

# DIVERTICULAR DISEASE

A MEDICAL DICTIONARY, BIBLIOGRAPHY,  
AND ANNOTATED RESEARCH GUIDE TO  
INTERNET REFERENCES



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**AND PHILIP M. PARKER, PH.D., EDITORS**

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## FORWARD

In March 2001, the National Institutes of Health issued the following warning: "The number of Web sites offering health-related resources grows every day. Many sites provide valuable information, while others may have information that is unreliable or misleading."<sup>1</sup> Furthermore, because of the rapid increase in Internet-based information, many hours can be wasted searching, selecting, and printing. Since only the smallest fraction of information dealing with diverticular disease is indexed in search engines, such as **www.google.com** or others, a non-systematic approach to Internet research can be not only time consuming, but also incomplete. This book was created for medical professionals, students, and members of the general public who want to know as much as possible about diverticular disease, using the most advanced research tools available and spending the least amount of time doing so.

In addition to offering a structured and comprehensive bibliography, the pages that follow will tell you where and how to find reliable information covering virtually all topics related to diverticular disease, from the essentials to the most advanced areas of research. Public, academic, government, and peer-reviewed research studies are emphasized. Various abstracts are reproduced to give you some of the latest official information available to date on diverticular disease. Abundant guidance is given on how to obtain free-of-charge primary research results via the Internet. **While this book focuses on the field of medicine, when some sources provide access to non-medical information relating to diverticular disease, these are noted in the text.**

E-book and electronic versions of this book are fully interactive with each of the Internet sites mentioned (clicking on a hyperlink automatically opens your browser to the site indicated). If you are using the hard copy version of this book, you can access a cited Web site by typing the provided Web address directly into your Internet browser. You may find it useful to refer to synonyms or related terms when accessing these Internet databases. **NOTE:** At the time of publication, the Web addresses were functional. However, some links may fail due to URL address changes, which is a common occurrence on the Internet.

For readers unfamiliar with the Internet, detailed instructions are offered on how to access electronic resources. For readers unfamiliar with medical terminology, a comprehensive glossary is provided. For readers without access to Internet resources, a directory of medical libraries, that have or can locate references cited here, is given. We hope these resources will prove useful to the widest possible audience seeking information on diverticular disease.

*The Editors*

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<sup>1</sup> From the NIH, National Cancer Institute (NCI): <http://www.cancer.gov/cancerinfo/ten-things-to-know>.



## CHAPTER 1. STUDIES ON DIVERTICULAR DISEASE

### Overview

In this chapter, we will show you how to locate peer-reviewed references and studies on diverticular disease.

### The Combined Health Information Database

The Combined Health Information Database summarizes studies across numerous federal agencies. To limit your investigation to research studies and diverticular disease, you will need to use the advanced search options. First, go to <http://chid.nih.gov/index.html>. From there, select the "Detailed Search" option (or go directly to that page with the following hyperlink: <http://chid.nih.gov/detail/detail.html>). The trick in extracting studies is found in the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Journal Article." At the top of the search form, select the number of records you would like to see (we recommend 100) and check the box to display "whole records." We recommend that you type "diverticular disease" (or synonyms) into the "For these words:" box. Consider using the option "anywhere in record" to make your search as broad as possible. If you want to limit the search to only a particular field, such as the title of the journal, then select this option in the "Search in these fields" drop box. The following is what you can expect from this type of search:

- **Understanding Diverticular Disease**

Source: Ostomy Quarterly. 39(2): 56-57. Winter 2002.

Contact: Available from Ostomy Quarterly. 36 Executive Park, Suite 120, Irvine, CA 92614-6744. (800) 826-0826 or (714) 660-8624.

Summary: Diverticular disease is a condition where the diverticula form in the colon; it is associated with abdominal pain and disturbed bowel habits. The symptoms are caused by intestinal muscle spasms, not from an inflammation of the diverticula. Diverticulosis is the presence of diverticula in the colon with no symptoms. This newsletter article helps readers with ostomies understand **diverticular disease**. **Diverticular disease** is very common in the United States; roughly half of Americans

develop diverticula by the age of 60 and nearly all of those over 80 do. Most people with diverticula have no complications. Unless a diverticulum becomes inflamed, it will produce no symptoms (including pain). The article considers the causes of **diverticular disease**, the symptoms, the causes of diverticulitis (inflammation), treatment strategies for diverticulitis, and the prevention of **diverticular disease**. A diet high in fiber may prevent the development of diverticula within the colon and may lessen the symptoms associated with **diverticular disease**. Most cases of diverticulitis respond to medical treatment. Surgery is reserved for patients with recurrent bouts of diverticulitis or when complications arise. 2 figures.

