our ministry, and the spiritual aspect is the most important aspect in my life as well as for many other older people. This focus keeps me healthy and happy."

Elaine agrees, "Retirement is the happiest time of my life and being with grandchildren – giving them resources and any help she can offer. Religious faith is also important and we have to become more tolerant and much more compassionate." And Stephanie agrees with it all, "The spiritual focus has helped me through tough times. Everyone has to find out for themselves; but for me it keeps me grounded and focused."

Because Stephanie's mother died when she was 5 years old, the nuns who taught her at school became her guiding light. She would go to them when she needed guidance. During WWII, she went to a boarding school. Nuns were her second mother; they supervised her around the clock. Stephanie was friendly with the nun who taught her in 8th grade until the day she died. In first and second grade, when kids in Catholic school get ready for first holy communion, Stephanie wanted to emulate the life of the "holy family" and all the wonderful stories she had heard about Jesus Christ's life on earth. As long as Stephanie can remember, she was taught to follow in the footsteps of these good role models. These beliefs have sustained her through all her trials in life and given her the strength to carry on and not be depressed.

In her high school, nuns of all orders encouraged Stephanie "to keep the faith." There she learned that no matter what your religious denomination is "it should be your guiding light." Stephanie practices her faith throughout the day. Every morning she starts with a small prayer:

"Thank you for keeping me safely throughout the night and for allowing me to have such a good night sleep – or not. If not, I will take a nap in the afternoon." Stephanie is thankful, "I am so fortunate and so rich!" But her friends and sister would say "You are so crazy." Stephanie means "being rich in friends, rich in health, and rich in family." But her sister thinks, "You are not rich", because the sister's god is money.

Stephanie says little prayers after breakfast, after she showers, when she gets in her car: "PLEASE get me to my destination safely and safely home." Sometimes she talks to God when she is driving and throughout the day. In the evening she prays for everyone who needs a special prayer ending with a "Hail Mary," and then she goes to bed. Her faith is always with her, guiding her through all the trials and tribulations of life.

Research on faith has demonstrated its positive effects on health in people. For example, a study at Duke University offered 150 patients with acute heart problems to prayers after surgery. The results showed that 20-30 percent of the patients had a decrease in negative aftereffects (Williams, 1999). Another study conducted by Israeli researchers showed that Orthodox Jews who pray often had better cardiac health than non-believers. Numerous other studies repeatedly demonstrate the healing powers of prayer and faith, with patients needing less medicine than patients who do not pray (Williams, 1999). Researchers in North Carolina documented that people over 65 years of age who attended religious services regularly had lower blood pressure than those of similar age who did not (Williams, 1999).

It is not only physical health that is positively impacted by prayers and faith, but mental health as well. The book, *Faith and Mental Health: Religious Sources for Healing*, shows how participation in Mennonite and African American church activities has a positive effect on people. Clergy provide mental health counseling to the members of their churches, which also has a positive effect on people (Koenig, 2011). In general, it has been found that religious faith enables a person to make sense of difficult situations and this capacity decreases anxiety and creates hope (Maurer, 2008). Health care professionals and psychologists often encourage patients to recite prayers during illness and other suffering. It is encouraged because it helps patients to see past their troubles and free themselves from distress. This approach makes prayer the perfect companion to medication and rehabilitation (Plante, 2011). The benefits of combining health and prayers/faith/religion include:

- + leading a more meaningful life
- + learning coping skills to deal with health issues
- + providing hope
- + providing a larger perspective
- + lowering blood pressure
- + relaxation
- + social contacts

Stephanie also has made many friends at "St. Paul" over the years. When she met some of the church members she had never spoken to before and saw them at the *SilverSneakers* Fitness program, she was amazed how they then came up to her and became friendly. This setting has greatly enhanced her social circle. Now, when she goes to church she is among friends. "In *SilverSneakers*, there are no strangers. Everyone has to introduce themselves to the others; and at Christmastime there is a collection for the teacher, who provides these wonderful physical and mental experiences for the whole group."

The best friends agree on what is most important in life. Mutual support in tough times and the joy and laughter of the exercise session have bound them together. "United we conquer and do not think about our age. We feel good and try to make the best of every day."



#### **REMOVING BARRIERS TO EXERCISE**

Unlike the best friends, many elderly people are not well connected or taken care of. The greatest challenge for them is to get started in an exercise program. *SilverSneakers* has addressed various exercise barriers and has come up with the following solutions:

- + **Affordability:** fitness membership is free for adults over 65 years of age. In addition, social programs and health education are offered to its members.
- + **Fear/Intimidation**: senior-friendly services are in place with senior advisors and senior sensitivity. The class format provides peer support and applies to all fitness levels.
- Motivation: social programming induces participation in the program at all levels. Physicians are encouraged to motivate their patients and prescribe fitness/exercise programs.
   Interaction with the instructors and other class members provide constant encouragement.
- + **Transportation/Location/Accessibility**: 90% of urban and suburban members reside within 10 milies of at least one location; 80% of rural members reside within 15 miles of at least one location. Abundant parking is helpful. And carpool programs are in place.
- + **Health Concerns**: the classes apply to all fitness levels and are nonimpact (no pressure on joints). Members are encouraged to exercise at their own pace. Physical approval is requested.
- + **Safety**: locations are evaluated on safety, cleanliness, senior-friendly service, and easy accessibility.
- + **Cultural Boundaries**: cultural barriers to enrollment and participation are researched before the program is offered.
- + **Weather**: programs are held inside climate-controlled environments. *SilverSneakers* video is available for members to use at home when weather prohibits driving to the location.
- + **Time Conflicts**: programs allow accessibility at all open times, not just peakhours. Class times are adjusted based on demand.



EXERCISE FACILITY IN THE COMMUNITY CENTER - GREATER PLYMOUTH MEETING AREA

#### SUGGESTIONS FOR IMPROVEMENT IN NEIGHBORHOODS

LOCATION - LOCATION - LOCATION

Where one lives can be the barrier to exercise or spending time in nature. Americans are too dependent upon their cars. In Europe, there is more public transportation, trains and buses, which makes it easier to get around, especially for older people. However, that is not the case in the US. Significant environmental improvements in neighborhoods can make a difference here as well.

The three best friends' suggestions for neighborhood improvements include:

- + Sidewalks, so that we can walk more and leave the car behind.
- + Near-by parks and shopping that are accessible without a car.
- + Increased public transportation by bus, train or metro.
- + Safe neighborhoods where one can walk and not be afraid of bullying or worse.
- + Access to libraries and the internet. "You need to be well informed and be active in your community and VOTE!" "Computer use is important, including Wii with the grandchildren."

Elaine tells us how her grandchildren liked to come by after school on their bicycles, but the neighborhood is no longer as safe as it used to be; so now she wants to see a parent drive them over for a visit. Polly, Elaine and Stephanie all agree that their neighborhoods were safer when they grew up. "It was safe back then. And the neighbors would all watch out for us. Our parents were not worried, nor did they care in whose house or backyard we were playing, as long

as we came home at dinner time. But times have changed, and with the on-set of the computers, our kids are less likely to spend time outside than in front of the computer inside. Technology has its good and bad. It is all about balancing and making sure that one does not lose sight of what is most important in life."

#### SUGGESTIONS FOR HAPPY AND HEALTHY AGING

The three best friends often review their health problems and discuss how to approach getting older or dying. They all agree that one first has to embrace the fact that we are all going to die. "Appreciate life every moment you can." If you have a positive approach toward aging, getting older is less fearful. Aging also provides the opportunity to be "authentic," to be who you want to be. Redefining old age and older people removes the stigma of aging. Suggestions for graceful aging (which is supported by research) include:

- + Stay positive, embrace the word "old" as meaning wise, intelligent and athletic.
- + Stay active to avoid heart and other chronic diseases and to nourish the brain.
- + Research shows that memory, learning and physical activity are connected.
- + We learn the world through the body; every age has its advantages.
- + Exercise 30 minutes a day (60 minutes is better) with a focus on aerobic, balance, core strength and flexibility activities, as taught by *SilverSneakers*.
- + The best exercise is what YOU love to do!
- + Exercise with others is important for social engagements, and it is more fun.

Stay active! Move! Walking, gardening, housework or yard work; no matter what movements, it all counts. Elaine, Polly and Stephanie conclude that everyone has to review their own health problems, consider the social and psychological dimension of the problem and commit to the solution that daily exercises maintain



health and fitness for you. They help each other to stay with their goals and celebrate the positive outcomes that come with it, such as a better functioning of their bodies and their brains (including memory and learning). "Hearing inspiring stories about older women can help re-frame your own story. And live life so that physical activity becomes a treat, not a chore!"

The poem by Mariah Burton Nelson (2010) sums up this BEST PRACTICE

Women who exercise Build bones and muscles, Less risk of stroke and less strain on blood vessels, Less diabetes, arthritis and fat, Less stress, Better sleep and better sex, How about that?

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# **CHAPTER FIVE**

Aging Well with Disability – The Power of Sports

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### Aging Well with Disability – The Power of Sports

When he was two years old, Eddy contracted polio from the outbreak of the polio epidemic in the 1950s. He was immediately hospitalized and quarantined for over a year. When his parents were finally allowed to visit, he did not recognize them and sought shelter with his familiar nurse. Eddy lost one leg and grew up learning to use crutches.

Coming from an athletic family, sport was heavily emphasized by Eddy's father, who had played semi-professional baseball in his youth. As a former Marine, he tried to teach his children to be physically active and mentally tough. His dad stayed physically active throughout his life, with no fitness centers around, living through the depression in the post World War II period. Playing handball and kickball on the street against kids in the neighborhood, Eddy was enjoying himself as much as the other kids, not "feeling much different," and certainly not feeling sorry for himself.

Every day Eddy is thankful that he had a dad who pushed him to persevere and always do better. He gives credit to his parents for their support and his achievements in sport and academics. He is a nine-time Gold and Silver Medalist in the Olympics, Paralympics, and the Pan American Games in power lifting, and broke 23 World Records; he also received a doctoral degree in Education. How did he do it all? And how does he master growing older with a disability?

#### **GROWING UP WITH AN "INCONVENIENCE"**

Eddy was born healthy but premature. His mother was a smoker and Eddy was born one month early in July 1949. In August 1951, when he was only 2 years old, a major polio epidemic swept the country. Eddy became severely paralyzed with polio, which spread from the legs to the neck. He was sent to the hospital for 6 months of quarantine. His parents were not allowed to visit for the six months. His

sister was only 1 year old, and they quarantined the whole family. Hot packs and range of motion were the treatments he received early on, which was called the "Sister Kanny Treatment from Australia." Both legs and one arm were affected,





but fortunately, the illness did not travel to Eddy's lungs. There was no medication at that time. This travelling virus went into the bloodstream and then shut down the central nervous system. Many people died and many

never came out of the hospitals, being enclosed in an "iron lung," which helped with breathing when you could not breathe on your own anymore.