- **Diverticular Disease of the Colon**

Source: Journal of Clinical Gastroenterology. 29(3): 241-252. October 1999.

Contact: Available from Lippincott Williams and Wilkins, Inc. 12107 Insurance Way, Hagerstown, MD 21740. (800) 638-3030 or (301) 714-2300.

Summary: Diverticular disease of the colon is quite common in developed countries, and its prevalence increases with age. Although present in perhaps two thirds of the elderly population, the large majority of patients will remain entirely asymptomatic. Nonetheless, an estimated 20 percent of those affected may manifest clinical illness, mainly diverticulitis, with its potential complications. This article reviews the epidemiology, pathophysiology, clinical presentation, and treatment options for this disorder. Research into the etiology of **diverticular disease** focuses on three areas: colonic wall resistance, disordered gastrointestinal motility (movement through the digestive tract), and the role of dietary fiber. The observations that high fiber diets are associated with less colonic diverticulosis has led to the idea that higher fiber diets might prevent **diverticular disease**; research studies provide general support for the recommendation that patients may benefit from increasing their fruit and vegetable fiber intake, decreasing their fat and red meat intake, and increasing their physical activity. The author reviews the symptoms, differential diagnosis, diagnostic tests, treatment, and expected treatment outcomes for diverticulitis, and then discusses diverticulitis in special populations, including the young patient, the immunocompromised patient, and recurrent diverticulitis after resection. A final section reviews the complications of diverticulitis, including abscess, fistulas, obstruction, and hemorrhage; the author offers treatment strategies for each potential problem. 112 references.

- **Motility and Functional Diseases Including Diverticular Disease**

Source: Current Opinion in Gastroenterology. 8(1): 12-18. February 1992.

Summary: In this article, the mechanisms linking the psyche and cerebral control of colonic motility are reviewed, including the psychologic profile of patients with functional bowel disease, and human and animal experiments that clarify this connection. Other abnormalities in functional disorders such as hormone abnormalities and myenteric plexus changes are also covered. The role and therapeutic application of calcium as a regulator of smooth muscle activity, circulatory hormones, colonic and pouch motility, and greater characterization of colonic hormone and neurotransmitter receptors are discussed. An update on measurement of colonic transit and motility is included. A final section discusses a clinical curiosity, ciguatera fish toxin as a cause of diarrhea. 54 annotated references.

- **Diverticular Disease in the Elderly**

Source: Gastroenterology Clinics of North America. 30(2): 475-496. June 2001.

Contact: Available from W.B. Saunders Company. 6277 Sea Harbor Drive, Orlando, FL 32821-9816. (800) 654-2452.

Summary: The term **diverticular disease** refers to the entire spectrum of asymptomatic to symptomatic disease associated with colonic diverticula (a pouch or sac created by herniation of the lining of mucus membrane in the intestine). Diverticulosis is the presence of one or more diverticula; diverticulitis is diverticulosis with clinical symptoms and evidence of inflammation. This article, from a special issue on gastrointestinal (GI) disorders in the elderly, addresses **diverticular disease**, a condition of special significance in the elderly. The incidence and severity of **diverticular disease** increases with age. Elderly patients often present with complicated **diverticular disease**, and because of their advanced age, poor ability to provide a history, and muted symptoms and signs, the diagnosis is particularly difficult to make. Consequently, great demands are placed on the physician to diagnose and treat **diverticular disease** in this population. In the past, advanced age made conservative therapy the standard of care for most patients; however, recent endoscopic, radiologic, and surgical advances have helped define more definitive therapies for patients with complicated **diverticular disease**. Complications of diverticulitis can include abscess, fistula (an opening between the colon and surrounding structures), obstruction, free perforation, and diverticular hemorrhage. Treatment strategies include bed rest, oral broad spectrum antibiotics, bowel rest, and oral hydration for uncomplicated diverticulitis; complicated diverticulitis generally requires surgery in addition to these primary care strategies. Lack of improvement with medical management may indicate a peridiverticular abscess. Recurrent diverticulitis is less likely to respond to medical management. Elective surgery should be considered after the second attack. 4 figures. 1 table. 82 references.

- **Diseases of the Appendix and Diverticular Disease**

Source: Current Opinion in Gastroenterology. 6(1): 19-23. February 1990.

Summary: This review covers diseases of the appendix and **diverticular disease**. The most common manifestations of appendicular and **diverticular disease** of the colon are infectious, with both appendicitis and diverticulitis posing problems of diagnosis and treatment on a regular basis in most countries of the western world. The studies included in this review focus on new diagnostic modalities applied to the old problems of diagnosis and treatment. Techniques discussed include computed tomography, ultrasound, laparoscopy, laparotomy, surgery for appendicitis, radiography, and sigmoidoscopy. 28 annotated references. (AA-M).

## **Federally Funded Research on Diverticular Disease**

The U.S. Government supports a variety of research studies relating to diverticular disease. These studies are tracked by the Office of Extramural Research at the National Institutes of Health.<sup>2</sup> CRISP (Computerized Retrieval of Information on Scientific Projects) is a searchable

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<sup>2</sup> Healthcare projects are funded by the National Institutes of Health (NIH), Substance Abuse and Mental Health Services (SAMHSA), Health Resources and Services Administration (HRSA), Food and Drug Administration (FDA), Centers for Disease Control and Prevention (CDCP), Agency for Healthcare Research and Quality (AHRQ), and Office of Assistant Secretary of Health (OASH).

database of federally funded biomedical research projects conducted at universities, hospitals, and other institutions.

Search the CRISP Web site at [http://crisp.cit.nih.gov/crisp/crisp\\_query.generate\\_screen](http://crisp.cit.nih.gov/crisp/crisp_query.generate_screen). You will have the option to perform targeted searches by various criteria, including geography, date, and topics related to diverticular disease.

For most of the studies, the agencies reporting into CRISP provide summaries or abstracts. As opposed to clinical trial research using patients, many federally funded studies use animals or simulated models to explore diverticular disease. The following is typical of the type of information found when searching the CRISP database for diverticular disease:

- **Project Title: PHYSIOLOGY OF COLONIC FUNCTION AND DEFECATION USING COLONIC MOTILITY**

Principal Investigator & Institution: Rao, Satish S.; University of Iowa Iowa City, Ia 52242

Timing: Fiscal Year 2002; Project Start 01-DEC-2001; Project End 30-NOV-2002

Summary: The goal of the study is to examine physiological changes in motor function throughout the defecation unit recording the intraluminal pressure activity in healthy subjects and subjects with constipation, **diverticular disease** and fecal incontinence.

Website: [http://crisp.cit.nih.gov/crisp/Crisp\\_Query.Generate\\_Screen](http://crisp.cit.nih.gov/crisp/Crisp_Query.Generate_Screen)

## The National Library of Medicine: PubMed

One of the quickest and most comprehensive ways to find academic studies in both English and other languages is to use PubMed, maintained by the National Library of Medicine.<sup>3</sup> The advantage of PubMed over previously mentioned sources is that it covers a greater number of domestic and foreign references. It is also free to use. If the publisher has a Web site that offers full text of its journals, PubMed will provide links to that site, as well as to sites offering other related data. User registration, a subscription fee, or some other type of fee may be required to access the full text of articles in some journals.

To generate your own bibliography of studies dealing with diverticular disease, simply go to the PubMed Web site at <http://www.ncbi.nlm.nih.gov/pubmed>. Type “diverticular disease” (or synonyms) into the search box, and click “Go.” The following is the type of output you can expect from PubMed for diverticular disease (hyperlinks lead to article summaries):

- **A comparison of emergency resection and staged management in perforated diverticular disease.**

Author(s): Finlay IG, Carter DC.