In 1953/54, polio was finally eradicated when the SALK and SABIN vaccines became available. In 1952, Eddy came out of the hospital with crutches and a leg brace. He had to go to clinics regularly until he was thirteen years old, receiving various therapies. "Don't change the world for the kid; let the kid adapt to the world as it is," was his Dad's major mission in raising Eddy. "Go back and do this again, it was not good enough." Dad was pushing Eddy hard. His parents helped Eddy to regain his strength. "My parents were on the same page! Loving, supporting but firm, real disciplinarians. They were not as strict with the girls."

Despite his difficulties, Eddy was a happy child. However, when he reached the age of reason, the true impact of his "inconvenience had a boomerang effect. It comes to you later." It happened in 8th grade, when Eddy tried out for the football team, where he had played with crutches. Sports made him happy and gave him the feeling that he could do everything. In sports, he was always picked first. Then one day in 8th grade, his coach said to him: "what do you want?" Eddy said: "I want to get shoulder pads." And the coach replied: "You cannot play, you are crippled."

Up to this point, Eddy had adapted very well. He worked hard to become fit. Two years later, in high school, his coaches in rowing and football embraced him

and took him as a walk-on. That made him happy. Eddy was doing pull up bars, running in hot weather, and he impressed the coaches. When they asked him: "Do you want to play?" a resounding "Yes" was exclaimed and Eddy took the equipment and made the tackles!!!

His parents, and especially his dad, had been wonderful role models for Eddy. "Dad was vice president of a company in Philly. Then he lost his job in the 1950s when he already had five kids to feed, one being sick." Eddy did not grow up with money; and when he graduated with his Ph.D. from the University of New Mexico, he did not have the money to buy his parents a plane ticket to attend his graduation. But Eddy was taught well by his dad, "make the most of every situation," so he took the Ph.D. dissertation on a plane and brought it to his dad instead. Dad, in turn, wrapped his arms around him and his thesis. Sadly, his father passed away 5 months later. He was only 67 years old when he died of heart failure. But dad was the athlete – how could that be? Heart problems are part of their family history. In high school, Eddy's dad played baseball, track, football and basketball and was good at all of these sports. But he had to quit high school in his junior year in order to start work. Later, his dad joined the Marine Corps and served in World War II for four years. Eddy was his first child, and his dad devoted his time and energy ensuring that Eddy was given the same chances as the other four children.

Eddy saw his father participating in all kinds of sport while growing up. "Dad was

very athletic; he was ahead of his time." There were no fitness centers when dad grew up, but he knew how to stay in shape, playing semi-professional baseball and handball with the kids in his community. Even when he was married, his dad continued to stay physically active. He walked to his job several miles every day. And as a retired Marine, he knew the importance of staying physically fit and mentally active. He realized the value of sport and its relation to a healthy lifestyle:

*"If you stay in sport, you have friends for life, get an education from it, and have access to many* 



#### AGING WELL WITH DISABILITY - THE POWER OF SPORTS

other areas in life; you can travel and have lots of friends." Eddy's favorite quote by his father.

Following in his father's footsteps, Eddy built a gym in the back of his house when he was only 14 years old. Dad gave him the facility and helped set it up. 100 kids from the neighborhood ages 16-20 came out to train with him in the back of his house. That is where Eddy started weight training at a young age. After rowing and baseball in 6th grade, and playing sandlot football



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in 8th grade, weight lifting now became his passion. Other activities that "kept Eddy out of trouble" included: being a newspaper boy on bike and a member in the Cub Scouts, then Boy Scouts, and later the "Explorers," (an elite group in the Boy Scouts organization).

Growing up in the 1950s and 60s, Eddy could always be found outside, playing games such as handball and "half ball" (played with half tennis racket and sticks). These games could be played anywhere, no special field or court was necessary. Eddy also ran track at high school and tried out for the basketball team. He was so physically active that he never thought of himself as being physically not able to do what he liked best: playing sports. Hence, he was shocked when the high school basketball coach said to him: "What are you doing here? We do not accept cripples on the team." So far, Eddy had not experienced any set-backs in sports. In fact, because he was so good at it, he was neither an outsider nor was he different or disabled. He was just living with an "inconvenience."

Yes, I used crutches a lot, not all the time, and they were an aid in many sports rather than a hindrance. I outran everyone on the track team in middle school and high school. The crutches helped me to propel myself forward and do bigger leaps than the other kids could do. They admired me for my athletic prowess. And I felt like a star.

"Dad had it all – he had great people's skills. At parties he talked to everybody and he took me with him."

Eddy's father had a holistic approach to life:

- + Athletic prowess
- + Academic interests
- + Social competence
- + Compassion
- + Belief
- + Living in the Moment/Mindfulness

Living day by day is something Eddy's father learned while he was fighting in the war. There, you never knew whether you would still be alive the next day. Eddy adopted this approach to life, which has helped him cope with the many health issues he has been confronted with from early childhood. Compassion is another characteristic Eddy has adopted from his dad. He did not want to become a sales personlike his dad was, he wanted to go to college and help others. He was interested in working with sick people. When he went to the local hospital looking for work in the physical therapy program, they thought he had come as a patient. He got the job. There was one patient who could not talk, but had tremendous motivation to get better. Helping other people with more severe problems than Eddy faced gave him such a psychological boost that he decided to study the reasons behind all this.

#### **A PASSION FOR SPORTS**



Throughout his life, Eddy continued to participate in sports and made it to the highest levels – the Olympics, Paralympics, and the Pan American Games. In his sport, power lifting, the emphasis is mostly on upper body strength, and bench press is performed laying on your back. Eddy first participated in the Olympics in this event, but officials told him he had to move over to the Paralympic events. In response to legislation banning discrimination against Americans with disabilities, many competitive opportunities have arisen for athletes with physical and medical conditions. "The realization that they too can take part in this form of exercise is not only a step for improving health conditions but also presents motivation for continued efforts to stay fit" (Evans, 2010, 81).



There are several reasons why the Paralympic

Movement has grown since Sir Ludwig Guttman developed it in England in the 1940s:

- 1. Sport is an effective means of augmenting rehabilitation outcomes for people with disabilities.
- 2. People with disabilities have a right to participate in sport and should have the same opportunities as others.
- 3. Paralympic Sport is elite, exciting, and inspiring (Vanlandewijck & Thompson, 2011).

Eddy benefitted from this movement and participated in the Paralympics when it was still in its infant stage. Many sports have been added, including winter sports, and athletes are now participating from all over the world. In fact, the ties between the Olympic and the Paralympic Games have become so strong that eventually the Paralympics will be recognized as "the disabled men and women's equivalent of the Olympic Games" (Sir Ludwig Guttman's vision realized, see Vanlandewijck, 2011, 17). The Paralympic Movement has opened the door for many athletes to participate in competitive sports at its highest level. Eddy is most grateful that he had these experiences in his life. They still provide meaning and purpose for him, and they keep him going: physically, mentally and emotionally, he is an ambassador of sports for people with disabilities.

"There are more opportunities for the accomplishment of personal goals through sport than in many other aspects of life, and sport certainly can change the way other people see us. For some persons with disabilities, competitive sports provides a vehicle for leveling out some of the inequalities that are faced day-by-day. But for everyone it is thrilling, fun and satisfying" (Bailey, 2008, 1). Eddy has experienced self-realization through competitive sport. He has achieved personal determination and explored his own boundaries. The new Paralympic motto embraces what Eddy represents, a "Spirit in Motion." His force and determination in life are admirable, and he touches the hearts and challenges the minds of the people he talks to, educates, and councils. A highly sought after speaker and teacher, Eddy – although retired from being a Physical Education teacher – is more active and involved in physical activity, lecturing, and travelling than ever before. The motto "use it or lose it" represents his drive.

It was not reading or music, but picking up a football and being out with the kids playing sports that inspired me. Sport was my PASSION and still is. Because of sports and the coaches I encountered, I was able to go to college. Sport represents the entry for many possibilities in life. Although I did not participate in organized sports during my college years, I always worked out. There I started to lift weights, formed a club, and later competed in the Paralympic Games.

Participation in sports with a disability at the highest level presents additional challenges. What if the leg brace broke? Eddy's determination and focus helped him to overcome these fears, and he was strong. Walking on crutches for 17 years, he had developed very strong upper body muscles. "I could get onto the rings and do Iron Cross and all." With the concern that he had only one good leg and that it was not to be injured, he avoided certain sports, such as gymnastics, although parallel bars and pull ups were really easy for him.

In 1995, when Eddy was already in his 50s, he swam the English Channel. Training for several years, he followed his friend and mentor's advice. He raised money and registered to swim from England to France. Eddy would have been the first person with a disability to accomplish such a high goal had the weather conditions been in his favor. "You need the wind at your back and warm waters in order to make it in a day." However, after waiting for ten days, Eddy's "waiting time" was up, and he had to choose to swim


across the English Channel against all odds, in freezing water and high currents against him, or just give up. And there was the charter of the two boats with a crew of ten people that must accompany the swimmers, the hotel bills and the plane fares. Eddy is no quitter. So, of course he jumped into the ice cold water without a wetsuit, with only fish oil all over his body, as permitted. He almost made it and still became a hero, although his name is not listed in the Guinness Book of World Records.

#### HEALTHY AGING – REGULAR EXERCISE

Multiple studies have proven that physical activity and exercise not only help with maintaining weight, but also with the person's physical and emotional state of well-being (see Volkwein-Caplan, 2004). Exercise can help anyone but can be particularly helpful to people with disabilities (Disabled World website). Aerobic exercise, performed about 3-5 times per week for 20-30 minutes, has been found to be beneficial. Group paricipation is also helpful because it increases social interactions.

Aerobic exercise also increases mental function and improves emotional stability. Why? When a person exerts energy, endorphins are released. The heart rate increases, as well as breathing rate and blood pressure. Exercise increases the transport of oxygen and nutrients to the muscles of the body. Exertion puts the body into an excited state, boosting brain activity and lifting one's mood. As one is physically releasing energy from the body, one is also releasing emotional energy that has been built up. Exercise can help to change one's focus to other things besides life's problems. These are the immediate effects of exercise.

As we have stated repeatedly throughout this book, there are also many longterm benefits of exercise for the human body. Physical activity is something to look forward to, whether one exercises once a week or five times a week; it provides structure and purpose, which can help in multiple ways. If there is group participation, this is an important time for social interaction, which in turn boosts positive emotions. Another way exercise can help a person mentally is by increasing confidence levels. Seeing improvement also helps with body image. As we age, quality of life often decreases. Our culture tends to have a negative view of aging, making the process even more difficult. Whether it is due to a decrease in mental capabilities or to physical limitations, all aspects of life are affected. Living alone or living with a disability is not easy when a support system is unavailable. Physical restrictions might not make it easy to find a physical activity that is suited for older people. Exercise programs need to be very personalized. However, aerobic activities are very simple to learn and perform, e. g. walking on a treadmill or using lightweight dumbbells. A set time to exercise each week helps to increase quality of life by giving your life a sense of purpose. The social interactions and mental benefits that come with exercise are important because they tend to decrease during the aging process.

Eddy wakes up early every morning before dawn to get ready for his big workout. After driving to the gym in the dark, he jumps in the pool, where he swims laps for 1-2 hours at a time five times a week. When that is finished, he goes to the weight room to lift weights, addressing all major muscle groups. That takes another hour. Then he has a well-deserved brunch. He eats dinner early because he wants to adhere to the rule "no food four hours before one goes to bed." Swimming is Eddy's aerobic activity, which suits him perfectly, since there is reduced gravity in the water and no pressure on the joints. Eddy swims like a fish in water.

Exercise is especially important for people with disabilities because they are more likely to have a sedentary lifestyle, with additional health issues later in life that could have been prevented (Hagen, 2011). Over the last thirty years in the United States, the population of overweight and obese people has reached epidemic proportions (U.S. Department of Health and Human Services, 2008). About one third of the US population is currently overweight and one third is obese. Epidemiological studies show an increase in mortality associated with obesity. Approximately 300,000 deaths a year in the US are currently associated with being overweight and obese (Allison et al, 1999). Weight problems are associated with an increased risk for developing various medical conditions including cardiovascular disease, certain cancers, high blood pressure, arthritisrelated disabilities and type 2 diabetes (US Department of Health and Human Services, 2008).

CHAPTER FIVE

AGING WELL WITH DISABILITY - THE POWER OF SPORTS



Obesity is associated with an increased risk of illness (US Department of Health and Human Services, 2002):

- + premature death
- + high blood pressure
- + type 2 Diabetes
- + complications of pregnancy
- + heart disease
- + menstrual irregularities
- + stroke
- + hirsutism (excess hair)
- + hypertension
- + stress incontinence
- + osteoarthritis
- + increased surgical risk
- + sleep apnea
- + psychological disorders (depression)
- + asthma, breathing problems
- + psychological disorders (depression)
- + cancer (endometrial, colon, kidney, esophageal, and postmenopausal breast cancer)

#### THE SOCIAL GEOGRAPHY OF HEALTHY AGING

Regular physical activity and a nutritious diet are key to maintaining a healthy weight. In order to maintain a healthy weight, there must be a balance between calories consumed and calories expended through metabolic and physical activity. Although being overweight and obesity are caused by many factors, in most individuals, weight gain results from a combination of excess calorie consumption and inadequate physical activity. Even though a large portion of a person's total caloric requirement is used for basal metabolism and processing food, an individual's various physical activities may account for as much as 15 to 40 percent of the calories one burns each day. While vigorous exercise burns calories at a higher rate, any physical activity will burn calories. For example, a 140-pound person can burn 175 calories in 30 minutes of moderate bicycling, and 322 calories in 30 minutes of moderate jogging. The same person can also burn 105 calories by vacuuming or raking leaves for the same amount of time. Whether people engage in functional fitness activities, such as gardening or cleaning the house, or participate in prescribed or organized fitness activities, they all help to maintain a healthy weight.

Aerobic exercise also helps with depression and anxiety. Studies have shown that exercise is a good medication for fighting depression. It is free and does not have the harmful side effects of drugs. Studies with patients engaging in 20-30 minutes of aerobic exercise reported that they felt more relaxed and calm. No medication was needed to achieve those results. There are multiple theories about what exactly it is about exercise that helps people deal with anxiety and depression. Some believe that it is the release of neurotransmitters that brings a natural calm to the body, while others believe exercise is a lot like "taking a warm bath;" it relieves tension and relaxes the skeletal muscles. Yet another belief is that exercise simply takes the person's mind off of whatever might be precipitating stress in his life. Regardless of what the underlying reason is, regular aerobic exercise has the potential to relieve depression and fight anxiety. Recognized benefits of doing regular aerobic exercise include (see www. disabledworld.com):

- + Strengthening the muscles involved in respiration, to facilitate the flow of air in and out of the lungs.
- + Improving circulation efficiency and reducing blood pressure.
- + Increasing the total number of red blood cells in the body, facilitating transport of oxygen.
- + Improved mental health, including reducing stress and lowering the incidence of depression.
- + Strengthening and enlarging the heart muscle, to improve its pumping efficiency and reduce the resting heart rate.
- + Toning muscles throughout the body.
- + Maintaining healthy body weight.

The National Institute on Aging and the National Institute of Health provide information about how to exercise, eat well and establish a regular exercise program. People with a variety of disabilities and activity limitations can easily adapt, tailor and use this information, which is posted on their websites. In addition, exercise videos and books can help anyone to get started on the healthy aging path.

## **HEALTHY AGING – SOCIAL AND MENTAL STIMULATION**

Besides regular exercise, Eddy likes to read, interact with people (including online) and get involved in community work. He also likes to coach young people.

Eddy also loves to travel. In fact, there is hardly a country he has not visited. He is a popular speaker at national and international conventions and still works closely with the Olympic and Paralympic organizations. Eddy's research interests also include the oral history of World War II Marines. His picture can be found all across the United States in various Halls of Fame. While travelling and lecturing keep him busy, he has friends all over the world who have become his extended family. This lifestyle has helped Eddy to enjoy a high quality of life and maintain good health despite his challenges. "Stay around positive people," are the words of wisdom Eddy never fails to give.



Even when he was bed-ridden after his stroke, Eddy did not miss a day of communicating with his friends all over the world. Thanks to the internet, no one has to miss out on communication any more, regardless of age, ability or disability level, or socio-economic background. "The power of the internet makes us all equal," Eddy proclaims.

Extensive research shows the positive effects the internet can have on helping people to connect, especially as they get older and cannot displace themselves easily. This is especially important for people with disabilities (Gates, 2000). This form of communication is an inexpensive way of bringing people closer together. Senior citizens can also buy computers to read more in a more convenient way. The number of seniors using email is rising (Kristan, 2011). No matter the age, the internet can serve as an outlet for communication and independence. This leads to an increase in the quality of life and provides greater freedom and mobility (Wheeldon, 2004). In the coming decades, a rapid increase in internet use among people over 80 is expected. These seniors will live a fuller life (Alm, et al., 2002).

Mental and emotional health are very important in the aging process. Joining social networks on the internet or volunteering are two examples of how people can ward off mental and emotional instability. Spending time with people increases one's overall well-being and enables a person to feel more fulfilled. Being a supportive listener for others and having your own group of people to talk and listen to is cited as an important factor in maintaining good emotional stability (Smith, et al, 2011). The internet can make it easier for people to maintain social connections.

#### Positive Effects of the Internet on the Aging Process

- + Communicating with friends and family
- + Social network
- + Convenient and inexpensive
- + Freedom and mobilization
- + Greater independence
- + Fuller life
- + Mental and emotional health

# **HEALTHY AGING – A HOLISTIC APPROACH**

Eddy believes in a holistic approach to life. These are four key concepts he lives by:

- 1. Spirit: "God is in charge. You have to believe!"
- 2. Physical and Mental Balance: "Condition yourself physically and mentally."
- 3. Determination: "Work ethic is very important."
- 4. Social Support Family and Friends: *"Stay away from toxic people. Positive input gives positive output; negative input gives negative output."*

Besides his dad and coaches, he also had a wonderful role model in college. A professor, Dr. Russell Sturzebecker, who took him under his wing, encouraged him. It is up to you to educate yourself, he was told, and you have to ask questions. Up until then he only had a passion for the physical, but soon Eddy would develop a passion for the mental as well. *"A sound mind in a sound body, and add the spiritual part!"* A good teacher/coach/professor can help you to discover yourself.

Happiness is also important in life. According to Eddy, that is directly related to health.

Health provides happiness, a lack of happiness affects your health. Your mood is influenced by your health and vice versa. Health is wealth, and health is freedom. Health affects your freedom of movement. As long as I have good health and maintain a sense of freedom, freedom of movement and no restrains, I can go where I want.

Health and freedom are very important to Eddy. Health and freedom are his base for happiness. The spiritual and social aspects of life are also very important. When Eddy suffered from a stroke last year, he spent months in rehab to enable him to move around without the assistance of a wheelchair or other people. The connection between health and freedom was obvious to him. He trained very hard and was determined to rehabitate himself. Eddy knows his physical limitations



but wants to maintain the quality of his life. Accordingly, he exercises, eats right, takes his medicines, and still enjoys that freedom of movement.

Eddy's holistic approach to life also includes music and the arts. Besides regular exercise, he reads, attends lectures, and enjoys music and theater performances. Although he does not go to church services regularly, his favorite advice to everyone who knows him is: "God is in charge." With this attitude, he has done well in life "placing the stress on someone else's shoulders." Looking back, Eddy has learned that one cannot control one's own destiny; one can aid it, but ultimately one is not in control of every aspect in one's life.

As a nine-time gold medalist in power lifting, and as a regular exerciser in swimming and weight training, Eddy offers the following advice for a healthy aging process:

- + Eat healthy;
- + Exercise the body and the mind regularly;
- + Find environmental support (parents, coaches, teachers/professors);
- + Use parks and fitness and sport facilities;
- + Get involved, help youth and give back to the community.

In sum, engaging in regular health-related exercise, as well as mental and social activities, greatly increases quality of life at any age. As people become less mobile and more restricted in their movements, the place and space they inhabit can greatly aid or hinder a holistic approach to life. As Eddy ages, because of the disability he suffered at an early age, he is aware that he needs to live in an environment in which he can get the physical, mental and spiritual stimulation he needs. As a consequence, he wants to sell his vacation home in the New Mexican desert and move to a more urban environment that offers access to fitness facilities, including a swimming pool. Another thought on his mind is the harsh winter in the greater Philadelphia area, which does not give him much freedom of movement. Hence, the best place to live for him would be a warmer climate like New Mexico, but near a city. Making the right decision on this issue is Eddy's next big challenge.

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# **CHAPTER SIX**

Walking to Fitness in Rockford Park

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# Walking to Fitness in Rockford Park

Walking is a perfect form of exercise. Even walking 10 minutes two times a day can make a difference in one's health and happiness. Such relatively modest rates of exercise can lead to significant improvement in both physical and psychological health. In fact, of all of the possible ways to exercise, walking is perhaps the easiest and most accessible.

- + Walking is free; it does not require expensive equipment (only a good pair of walking shoes).
- + It does not pose stress and strain on the body.
- + It is possible to walk alone or to walk with a companion, or a group.
- + Walking leads to socializing and a sense of community.
- Many people find that walking with a pet requires taking more regular walks.



In this chapter, we will present the stories of two women who were having health concerns and have benefited physically, socially, and psychologically from beginning a regular walking program.

### **THE STORY OF LISE**

Lise is 72 years old. She lives in a cozy and comfortable one story house in Wilmington,

Delaware. She loves the small town feeling of her adopted city and the easy access to New York City where Lise's two children live. She is 20 minutes from a large airport; she feels that if she had the opportunity, she could travel again. She is also conveniently located near shopping, her doctors, and drug stores. Her community has a large lovely park where people of all ages walk regularly.

#### WALKING TO FITNESS IN ROCKFORD PARK

While she was very active as a child and young adult, Lise has not exercised regularly for some time. She spends her days taking care of Ari, her husband of almost 60 years. Ari has had mild dementia. He is not completely disabled, but his loss of memory is stressful for Lise and the daily care she provides him,



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making his meals, reminding him to bathe and dress, driving him to the doctor, makes Lise so tired that she has not taken time to exercise or socialize. The burdens of care giving have had an effect on Lise's health and well-being.