Source: Diseases of the Colon and Rectum. 1987 December; 30(12): 929-33.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3691263](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3691263)

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<sup>3</sup> PubMed was developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM) at the National Institutes of Health (NIH). The PubMed database was developed in conjunction with publishers of biomedical literature as a search tool for accessing literature citations and linking to full-text journal articles at Web sites of participating publishers. Publishers that participate in PubMed supply NLM with their citations electronically prior to or at the time of publication.

- **A complicated case of sigmoid diverticular disease.**  
 Author(s): Francot C, Blomme G.  
 Source: J Belge Radiol. 1988; 71(6): 724-5. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3243753](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3243753)
- **A potential alternative treatment of uncomplicated painful diverticular disease by trans-colonoscopy irrigation technique: a preliminary report.**  
 Author(s): Chen WS, Lin JK.  
 Source: J Chin Med Assoc. 2003 May; 66(5): 282-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12908570](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12908570)
- **A prospective study of alcohol, smoking, caffeine, and the risk of symptomatic diverticular disease in men.**  
 Author(s): Aldoori WH, Giovannucci EL, Rimm EB, Wing AL, Trichopoulos DV, Willett WC.  
 Source: Annals of Epidemiology. 1995 May; 5(3): 221-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7606311](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7606311)
- **A prospective study of dietary fiber types and symptomatic diverticular disease in men.**  
 Author(s): Aldoori WH, Giovannucci EL, Rockett HR, Sampson L, Rimm EB, Willett WC.  
 Source: The Journal of Nutrition. 1998 April; 128(4): 714-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9521633](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9521633)
- **A study of abnormal muscular patterns in diverticular disease of the colon using the polysiloxane foam enema.**  
 Author(s): Hughes LE.  
 Source: Gut. 1970 February; 11(2): 111-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5441878](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5441878)
- **A study of histochemical changes in mucus from patients with ulcerative colitis, Crohn's disease, and diverticular disease of the colon.**  
 Author(s): Habib NA, Dawson PM, Krausz T, Blount MA, Kersten D, Wood CB.  
 Source: Diseases of the Colon and Rectum. 1986 January; 29(1): 15-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3940799](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3940799)
- **A study on the peptidergic nerves (VIP, substance P) in the colon of patients with diverticular disease.**  
 Author(s): Tomita R, Munakata K, Aoki N, Tanjoh K, Kurosu Y.  
 Source: Regulatory Peptides. 1993 July 2; 46(1-2): 244-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7692505](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7692505)

- **A technique to facilitate colonoscopy in areas of severe diverticular disease.**  
 Author(s): Falchuk ZM, Griffin PH.  
 Source: The New England Journal of Medicine. 1984 March 1; 310(9): 598.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6694718](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6694718)
- **ABC of colorectal diseases. Diverticular disease.**  
 Author(s): Jones DJ.  
 Source: Bmj (Clinical Research Ed.). 1992 May 30; 304(6839): 1435-7. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1628026](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1628026)
- **Aberrant crypt foci in the human colon: frequency and histologic patterns in patients with colorectal cancer or diverticular disease.**  
 Author(s): Nascimbeni R, Villanacci V, Mariani PP, Di Betta E, Ghirardi M, Donato F, Salerni B.  
 Source: The American Journal of Surgical Pathology. 1999 October; 23(10): 1256-63.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10524527](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10524527)
- **Abnormal response to cholinergic stimulation in the circular muscle layer of the human colon in diverticular disease.**  
 Author(s): Huizinga JD, Waterfall WE, Stern HS.  
 Source: Scandinavian Journal of Gastroenterology. 1999 July; 34(7): 683-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10466879](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10466879)
- **Accuracy of computerized tomography in the diagnosis of colovesical fistula secondary to diverticular disease.**  
 Author(s): Jarrett TW, Vaughan ED Jr.  
 Source: The Journal of Urology. 1995 January; 153(1): 44-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7966788](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7966788)
- **Acquired jejuno-ileal diverticular disease: a diagnostic and management challenge.**  
 Author(s): El-Haddawi F, Civil ID.  
 Source: Anz Journal of Surgery. 2003 August; 73(8): 584-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12887523](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12887523)
- **Acquired jejunoileal diverticular disease: subject review.**  
 Author(s): Maglinte DD, Chernish SM, DeWeese R, Kelvin FM, Brunelle RL.  
 Source: Radiology. 1986 March; 158(3): 577-80. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3080802](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3080802)



- **Acute diverticulitis and diverticular disease of the colon: a safe indication for laparoscopic surgery.**  
 Author(s): Carbajo Caballero MA, Martin del Olmo JC, Blanco Alvarez JI, Martin Acebes F, De la Cuesta de la Llave C, Atienza Sanchez R, Toledano Trincado M, Vaquero Puerta C.  
 Source: Rev Esp Enferm Dig. 2000 November; 92(11): 718-25. English, Spanish.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11468853](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11468853)
- **An unusual presentation of complicated diverticular disease.**  
 Author(s): Awad Z, Ryan T.  
 Source: Ir Med J. 1996 September-October; 89(5): 190. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8936846](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8936846)
- **Analgesics and symptomatic diverticular disease.**  
 Author(s): Mold JW.  
 Source: Archives of Family Medicine. 1998 May-June; 7(3): 262-3.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9596461](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9596461)
- **Anastomotic myotomy: an adjunct to resection for diverticular disease.**  
 Author(s): Veidenheimer MC, Lawrence DC.  
 Source: Diseases of the Colon and Rectum. 1976 May-June; 19(4): 310-13.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1277973](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1277973)
- **Angiography with vasoactive drugs in diagnosis of diverticular disease and carcinoma of the sigmoid colon.**  
 Author(s): Holmstrom B, Ulden R, Wallensten R.  
 Source: Acta Chir Scand Suppl. 1978; 482: 57-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=278431](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=278431)
- **Anti-inflammatory drugs, analgesics and the risk of perforated colonic diverticular disease.**  
 Author(s): Morris CR, Harvey IM, Stebbings WS, Speakman CT, Kennedy HJ, Hart AR.  
 Source: The British Journal of Surgery. 2003 October; 90(10): 1267-72.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14515298](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14515298)
- **Antimesenteric perforations of the colon during diverticular disease: possible pathogenetic role of ischemia.**  
 Author(s): Tagliacozzo S, Tocchi A.  
 Source: Diseases of the Colon and Rectum. 1997 November; 40(11): 1358-61.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9369113](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9369113)

- **Applied physiology of the colon: factors relevant to diverticular disease.**  
 Author(s): Connell AM.  
 Source: Clin Gastroenterol. 1975 January; 4(1): 23-36. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1109817](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1109817)
- **Are fibre supplements really necessary in diverticular disease.**  
 Author(s): Painter NS.  
 Source: British Medical Journal (Clinical Research Ed.). 1981 July 11; 283(6284): 140.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6266574](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6266574)
- **Aspects of the epidemiology of diverticular disease and ischemic heart disease.**  
 Author(s): Trowell H, Painter N, Burkitt D.  
 Source: Am J Dig Dis. 1974 September; 19(9): 864-73. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4850652](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4850652)
- **Association of diverticular disease of the colon and vagal atrial fibrillation.**  
 Author(s): Gonzalez-Zuelgaray J, Perez A.  
 Source: The American Journal of Cardiology. 2002 February 15; 89(4): 475-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11835936](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11835936)
- **Atypical diverticular disease: surgical results.**  
 Author(s): Horgan AF, McConnell EJ, Wolff BG, The S, Paterson C.  
 Source: Diseases of the Colon and Rectum. 2001 September; 44(9): 1315-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11584207](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11584207)
- **Audit on complicated diverticular disease.**  
 Author(s): Shephard AA, Keighley MR.  
 Source: Annals of the Royal College of Surgeons of England. 1986 January; 68(1): 8-10.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3947025](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3947025)
- **Beyond Burkitt--is diverticular disease more than just cereal fibre deficiency?**  
 Author(s): Hart AR, Kennedy HJ, Day NE.  
 Source: Postgraduate Medical Journal. 2000 May; 76(895): 257-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10775276](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10775276)
- **Bilateral type diverticular disease of the colon.**  
 Author(s): Miura S, Kodaira S, Aoki H, Hosoda Y.  
 Source: International Journal of Colorectal Disease. 1996; 11(2): 71-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8739830](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8739830)