The case of Lise and Ari is not unusual. Now that people are living longer, an increasing number of older men and women are developing dementia. Statistics indicate that:

- Alzheimer's is the 6th leading cause of death in the US. +
- It is the only cause of death among the top 10 causes for which there is + no prevention and no cure.
- 5.4 million Americans are living with Alzheimer's. +
- By 2050, more than 16 million will have the disease.

#### More Facts about Dementia or Alzheimer's

- Alzheimer's disease is the most common form of dementia. +
- It is a progressive disease leading to a gradual and complete + deterioration.
- It affects social, affective, cognitive, and physical abilities. +
- Death generally occurs 8 to 10 years after diagnosis. +
- The risk of developing Alzheimer's increases with age. +
- Two thirds of victims are women. +
- A person develops Alzheimer's every 69 seconds. +
- Caring for those with Alzheimer's is expected to cost about \$183 +million annually.



# THE BURDENS OF CAREGIVING

- + It is estimated that as many as 30 to 38 million American adults provide regular ongoing informal care or arrange for formal care for a family member or loved one.
  - + Informal Care: Unpaid caregivers, support of family and friends.
  - + Formal Care: Community-based services or programs, paid caregivers.
- + 75% of these caregivers are women, mostly like Lise over the age of 65.
- + Many caregivers are coping with personal health concerns.
- + Caregiving has a negative effect on the health and happiness of care providers.
- + Caregivers suffer emotionally and physically.
- + More than 60 % say that they are stressed.
- + More than 30 % suffer from depression.

www.apa.org/topics/alzheimers/protect.aspx

Millions of people are providing formal and informal care for a family member or loved one: The chart on the right lists the number of caregivers in the United States. Caregivers are represented in each state in the United States and D.C. (rounded to the nearest thousand).

#### WALKING TO FITNESS IN ROCKFORD PARK

Alabama	188	Louisiana	181	Ohio	435
Alaska	16	Maine	51	Oklahoma	127
Arizona	201	Maryland	188	Oregon	136
Arkansas	125	Massachusetts	234	Pennsylvania	484
California	1,233	Michigan	402	Rhode Island	39
Colorado	162	Minnesota	196	South Carolina	183
Connecticut	126	Mississippi	148	South Dakota	30
Delaware	33	Missouri	203	Tennessee	252
Florida	639	Montana	37	Texas	853
Georgia	396	Nebraska	61	Utah	101
Hawaii	34	Nevada	85	Vermont	18
Idaho	53	New Hampshire	46	Virginia	280
Illinois	386	New Jersey	322	Washington	204
Indiana	235	New Mexico	65	West Virginia	94
lowa	106	New York	721	Wisconsin	200
Kansas	94	North Carolina	357	Wyoming	18
Kentucky	171	North Dakota	19	D.C.	19

Alzheimer's Disease Facts and Figures. (2009). [Chart of Alzheimer's and Dementia Caregivers, March 3, 2011]. *AARP.org Bulletin*. Retrieved http://refresh.aarp.org/relationships/caregiving/info-03-2011/alzheimer\_caregiver.html

Like many other people who care for a family member or friend, the stresses of providing 24-hour care have threatened Lise's health and happiness. In the past three years, she has gained almost 20 pounds. She knows she should eat better, that she should exercise more, but she is too tired most of the time to do anything more. When she is tired and stressed, she eats; food has always provided her with comfort. When she was active, this was not a problem. She does not binge, or eat large amounts of food; she simply enjoys eating.

Lise grew up during and after World War II in Germany. Her early memories are filled with hunger. She was always longing for food. Since that time, food has provided her with comfort. It comforts her when she thinks back on her early life as a young girl in Germany. "Whenever I remember those hungry times when I was small, I cry," Lise says. "I remember my little sister, pleading for food. One day, she picked an old piece of cheese out of the garbage and ate it. It made her sick. The memories of hunger will be with me until I die."

Privation marked the early years of Lise's life. She was born in Germany, several years before the outbreak of World War II and spent much of her difficult childhood in wartime and postwar Germany. Her early memories are filled with images of herself and her sister Elli at home, alone in a top floor apartment of a big house on a riverbank. The house was usually dark and they were usually very hungry.

The family's health suffered from the food shortages of the war. Lise's mother would give her starving daughters most of her own food. Lise remembers her mother taking a loaf of bread and cutting it into equal pieces for the three of them. After the girls had wolfed down their portions with a piece of cheese, their mother would cut her own share in half and say casually: "I ate earlier at work and am not



hungry. Take mine." As a result of constant hunger, her mother had digestive problems for the rest of her life.

Lise learned to associate food with comfort. Until now, she has never been heavy or had any health problems, so eating when she wanted comfort was not a problem. Now, in later life, as she cares for her husband, she eats. As a result she has lost the slimness she always had and has become heavy.

She is not "fat," but the weight is threatening her health. On a recent check up, her bloodwork indicated that she has borderline diabetes. Lise is not alone in seeking comfort in food. The saying "comfort food" is a good example that most people associate food with home, family and "comfort." Problems arise when one eats the wrong kind of foods for comfort, or too much food. It is important to find comfort in a variety of ways, not just by eating.

After a lifetime of being thin, Lise is now embarrassed by her weight; she does not like her aging body, and her health is at risk. In another chapter of this book,

we discuss age and body image and some of the problems that can arise when women age, gain weight, and feel helpless to change their habits. Lise is certainly not alone. During her recent check up, her doctor warned that her weight was placing her at risk for heart disease and diabetes. Lise has also been reading that the stressful effects of providing daily ongoing care for someone, no matter how much you love them, can be helped by regular exercise.

#### Physical health consequences of caregiving

- + Increased blood pressure
- + Decreased immune system functioning
- + Increases in cardiovascular disease
- + Higher mortality rates

#### Psychological health consequences of caregiving

- + Depression symptoms (30 to 50 % of care providers, 30 to 40 % suffer from depression)
- + Forty to 50 % take medication for anxiety and sleep disorders
- + Caregiving can lead to feelings of isolation and loneliness

Lise decided to take action. Her neighbor walks every day in the large park near her house. She has often asked Lise to join her, telling Lise that once she starts, she will be addicted. Before she can change her mind, Lise walks next door and asks Sonja if she can walk with her the next morning. In the afternoon, Lise buys a pair of walking shoes. Her doctor has told her that walking would be good for her, so she knows there is no medical reason she should not walk. Her doctor has also said that Ari should walk as much as he can. Lise is determined that in the afternoons she will encourage Ari to take short walks around the block. Lise figures that even a short half-mile walk would help Ari feel better. Bed rest and a sedentary lifestyle have negative health consequences. In one study, three young, healthy men were put on bed rest for just 3 weeks. At the end of this short time, their physical health had already declined, with an increase in body fat, a decrease in muscle strength

THE SOCIAL GEOGRAPHY OF HEALTHY AGING



and higher heart rates and blood pressure (www.harvard.edu/ *Newsweek*, 2011).

The implications of this small studv are tremendous. Given that chronic illnesses increase in later life, it is highly likely that many older adults will be bedridden for a time. One way to reduce the likelihood of this happening is to walk, walk, and walk. Walking, like other physical activity,

boosts the immune system, reducing the chances of developing acute or chronic illnesses. In one study reported in *Live Science*, people who exercised at least five times a week were less likely to catch a cold, and if they did, their cold symptoms lasted for a shorter period of time than those who did not exercise (*Health and Science*, 2010).

Any walking is beneficial, and as we have emphasized several times, exercise is beneficial to not only the body, but it also benefits cognitive skills, problem solving, memory, and the management of emotions. According to the American Psychological Association, exercise can increase and stimulate neural connections in the parts of the brain that control memory decline (www.apa.org/ topics/alzheimers/protect.aspx). Lise even read an article in the newspaper that stated walking may help ward off Alzheimer's. The article emphasized that what is good for the heart is also good for the mind. Participants over the age of 70 who walked regularly were less likely to develop Alzheimer's (Tanner, 2004).

The very next morning Lise joins her neighbor, Sonja, for a morning walk. Sonja is very happy to have company. Lise starts small, walking only 15 minutes the first

day. She likes it so much that, very soon, Sonja and Lise begin to walk together for one hour, 4 to 5 times a week.

#### WALKING FACTS

- + The average person walks about 1 mile in 20 minutes
- + Walking at a moderate pace for one mile burns approximately 100 calories
- + In one hour, Lise and Sonja burn about 300 calories

In three months of walking, Lise loses 12 pounds. She and Sonja have also become good friends; they have lunch one day a week at a local cafe. By walking, Lise has also met several other neighbors, including one other woman who also cares for her husband. Sharing stories of care with this new friend has been helpful to Lise. Occasionally in the afternoon, the two caregivers have managed to encourage their husbands to take a stroll in the park and then get together for afternoon coffee and cake. Lise feels much better physically than she did three months ago. She is also much happier. The hour away from Ari every morning is helpful for them both. Ari is fine in front of the TV by himself for such a short time. Lise only wonders what took her so long when such a relatively small change could make such a big difference in her life.

### THE STORY OF JOAN

The scratch at her door is unmistakable. It is time to get up. Joan slowly gets out of bed, does five minutes of stretching, and turns the knob of her bedroom door. Her eager dog pushes and the door opens. Joan, a psychotherapist, who was widowed ten years ago, is seventy-four years old. She lives alone with her 3-yearold lab mix Baron. She finds comfort in the companionship and predictability of her routine with her dog. Joan is a busy and active woman. She is a practicing psychotherapist, loves to work in her small garden, and enjoys a wide circle of friends; she travels to see her son and sister twice a year. She is very grateful for her health and happiness at this stage of her life. Too often she has seen her friends, people her same age, who are ill, disabled, and housebound. Joan loves



her job but in recent years she has reduced her patient load so that she can have more time to walk, read for pleasure, and socialize with her friends.

Every morning Joan and Baron follow a routine. They wake up early and go into the kitchen. Once in the kitchen, Joan feeds Baron, makes herself a cup of tea and eats a bowl of cereal while she reads the newspaper. After about 30 minutes, as Baron circles eagerly, indicating he is ready to go out, Joan says, "Get your leash!" He runs in circles then darts for the door. Baron takes up a proud trot ahead of her as Joan exchanges pleasantries with a neighbor. At many of the houses they pass, they are greeted with a bark from the dogs living in this animal-friendly neighborhood. Joan is familiar with most of these dogs and their respective owners. Many of the introductions have been made while she was walking Baron. Joan believes that people are much friendlier when Baron is with her. They stop and pet him and chat. She is also familiar and friendly with most of the people she encounters at the dog park where she heads every morning.

After walking a few blocks through the neighborhood, the two follow a path leading to the park and woods. The trail runs along a small stream then departs, climbing toward a vast field, the dog park. With the dog park in sight Joan senses Baron's excitement exclaiming, "We're here boy!"

Baron quickly makes his rounds announcing his presence to his fellow canines as Joan sits on one of the picnic tables chatting with her friends. After Baron has played for 30 minutes, they set off for a forty-minute, two-mile walk, around the perimeter of the park. Then they return home for breakfast, a shower, and a busy day of working, a bit of gardening after work, emailing with her children and grandchildren, and a weekly dinner with a small group of friends at a local Italian restaurant. Joan realizes how fortunate she is to have a great dog, an interesting profession, and great neighbors and friends.

People like Joan who exercise regularly tend to stay free of even minor disabilities for up to 7 years longer than those who do not exercise. Exercise, especially for older people like Joan, can be beneficial in keeping them independent and mobile. Walking in particular can strengthen bones and muscles, improve balance and maintain a healthy weight. Given that motivation can sometimes be a problem, having a pet that needs to be walked is one way of staying physically and socially active.

# WALKING WITH YOUR DOG CAN LEAD TO BETTER HEALTH AND MORE HAPPINESS

Studies have shown that dog owners get twice as much exercise as those without dogs. Dog owners have been found to walk an average of 30 minutes with their dogs, which is consistent with weight loss exercise recommendations (about.com).

#### The benefits of dog walking

- + An increase in regular physical activity
- + Weight loss or maintenance
- + Dog walking promotes social interaction
- + Having a dog provides motivation to walk
- + A dog can make it safer to walk
- + Physical contact with your pet can have physical and psychological benefits, such as reducing high blood pressure
- + Pet companionship can reduce isolation and loneliness improving psychological health. Pets can have benefits for entire neighborhoods and communities. Pet ownership can lead to people greeting, talking, getting to know each other, relating in a more friendly community feeling

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# THE SOCIAL BENEFITS OF WALKING WITH A DOG

The benefits of walking a pet for 30 minutes a day seem numerous. According to several research studies, walking the dog a few times a week could offer many long-term health benefits, such as improved cardiovascular fitness, lower blood pressure and cholesterol, all factors that keep people healthy as

they age. People who walk dogs often meet others; they are seen as friendly and caring.

As the list on the previous page indicates, dog walking can even impact neighborhoods and communities by increasing social engagement, cohesion and networking. Walking regularly with a pet can help people get to know their neighbors, make friends, feel less lonely and isolated. For people like Joan who live alone, pets serve as companions and sources of support.

# THE BENEFITS OF DOG WALKING: WHAT THE RESEARCH SAYS ABOUT AGING AND COGNITIVE FUNCTION

Brain function is related to physical activity and the relationship is very important for older adults. In aging populations, cognitive executive functioning sometimes begins to deteriorate. Keeping active in mid-to-old age can be beneficial. Studies have indicated that fitness training benefited cognitive abilities, such as planning and abstract thinking (Colcombe and Kramer, 2003).

Joan remains active and healthy in her advanced age. Her planning and abstract thinking skills are well intact. She has a well-planned daily routine, works hard, and is able to accomplish what she plans to do. People of any age would be pleased to be able to do this.

Studies have supported the finding that exercise can ensure successful brain function. Deslandes et al. (2009) investigated the impact of exercise on the

release of neurotransmitters and cerebral blood flow and ultimately how that affected brain function. The findings suggest that exercise promoted successful brain function.

People who stay active are also better able to learn new skills (Eggermont, Milberg, Lipsitz, Scherder, & Leveille, 2009). Participants in one study who were highly active tended to score higher on learning tests than those who were more sedentary, suggesting that exercise and brain function are related. These findings help to explain Joan's high level of cognitive function as a potential result of her highly active lifestyle.

## WHAT THE RESEARCH SAYS ABOUT PHYSICAL ACTIVITY, AGING, AND WELL-BEING

As we have mentioned many times before there are numerous benefits to exercising. These benefits are physical, social, and psychological. In one study conducted by Fox, Stathi, McKenna, and Davis (2007), participants started a 12-month exercise program. Although the exercise program was structured, individuals varied in the time they were able to spend exercising, and also how much energy they expended during exercise. These different levels of activity were measured by recording how much time each person spent. The impact of this program on their well-being and quality of life was assessed through questionnaires and interviews.

Results indicated that the more active people who exercised more tended to have an overall greater well-being and quality of life. In another similar study, physical activity was positively related to overall wellbeing and made people feel happier and more relaxed (Rennemark, Lindwall, Halling, & Berglund, 2009). Joan's well-being and quality of life seem to be quite high. She goes about her day with a sense of independence and still does many of the activities she has always done. She works; she socializes; she walks her dog.





# WHAT IS THE RELATIONSHIP BETWEEN PET OWNERSHIP AND AGING?

Pet ownership is thought to have a positive influence on aging for many reasons. Like the case of Joan, pet ownership tends to keep people active, it makes them feel more safe and secure, it provides companionship, and leads to an increase in social activity; it makes people feel happier with their neighborhood and community (Putnam, 2000).

Joan experiences many of the benefits associated with pet ownership. Taking Baron for his daily walk is integral in maintaining a healthy level of physical activity. The companionship of Baron mitigates her feelings of loneliness, and she finds comfort in their established routines and the love and loyalty they share. Baron allows Joan to feel safe when out walking in the neighborhood. Pets, especially dogs, allow individuals to get exercise they may otherwise be too fearful to engage in. There are also research results supporting these findings. Wood, Giles-Corti, Bulsara, and Bosch (2007) explored the effect companion animals have on aspects of social capital stating:

"Animal presence can facilitate human social contact. It can increase or trigger a conversation between strangers, lead to a closer connection between acquaintances, and serve as a conversation trigger between strangers or casual acquaintances."

#### CONCLUSION

The stories of Lise and Joan and her dog illustrate the positive impact that walking has on health and happiness. In the case of Joan, having a pet can help motivate and keep one walking. Lise's health and happiness improved greatly by regular walking. She lost weight, felt better, made friends, and was happier after she started becoming physically active.

Joan is in good health. She is active, busy, and her cognitive and physical skills are well exercised and in good shape. She feels happy. One of the reasons she is in such good shape is that she has Baron for a companion. Joan might walk anyway, but for many people, pets like Baron can encourage their owners to keep active, spark conversations, in addition to serving as companions.

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THE SOCIAL GEOGRAPHY OF HEALTHY AGING

# **CHAPTER SEVEN**

Exercise, Diabetes, and Your Aging Body

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# Exercise, Diabetes, and Your Aging Body

As the previous chapters of this book have stated, aging changes the body. Age is also important in how men and women view themselves and how others see them. In most countries, the idealized cultural standards of attractiveness and fitness are based on the bodies of prepubescent, thin, and young adults, especially young women. As people age, these images become impossible to achieve or even aspire to.

### THE CASE OF TINA

On a hot July morning, Tina struggles out of bed to get to the boardwalk before it gets too hot and too crowded with summer tourists to enjoy her two-mile walk. She loves this time of day. The sea looks peaceful and inviting; she often spots dolphins swimming along the coastline. After her walk, she gets a coffee at one of



the little places nearby. Often, she sees a friend whom she chats with as she drinks her morning coffee. She loves living near the sea, she loves walking the boardwalk every day. She also goes to a yoga class at the local YMCA two times a week and swims one or two additional days each week.

She cannot believe that only one year ago she was 30 pounds overweight. Her feet ached so much she had

difficulty walking. Then, she received a wake-up call. During her annual checkup, her blood work indicated that she had diabetes. She was shocked; she had always been thin and healthy. How had this happened to her? She had avoided really looking at herself in the mirror for some time. Finally, she took off her clothes and stood in front of her full length mirror. What had happened to her muscle tone, what had happened to her body? She was only 60 years old. She had always taken her health for granted. **Diabetes:** Sugar is not able to pass from your bloodstream into the cells of your body. This can present many problems, you may experience some of the symptoms below, or you may not have any symptoms at all (Barnard, 2007). When sugar or glucose is not able to enter your cells, they are deprived of their basic fuel which gives you energy.

- + You may lose weight, but not for healthy reasons
- + You may need to go to the bathroom more frequently
- + You may be more fatigued
- + You may be thirsty

About 16 million Americans are diagnosed with diabetes. Given the obesity rates in the United States, these numbers are growing every day. Being inactive like Tina, like the majority of other older men and women (only about 30 percent of older Americans exer-cise regularly), increases a person's risk for diabetes. Diabetes has numerous negative outcomes inclu-



ding possible blindness, loss of a limb, heart disease, kidney failure, and death. With treatment and changes in diet and exercise, many people with diabetes can lead full lives (http://kidshealth.org/parent/diabetes\_center/diabetes\_basics/ weight\_diabetes.html).

Diabetes comes in three main types; type 1, type 2, and gestational diabetes. Type 1 usually occurs in childhood or early adulthood. Type 2 is the most frequent; 9 out 10 people who have diabetes have type 2. Gestational diabetes is similar to type 2, but it occurs during pregnancy and typically disappears after childbirth. THE SOCIAL GEOGRAPHY OF HEALTHY AGING



Tina has always known that diabetes runs in her family and that it is a disease with an inherited tendency. Her mother and her aunt both have diabetes. She just never thought of herself as vulnerable. She has been too busy getting divorced, working, and taking care of her children to pay attention to herself, her body, and even her health.

Tina is a graphic artist. From her mother, she had inherited a talent and interest in art. She completed her undergraduate studies in graphic design and wanted to become a fashion designer. But fate intervened; she fell in love, got married, and had two daughters. They were happy for many years, years where Tina worked part time at home designing ads for a friend who had a marketing company. Eventually she and her husband grew apart; he got laid off, and the only new job he could find was two hours away. Given that they were not happy, Tina did not wish to leave and uproot herself, and her mother and her daughter who were grown up lived near her. She loved living in a small beach town. Tina and her husband Jonathan decided to separate. She moved to a small condo and looked for another job in order to support herself. Unfortunately, there was a recession and it took her some time. During these months she did not pay attention to her diet, she did not exercise. She realized that she was gaining weight but kept telling herself that once she was settled and had more work, she would exercise, cook again, watch what she ate. Before she realized time had gone by and she had gained 30 pounds.

Eventually she found a part-time job as a receptionist at a local real estate office, and she continued with her part-time design job in order to make ends meet and allow herself some flexibility in her days. Somehow while these important changes were going on her body had also changed dramatically and she needed to take action. Tina knew she should be more worried about the borderline diabetes diagnosis but she was very unhappy with the image of herself that she had seen in the mirror. She did not like her aging body. Where was the body she had always known and loved? What had happened? She knew that age-related physical changes happened. But the extra 30 pounds made her not recognize her physical self.

As early as midlife, most Americans gain about 3-4 pounds a year. This gain of fat, compounded with the loss of muscle mass due to lack of exercise contributes to the rise in bad (LDL) cholesterol. We cannot stop the aging process and decline of health, but we can slow it down with regular exercise.

### AGING AND THE BODY

Aging changes our physical appearance despite our many struggles to hide or stop the process. As we age, we tend to compare ourselves to others around us. If we compare ourselves to the western cultural ideal body image, which tends to be an extremely thin prepubescent body type (for women at any rate), the comparison can make aging women feel bad about their bodies and themselves. This can cause anxiety and distress over the aging physical self (Homan & Boyatzis, 2009), and these negative feelings can reduce our self-esteem, our life satisfaction, and our happiness.

Aging is inevitable. There are very real consequences to getting older. While there are many positive aspects to getting older, some of the consequences of aging are not positive. Aging leads to an increased susceptibility to disease. It tends to lead to weight gain.

Many years of research on healthy aging has found that many of the health problems associated with aging may actually have more to do with lifestyle choices such as:

- a lack of exercise
- + smoking
- + a high-fat diet
- + a lack of stress management skills
- + even loneliness and isolation

As we have stated in the first two chapters of this book, exercise is still the only true "fountain of youth." It is the only way to keep the machine, that is our bodies, operating smoothly.

# THE BODY: HISTORY AND THE PRESENT

Research indicates that a woman's value is often associated with how she looks (Davis, 1996). Beauty and femininity have been linked throughout history. The word "beauty" derives from the Latin *bellus*, which was used to describe women and children (Banner, 1983). Webster's *New World Dictionary* associates beauty with "a very good looking woman."

Throughout history, women of all ages have gone to great lengths to alter their bodies to conform to their era's beauty "ideal." These ideals can be seen in the art and artifacts of various periods. Ideal images are based on factors that include the prosperity of the time, availability of food, health concerns, religious values, and women's roles. Needless to say, in the 21st century USA where Tina lives, there tends to be an overabundance of food for most people, and the beauty ideal is one of very thin women regardless of the age of those women.

Artifacts and sculptures from 20,000 to 25,000 years ago, when food was not plentiful, show that extreme fatness was viewed as a sign of beauty and health (Ritenbaugh, 1982). Even the heavy image of the Stone Age fertility model suggested an association between fatness and fertility (Wolf, 1991).
#### EXERCISE, DIABETES, AND YOUR AGING BODY



In the "Middle Ages" in Europe, however, fatness became related to gluttony and sin. In mediaeval Europe, food refusal was seen as an expression of piety and virtue. Paintings and sculptures of the Renaissance period (15th and 16th centuries) once again depicted the nude female body as plump, rotund, solid and weighty, underscoring that era's prescription for beauty. As in the case of Stone Age artifacts, the ample female body shape represented in many Renaissance paintings was associated with fertility.

In the 17th and early 18th centuries, Baroque and Rococo art reflected that epoch's image. Toward the latter part of the Rococo period, a change took place and painters such as Watteau and Fragonard began to depict women as buxom, yet small and delicate. In the 1800's, an unnatural 18-inch waist was established as an ideal. Most women were only able to meet this measurement by tightening their corsets, a practice that often caused headaches and fainting spells. It may have also been a primary cause of uterine and spinal disorders widespread among 19th century women (Wolf, 1991).

The Western feminine ideal of this period conforms to the frail, thin, and pale model of beauty. In the United States, the pre-Civil War ideal was also a pale, frail, and willowy woman. Following the Civil War, the ideal woman was more buxom and heavy. In the late 1800's, a tall, athletically shaped female figure became popular (Cash & Pruzinsky, 1990).

The emergence of the thin female body as the American beauty ideal paralleled the women's suffrage movement. During World War II, women were encouraged

to enter the workforce and subsequently, the fat/fertility link as beauty was discarded and a more "non-reproductive," pre-pubescent female body ideal became popular. In the 1950's, social pressures encouraged women to return to the home and produce children. As a consequence the voluptuous model of beauty, linked again to fertility was once again promoted (Wolf, 1991). From the 1960's to the present, thinness has continued to be associated with attractiveness, success, self-discipline, and self-control. The promotion of a thinner woman's body does not only occur with younger women, it spans the lifetime, well into late adulthood (Ferraro et al., 2008).

In the 1980's, with the beginnings of the fitness movement, a more healthy, muscular, and fit image began to emerge. Since that time, Western societies such as the United States began to promote fitness as a major component associated with the ideal body.

## **BODY IMAGE**

Self-esteem and mood can improve with "Green Exercise." This includes outdoor activities such as fishing, bicycling, and gardening.

Our bodies not only influence our health, they also shape our happiness. The body is an important symbol representing a person's identity. How we feel about our bodies influences our overall self-image and has widespread implication for our lives. It influences our well-being, relationships, and career choices. The way other people relate to us is influenced by what our bodies look like. According to the famous philosopher, Michel Foucault (1983), our bodies are constructed primarily through our relationships with others and how they treat us. Cultural values and norms set the parameters of what is considered attractive. Unfortunately, due to ageist views we have already discussed, these parameters tend not to include aging bodies.

Like Tina, many of us have a discrepancy between how we actually look and how we think we look. Self-discrepancy theory explains the influence of body image to overall self-image. According to this theory, people divide their ideas about themselves into beliefs about "actual selves" and "ideal selves" (Higgins, 1987). People develop their own perceptions of their self-images as well as an idea of how they think others perceive them, how different these two images are affects our feelings about ourselves. It is commonly believed that older women do not have body or self-image concerns. This is not true. For older women, like Tina, they may still suffer from Body Image Dissatisfaction (BID). There is actually little to no difference between BID in younger and older women (Bedford & Johnson, 2006).

Everything we eat contains calories and everything we do burns calories. This includes sleeping, digesting and exercise. Extra calories can be burned by any additional physical activity we perform during the day (WebMD).

Being overweight in the United States is also associated with social class. Over 30 % of lower class women are heavy to the point of being considered obese, compared to only 15% of middle and upper class women.

The actual physical changes that occur in aging can affect body image. This includes the increase in fat and the decrease in muscle mass.

## THE AGING BODY

As women age, their bodies may be seen as a symbol of decay and mortality. Social comparison can also lead to a diminished sense of the physical and psychological self. Older women tend to be more concerned with their body and body shape than men (Ferraro, et al., 2008). There is still a "double standard" of aging. Women are seen as "old" at an earlier age than men and there is more emphasis placed on women with regard to "youth and beauty."



Luckily for Tina, she had a wake-up call and she was able to make changes before she had any serious negative health consequences.

### Factors that make us feel good about our bodies

- + Regular physical activity is the key to successful aging.
- + Exercise promotes a healthier later life.
- + Exercise prevents depression and aids in stress management.
- + Exercise prevents illness and chronic diseases.
- + A positive relationship exists between regular physical activity and happiness.

Unfortunately, regardless of age, women like Tina and others must negotiate their identities through their appearance (Davis, 1996). With the promotion of the awareness of the importance of regular exercise, the fitness movement can be viewed as a positive force in the world today. Increasingly, neighborhoods and communities are providing people with a safe place to walk, jog, and bike, making it easier to stay fit and healthy. There are many suggestions regarding the appropriate amount of exercise, but the most important thing is to keep moving – to garden, walk, bike, walk up and down stairs, clean the house, or whatever works. Everyone has different preferences.

## **HOW TINA DID IT**

Tina is no longer "young," but she can be fit, healthy, and attractive. She soon started to watch what she eats and exercise regularly. She started walking two miles, about 40 minutes every morning on the boardwalk. Within weeks she not only felt better but walking also impacted her mental health and well-being, improving her mood and coping with and decreasing stress (Edwards, 2006). Becoming absorbed in an exercise routine can also reduce self-conscious feelings (Greeneleaf, 2005). Tina had forgotten that happiness is something we often have to work toward ourselves.



# **A HEALTHIER DIET**

Tina decided to cut down on meat consumption (she ate smaller pieces of chicken and ate more fish instead of red meat).

- + She ate oatmeal or a poached egg on toast for breakfast.
- + She tried to always eat vegetable soup or a salad full of veggies with light dressing for lunch.
- + She ate one apple or pear each day.
- + She focuses on eating more whole grains, beans, vegetables, and fruits.
- + She cut down on dairy fat.
- + She minimized the number of carbohydrates she ate.
- + She stopped eating in front of the television; while she ate she paid attention to her food and ate slowly.
- + She changed the way she cooked food, cutting down on fried foods.

# WOMEN OVER THE AGE OF 60

Older women report that they struggle with body dissatisfaction. Research has shown that women over 60 tend to feel as dissatisfied as women under 30. These women may not develop eating disorders as a result but they are at risk for developing negative health consequence including diabetes, heart disease, high blood pressure, bone and muscle loss, kidney failure and death.

## **TIPS FOR AGING WOMEN**

- + Choose healthy eating
- + Refer to food pyramid (http://fycs.ifas.ufl.edu/pyramid/)
- + See a licensed nutritionist

#### Maintain Contact with Your Doctor (for Tina this was the wakeup call)

+ Due to potential health concerns when aging, you should remain in contact with your physician

#### Watch Out for Warning Signs

- + Depression
- + Anxiety
- + Grief
- + Unhappiness
- + Loneliness and isolation
- + Low self-esteem (Body Image and Aging: Learning to Love the Changes in Love at http://www.grandtimes.com/bodyimage.html)

After one month of walking the boardwalk five mornings a week, Tina decided she was ready to do more. She joined the local WMCA and participated in exercise classes that they offered. Tina was successful in reversing her diabetes. For many people like Tina, changing one's diet and exercising regularly is as effective as medication.

## CONCLUSION

Although contemporary culture has in many ways associated age with a loss of attractiveness, poor health, and sedentary lifestyle, a significant number of older women and men are maintaining or gaining health and fitness. Good health pushes the awareness of physical aging upward. On the other hand, poor physical fitness can make older adults feel "older" and appear "older" to others. As the proportion of vigorous older people increases and the Baby Boomer generation reaches middle age, it is likely that the traditionally negative stereotypes of an older person will continue to undergo much-needed changes.

In the 21st century, we know that there is a relationship between health, healthy living, and happiness and well-being in later life. Regular exercise prevents disease, decreases the risk of falling and injury, improves sleep, increases the sex drive, and enhances overall mood. Despite all of these benefits, many older men and women do not exercise regularly. We conclude this chapter with Resnick's (2001) 7 helpful steps to beginning a regular program:





- 1. Education and awareness of the importance of exercise
- 2. Exercise prescreening (see your doctor)
- 3. Set reasonable goals for yourself
- 4. Exposure to exercise (watch what others are doing, what programs are out there?)
- 5. Making use of role models (watch what others are doing)
- 6. Encourage yourself and others
- 7. Give yourself rewards (buy a gift, take a trip)

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EXERCISE, DIABETES, AND YOUR AGING BODY

THE SOCIAL GEOGRAPHY OF HEALTHY AGING

# **CHAPTER EIGHT**

An Active and Happy Retirement

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# An Active and Happy Retirement

# THE CASE OF WILLIAM AND SARA

Bill and Sara have been married for almost 40 years. They get along well and enjoy many of the same things. They both love to bike, walk, travel, and read. Bill has been working as an information technology person at a local college and Sara is an elementary school teacher. They have one grown daughter. Bill and Sara have both been active their entire lives. Bill grew up in Colorado where he skied all winter long and hiked and biked in the summers. Sara grew up in upstate New York, where she pursued similar types of activities. They met during a biking tour in the south of France.

Now both in their in mid-6os, they feel that they are ready to retire. They want to spend more time travelling; Bill wants to consult on a part-time basis, and Sara works part-time as an English tutor. They feel that this part-time work, their active



lifestyle, and their various interests will keep them busy and happy. They have read that in order to have a happy and "successful" retirement, it is important to plan ahead. While Bill and Sara do not have a lot of money, with Social Security income, they feel that they have enough to get by and do the things they want to do.

The one concern they have at this time is that Sara has serious arthritis, which flares up at times and keeps her from doing the things she wants and needs to do. Over the years, she has learned to manage the symptoms of arthritis, but it is still a struggle and something that causes her anxiety and distress. She

hopes that her disease stays manageable and that she and Bill will be able to enjoy their retirement years.



# **RETIREMENT IN THE 21ST CENTURY**

Retirement is an important later life transition. During retirement, men and women like Bill and Sara are finally free to spend their time as they wish. To relax, engage in creative pursuits, exercise, travel, and do those things that they always wanted to do. Retirement in the 21st century means something very different from what it did when the notion of retiring was first a possibility almost one hundred years ago. At that time, men and women "retired" in order to relax from hard physical labor. The stereotype of retirement was one of sitting in a rocking chair on a porch and observing the world go by. Modernization, globalization, and industrialization have changed the face of retirement in the United States and other parts of the world. People are now retiring both earlier than ever before and later than previous decades.

American corporations have downsized and out-sourced jobs as a way of cutting costs and increasing profits. They have laid-off millions of men and women. Many of these workers have decided that instead of seeking new employment they would retire early. Other workers have seen their retirement plans and what for them was long anticipated times of life, disintegrate. This time will now mean many more years of full and part-time work. Some of these lay-offs are unfortunately a result of age biases. As we have mentioned in earlier chapters, ageism is unfortunately alive and well. Statistics indicate that older workers are more likely to lose their jobs; they also have more difficulty finding new employment. Although the Age Discrimination Act of 1967 made it illegal to use age as a hiring or firing criteria, age discrimination is still widespread (Atchley & Baruschi, 2004). Forced retirement of older adults as a result of ageism can cause a loss of well-being due to the removal from their societal role and decreased involvement in the social realm (Whitbourne, 2005).

# **RETIREMENT IS STILL A RELATIVELY NEW CONCEPT**

- + Until the last century, retirement was something available only for the very rich. Everyone else had to work as long as they could. There was generally no income available after retirement for most people.
- + In 1900, the average person who retired spent only 1.2 years in retirement. By 2000, the typical person who retired at 65 would spend about 20 years in retirement.

In the United States, one quarter of workers between the ages of 58 to 73 continue to participate in the workforce after retirement (Altschuler, 2004). In 1978, the Age Discrimination in Employment Act banned mandatory retirement prior to age 70 for most occupations. Despite this act, the United States and the other technologically advanced societies, such as Germany, Japan, and Sweden, have experienced a drop in retirement age (Atchley & Baruschi, 2004). About one third of women and one fourth of men also have concerns about having to work longer than they had anticipated. Many older men and women, like Bill and Sara, are choosing to work part-time. They find that this is an attractive alternative to the demands of full-time work. Part-time work can help them stay engaged and stimulated; they feel that they are continuing to make a contribution, and they have some added income to help with the increasing cost of living expenses.

Although there is a relationship between retirement and age, retirement is certainly not synonymous with old age; instead retirement refers to an occupational shift. Occupational shifts may take place in later life, but they can occur throughout adulthood. Retirement is a socially acceptable way to leave the workplace. The history of the United States is based on the history of a "Protestant Work Ethic" where the value of a day, a week, or a life is evaluated by how much work gets accomplished. This value also goes along with placing a person's self-worth on how industrious, disciplined, and hard working they are.

Around the world, elders work until they are no longer able. At that point, when they can no longer work, they are cared for by younger family members. The modern notion of retirement in the United States originated in 1935. The government began to offer Social Security benefits, making it possible for older Americans to "retire" from full-time employment. The United States was not the first Western country to introduce benefits for older adults. Countries in Western Europe provide comprehensive programs for retired men and women.

Germany, for example, has long provided a more comprehensive social service program for older Germans. For example, long-term care insurance coverage is available for those with chronic diseases. This coverage includes government subsidies for care in a retirement community or at home. The German system is based on a history of paternalism dating back to the 1880's and to the social policies of old imperial Germany. In the late 19th century, Germany was the first country to introduce a system of universal health insurance and old age pensions (Cockerham, 1997).

A humanitarian society rests on the assumption that the gainfully employed support those who are unable to work, although the economic stress of providing a sustainable income and health care to an ever-increasing older adult population is a concern in Western societies. As a consequence, certain changes are being implemented. For example, in 2002, the age eligibility in the United States for full retirement benefits began to increase from 65 to 67. Given that the average life expectancy in the United States is 78, this allowed for Social Security payments to be made for approximately 10 years.

Technologically advanced societies, such as the United States and Germany, face one of the steepest declines in birth rates. Present fertility rates in the US stand at 2.1 for the average number of children born per woman; in the European Union, they are at 1.5 children born for each woman (Tahmaseb McConatha & Volkwein 2010; Tahmaseb McConatha & Volkwein-Caplan, 2011). In Germany, rates are even lower. By the year 2040, there are expected to be 56 people over the age of 65 for every 100 people between the ages of 20 to 64. One answer to this demographic age trend is to encourage older men and women to be as fit and healthy as possible in order to fight off chronic conditions as long as possible.

## THE SOCIAL CONSTRUCTION OF RETIREMENT

Stereotypes of retirement are based on the view that "the golden years" are a long-awaited and hard-earned time of rest and relaxation. For millions of men and women like Bill and Sara, retirement does provide freedom to engage in activities that have been put on hold. It provides time to travel, exercise, spend time with families, and take on part-time work. Retirement, providing that people are healthy, allows them to finally pursue their dreams (Roesenkoetter & Garris, 2001). Being healthy and fit are two components essential for a happy retirement.

### **Tips for Happy Retirement**

- + **Find a purpose** by looking for what you can do regularly to bring joy and structure to your life. This can include travel, hobbies or a new career.
- + **Keep your mind sharp.** We are lifelong learners and need intellectual stimulation found at work, learning a foreign language, playing a musical instrument, or by joining a club.
- + **Volunteer**. Involvement in your community is a way to give back and fulfill your personal needs.
- + **Develop and maintain friendships.** That includes social network, including family, friends and religious organization.
- + **Share Dreams with loved ones**, such as a spouse or friend. It can add to positive experiences.
- + **Try partial retirement.** This is a plus for those who would like to keep busy or want to earn extra money.
- + **Stay positive**. The life changes after retirement can be challenging, but by keeping your spirits up, the transition can be easier.
- + **Remain healthy.** It is important to eat well, maintain a healthy weight and stay active.

http://seniorliving.about.com/od/retirement/a/retirement\_livi.htm?p=1

# HEALTH AND RETIREMENT

There is a widespread myth that retirement leads to bad health. Some people do retire because they have health concerns; however, many people experience improved health as a result of retirement. They have less stress in their lives, more time to relax, and more time to exercise. They may experience less anxiety. There are of course factors associated with retirement that influence health and happiness. If one is forced to retire either for personal reasons, laid off, or encouraged to retire by one's employer, retirement may not be a happy time, at least until one has adjusted. However, if retirement is planned and by choice, it is generally a time of enjoyment and fulfillment. In many cases, like the case of Bill and Sara, retired men and women choose to work on a part-time basis. A person has a high degree of retirement self-efficacy (Whitbourne, 2005) if they believe themselves to be an active agent in constructing their own retirement, and they are more likely to find retirement to be a time of satisfaction.

## Social Scientists have suggested several phases of retirement adjustment

- The Pre-retirement phase involves fantasizing about all that one would do
- 2. The Honeymoon phase euphoria that comes with newfound freedom
- 3. **The Disenchantment phase** fantasy becomes reality and is not as exciting as one had hoped
- The Reorientation phase a realistic view of retirement begins to develop
- The Stability phase routine and stability set in, self-awareness of realistic needs and wishes

One of the biggest components of a successful adjustment to retirement is health. As we have stated repeatedly throughout this book, physical and social activity, diet, and stress management are important ways of promoting health and happiness in later life. The physical environment plays a determining role in health promotion; some environments are healthier than others. Throughout this book, we emphasize the importance of place in promoting a healthy and happy THE SOCIAL GEOGRAPHY OF HEALTHY AGING

retirement. Stay where you live or move; find a new place that makes you happy – a city, a rural area, a village in the mountains, a seaside town. Whatever suits your lifestyle and personality; it is important (whenever possible) to live in a place that fits you, your interests, your lifestyle, and your ways of engaging in recreation and leisure activities.

A healthy community is one where the characteristics of the environment positively influence health and happiness. Changing demographic trends have resulted in improvement in communities and neighborhoods throughout the United States.

#### Improvements include:

- + Walking access: clean, well-lit sidewalks and walking paths that are accessible year round.
- + Physical amenities, such as parks and community centers, where older men and women can exercise and socialize.
- + Access to public transportation.
- + Senior-friendly government agencies and policies (Masotti, Fick, Johnson-Massotti, & MacLeod, 2006).

# HEALTH AND RETIREMENT: IMPORTANT TIPS

- + **Know your cholesterol levels**, including LDL, HDL and triglycerides, which is determined with a simple blood test.
- + **Stop smoking:** It damages the heart and blood vessels and raises blood pressure.
- + **Know your blood sugar numbers** and have it tested yearly. High levels can lead to diabetes.
- + **Be aware of your blood pressure.** Blood pressure improves with less salt, alcohol and caffeine intake, not smoking, and being physically active.
- + **Maintain a healthy weight** by eating foods including high-fiber foods like fruits, vegetables, and whole grains.
- + **Avoid fad diets**: They set you up to regain weight once you resume your previous eating pattern and deprive you of important nutrients.
- + **Exercise regularly**. Ease into a more moderate exercise routine, then increase into a more challenging routine.
- + **Find ways to relax and reduce stress**, as stress can make you sad, irritable and even depressed. Ways to relax include meditating, deep breathing and listening to relaxing music.
- + **Express yourself:** Talk to your friends and family who can give you support. It is important to have someone to talk to when you're upset.
- + Be mindful of how you think. Certain styles of thinking can add stress to your life (like perfectionism, all-or-nothing thinking and negative thinking.) Try to focus on the good, and view problems as opportunities. http://www.planforyourhealth.com/retirement/article/show/10-tips-for-ahealthy-retirement/

# COPING WITH CHRONIC HEALTH CONDITIONS DURING RETIREMENT

While the above suggestions promote increased health and well-being, it is impossible to completely avoid dealing with health concerns. Arthritis is the leading cause of disability in the United States. In fact, arthritis is "mankind's" most common chronic disease family as such a large percentage of older men and women struggle to cope with the various symptoms and pain of arthritis. Approximately 21% of adults in the United States suffer from arthritis. Arthritis refers to one or more degenerative diseases that cause pain, swelling and stiffness of the joints and connective tissues. It affects 42 million Americans and is the leading cause of disability in the United States (Feldman & Tegart, 2003). Arthritis accounts for 17 % of all disabilities in the United States.

Arthritis is not one disease but a group of diseases, however they all cause pain, inflammation, limited movement, and ultimately destruction of the joints (Theodosakis, 2004). Like Sara, millions of Americans suffer from osteoarthritis, where the cartilage that cushions the ends of bones degenerates, allowing the bones to rub together.

#### Ways to Manage Osteoarthritis

- + Rest
- + Lose weight
- + Exercise to strengthen the structures around the joints
- + Wear proper clothing and shoes

## **RHEUMATOID ARTHRITIS**

Rheumatoid arthritis is an autoimmune disorder that can lead to weakness, fatigue, fever, anemia and many other problems (Theodosakid, 2004). It is the most serious form of arthritis, causing symptoms that can eventually lead to disability and a reduced quality of life. This type of arthritis leads to limited motion as it becomes difficult to move joints.

Sara developed arthritis a few years ago. It started with pain and stiffness in her knee. Occasionally, she even had trouble walking. Although Sara is not overweight and has always been relatively active, she decided that when she had more time, once she retired, she would increase her exercise in order to limit the potential

damage arthritis could do to her. Sara had found that when arthritis bothered her, she tended to be less active. We have a tendency to slow down when we are in pain or discomfort. But Sara knew that she needed to keep her muscles strong, that this strength would prevent increased damage from arthritis. Regular exercise also strengthens bone density.

### The best exercises

- + Weight-bearing exercise is helpful
- + Walking is a form of weight-bearing exercise for the feet, legs, and hips
- + Strength training or resistance training
- + Lifting free weights
- + Using weight machines and resistance devices

Once Sara and Bill retired, they had much more time to do the things they enjoyed. They had always tried to take care of themselves, but now they decided to increase their efforts. To be a bit adventurous, they planned a walking tour vacation. They both realized that while one should reward any efforts at increased fitness, there was also always room for improvement. Bill and Sara both knew that their health was one of their first priorities. Sara felt that if she increased her physical fitness, she would be in a better position to manage her arthritis.

Physical activity does not necessarily mean traditional exercise, such as using a treadmill at your local gym.

#### It can mean...

- + Taking the stairs instead of the elevator
- + Raking leaves, pushing the lawn mower, and other yard activities
- + Walking through your neighborhood
- + Swimming
- + Playing tennis
- + Performing tasks and odd-jobs around the house (Nevid & Spencer, 2007)



Sara and Bill walked together each morning. Sara decided that she would also walk alone in the afternoons. Walking is the most popular, simplest, and easiest aerobic exercise. It increases the heart rate, thereby increasing the functioning of the cardiovascular system. This also burns fat and tones and conditions the body. Unlike many other exercises, walking requires no special equipment, only a comfortable pair of walking shoes. After walking two to three miles, 4 afternoons a week, Sara soon found that she felt more relaxed and energetic during the early evening hours.

Low impact exercises that are easy on the joints are the best for beginning an exercise program. Unlike Sara, Bill preferred to add another low impact activity to his routine. He started biking three times a week. After checking with his doctor to make sure it was okay, he started small, biking two to three miles each time. Slowly he added miles until he was biking 10 to 15 miles three times a week. He also met two other retired men and they bicycled together for one hour going a distance of about 15 miles. Bicycling is a good conditioning exercise. It can build the muscles of the thighs, which are helpful in getting up. It is also recommended for people with knee problems.

### An Ideal Exercise Program will...

- + Translate to about 3 hours of exercise per week.
  - + This can be divided in periods that best suit your abilities, such as exercising 30 minutes per day OR
  - + 10 minutes routines 3 times per day
- + It is important to remember that exercise is an important part of health promotion. It is necessary to avoid a sedentary lifestyle, and any exercise is beneficial (Sarafino & Smith, 2011).

Sara found that her more relaxed and more active life helped her manage her arthritis better. She felt less debilitated by a flare up. She recommends the points below as important ways of coping with arthritis pain:

- + Have good posture. It is the key to minimizing the stress on your joints and the spine.
- + Losing weight and maintaining a healthy weight can take pressure off of knees.
- + Wearing high heels should be reduced, as it strains the joint behind the knee and increases wear and tear, worsening osteoarthritis.
- + Wear sturdy, supportive shoes when exercising to avoid overstressing the joints.
- + Avoid taking on more than one major cleaning job a day.
- + Measure improvement and track changes in pain before and after making changes in daily life. By using a 1 to 10 scale to measure pain, you can see what helps and what does not.
- + Keep a journal about your pain levels and what activities you are doing. Take this with you to the doctor.
- + Sleeping well restores your energy, improves pain management and reduces pain and swelling in joints.
- Build your life around wellness and positive thoughts instead of pain.
  Dwelling on the pain you feel can worsen pain. Arthritis pain can be more easily managed by focusing on the good.

ProHealth.com. (2002). *Ten easy tips to help cope with arthritis pain*. Retrieved from 2http://www.prohealth.com/library/showarticle.cfm?libid=1160



## PLANNING A HEALTHY AND HAPPY RETIREMENT

Clearly, Bill and Sara have been thinking about their retirement for several years. They have interests to keep them busy, they love to stay active, and although they have some health concerns, they are committed to lifestyle changes that can help them manage their concerns. Bill and Sara have read that there are gender differences in the retirement experience. Women often have more health concerns than men. If women are healthy, they may also be affected by the health concerns of their partners or other family members. As we saw in an earlier chapter, women may fall into a caregiving role. Many women, in fact, retire so that they can care for a family member. Whereas a man's decision to retire is usually based on professional reasons, a woman's is often based on family reasons.

As we have pointed out throughout this book, the evidence is clear; one's health is linked to one's environment. We have seen that people from "better"

#### CHAPTER EIGHT

#### AN ACTIVE AND HAPPY RETIREMENT

neighborhoods tend to be thinner and healthier, and the social characteristics of those around you impact overall health (Kesterton, 2011). In one study, Pinquart and Sörensen (2002), examined the retirement experiences of older American, Canadian, and German women. The researchers found that



retired women are at an increased risk of living alone and in poverty and needing care, especially if they were widowed. Even though planning for retirement is seen as a good thing, the German women in this study did not like to plan for their retirement. They said that one could not predict the future, they did not want to think about possible negative health concerns during retirement, and they were not as concerned about where their care would come from. This may be because the German health support system is more extensive than the Canadian or American health system. So once again, where one lives influences the concerns one has during retirement. If everyone is entitled to health care, this eases the stress of later life health concerns.

In the United States, women continue to earn less than men (U.S. Department of Labor, 2000); they are therefore at an economic disadvantage when it comes



SARA AND BILL

to retirement. If they have only Social Security to live on, it makes retirement a stressful period of life. Socially, women tend to have an advantage; they tend to be more social than men. Women generally have more friends than men; most men have work friends, and when they retire, these relationships often end. Women generally have more contact with and support from their friends and acquaintances. Their well-being seems to be more connected to the maintenance of social contacts outside the world of work. Women tend to confide in other women, while men rely on their spouse for emotional intimacy. This works for Bill because he has Sara, but not all men are partnered.

Even widowed or divorced women are better able to develop and sustain new relationships. They can find someone to exercise with, to talk with, and to go to church or synagogue with. For men who are widowed, loneliness may pose a health threat. Men who have been in high status are also likely to have a hard time with retirement. Whenever possible, planning is important. Many people like Bill and Sara do plan. They plan because it helps them cope with an uncertain future, it helps if they need to have care, and it helps make health care decisions easier when they do present themselves. American values also tend to emphasize the importance of taking control over one's life.

Being realistic about what to expect is important when contemplating retirement (Wrosh, Heckhausen, & Lachman, 2000). Regardless of how much one thinks and plans, there are surprises in life. Being prepared and finding ways of coping with these surprises is important. Being physically fit and exercising are two ways that help with coping. Physical fitness helps promote the immune system by helping the body heal faster. Exercise not only promotes physical fitness, but also helps with stress and anxiety; it serves as a buffering effect in times of stress. What is important is to know you. What do you like to do? If you have never golfed, it is highly unlikely that suddenly, because you are retired, you will enjoy golfing. A sense of continuity is important. Work part time, do what you have always liked doing, just do more of it.

The timing of retirement is important. If you are forced to retire sooner than you want, or have to work full time much longer than you want, it can be stressful. Part-time work can give a person plenty of time for recreation, exercise, and also help them feel that they are continuing to make a contribution. Many studies have found that one of the most stressful concerns of retirees is feeling that they are no longer productive (Chase, Eklund & Pearson, 2003).

## WHO AM I?

Retirement involves a change in self-image and identity. If the role of a worker has been central to one's identity, its loss may be an especially stressful concern. Staying healthy and active can help fill a



potential void (McConatha, Reiser-Danner, McConatha, Hayta, & Polat, 2004; McConatha, Volkwein, Schnell, Leach & Riley, 2003).

Most retired men and women are staying active and healthy longer and longer. Many people live 20 years after they have retired; finding productive and active ways of spending these years can make these 20 years good years.

Fear and anxiety regarding the aging process can cause people to feel anxious or depressed, making the transition to retirement a more stressful experience. If one retires because of losses and stressors, such as a personal or family health concern, this may affect retirement negatively (Kraaij, Prymboom, & Ganefski, 2002; Wrosch, Heckhausen, & Lachman, 2000). Despite these challenges, most people make a positive and happy transition to retirement.

As we have pointed out, a key component of a positive retirement experience is physical and social activity. Like Bill and Sara, many people experience more positive health when they retire. They are able to spend more time on health promotion activities. The majority of people have various hobbies and interests. Retired men and women have an opportunity to more fully explore aspects of their life they may not have had time for before.

Early life decisions regarding education and occupations continue to influence life experiences during retirement. They impact financial security and health and mortality. Although the stressors of early life contributes to health status in later life, it is never too late to make changes. Economic factors are important concerns during retirement. People tend to achieve their highest earnings from their mid-40s until their mid-50s. Generally, higher educational levels are associated with higher income. Those with higher incomes generally have more income during retirement. Stress and worry over finances can significantly threaten health and happiness during the retirement years. Women and minority populations often have lower incomes and poorer health and health care than European Americans.

## STEPS TO HEALTHY AND PROSPEROUS RETIREMENT

Before and after retirement, understand the big picture and focus on what really matters to you. The following steps will help.

- 1. Develop sources of reliable, lifetime retirement income
  - For most people, this includes Social Security benefits, pensions, income generated by retirement savings, such as 401ks and IRAs, income generated by home equity, work income

#### 2. Manage your living expenses

- + The majority of your budget (about 75%) will go to the following: housing, transportation, food, medical and entertainment
- 3. Protect against things going wrong
  - This includes high medical bills, high expenses for long-term care, poor health, investment losses, death of a spouse

#### 4. Plan for a good life

+ Find what makes you happy and satisfied with life, including meaningful relationships, helping others, discovering and learning new things, and applying your experiences and skills.

By Steve Vernon. (2011). *Four Steps to a Healthy and Prosperous Retirement*. Retrieved from http://moneywatch.bnet.com/retirement-planning/blog/money-life /four-steps-to-a-healthy-and-prosperous-retirement/2973/ Bill and Sara have chosen to retire, and they are excited about the prospect; they have part-time work, hobbies, and they like to exercise. Despite health concerns, they are likely to make a positive and happy transition to retirement. During much of one's adult life, work and occupations determine almost every aspect of life. During the retirement years, people can finally chart their own course. Retirement can be an exciting new journey full of adventure and growth. As we have pointed out throughout this book, older men and women are healthier and happier than ever before. Old age can be a time of "becoming truly ourselves." With the Baby Boomers aging, their stories of retirement can provide valuable lessons about what it means to be "old" in the 21st century.

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