- **Bleeding and diverticular disease.**  
 Author(s): Gledhill T, Hunt RH.  
 Source: Lancet. 1983 April 9; 1(8328): 830.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6132173](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6132173)
- **Bleeding in diverticular disease of the colon.**  
 Author(s): Heald RJ, Ray JE.  
 Source: Proc R Soc Med. 1972 September; 65(9): 779-80. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4538937](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4538937)
- **Bowel muscle in diverticular disease.**  
 Author(s): Slack WW.  
 Source: Gut. 1966 December; 7(6): 668-70.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4959615](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4959615)
- **Bowel resection for diverticular disease of the colon.**  
 Author(s): Wilson E.  
 Source: The Medical Journal of Australia. 1970 January 31; 1(5): 204-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5436532](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5436532)
- **Bowel transit, stool weight, and diverticular disease.**  
 Author(s): Watts GT.  
 Source: Lancet. 1977 September 10; 2(8037): 564.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=95774](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=95774)
- **Bran and diverticular disease.**  
 Author(s): Cleave TL.  
 Source: British Medical Journal. 1972 May 13; 2(810): 408-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5023931](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5023931)
- **Bran tablets and diverticular disease.**  
 Author(s): Taylor I, Duthie HL.  
 Source: British Medical Journal. 1976 April 24; 1(6016): 988-90.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=773493](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=773493)
- **Cancers among patients diagnosed as having diverticular disease of the colon.**  
 Author(s): Stefansson T, Ekblom A, Sparen P, Pahlman L.  
 Source: The European Journal of Surgery = Acta Chirurgica. 1995 October; 161(10): 755-60.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8555344](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8555344)

- **Cholinergic denervation in diverticular disease.**  
 Author(s): Young-Fadok TM, Farrugia G.  
 Source: Lancet. 2003 June 7; 361(9373): 1923-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12801731](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12801731)
- **Clinical and functional results after elective colonic resection in 75 consecutive patients with diverticular disease.**  
 Author(s): Thorn M, Graf W, Stefansson T, Pahlman L.  
 Source: American Journal of Surgery. 2002 January; 183(1): 7-11.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11869694](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11869694)
- **Clinical features and differential diagnosis of diverticular disease.**  
 Author(s): Fearnhead NS, Mortensen NJ.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 577-93. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406452](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406452)
- **Clinical implications of jejunoileal diverticular disease.**  
 Author(s): Longo WE, Vernava AM 3rd.  
 Source: Diseases of the Colon and Rectum. 1992 April; 35(4): 381-8. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1582362](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1582362)
- **Colocutaneous fistula between the sigmoid colon and popliteal fossa in diverticular disease.**  
 Author(s): Drabble EH, Greathouse RA.  
 Source: The British Journal of Surgery. 1994 November; 81(11): 1659.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7827899](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7827899)
- **Colon diverticular disease as cause of acute abdominal cases.**  
 Author(s): Vyslouzil K, Unger R, Zmrzlik P.  
 Source: Acta Univ Palacki Olomuc Fac Med. 1993; 135: 75-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7976684](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7976684)
- **Colonic diverticular disease in patients 40 years old or younger.**  
 Author(s): Acosta JA, Grebenc ML, Doberneck RC, McCarthy JD, Fry DE.  
 Source: The American Surgeon. 1992 October; 58(10): 605-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1416433](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1416433)
- **Colonic diverticular disease.**  
 Author(s): Simpson J, Spiller R.  
 Source: Clin Evid. 2002 June; (7): 398-405. Review. No Abstract Available. Update In:  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12230665](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12230665)

- **Colonic diverticular disease.**  
 Author(s): Young-Fadok TM, Roberts PL, Spencer MP, Wolff BG.  
 Source: Current Problems in Surgery. 2000 July; 37(7): 457-514. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=10932672](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=10932672)
- **Colonic diverticular disease. Its spectrum in a community hospital.**  
 Author(s): Bingley LJ Jr, Lung E.  
 Source: Postgraduate Medicine. 1987 April; 81(5): 79-81, 84.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=3562383](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=3562383)
- **Colonic diverticular disease--blood or pain?**  
 Author(s): Pantanowitz D.  
 Source: South African Medical Journal. Suid-Afrikaanse Tydskrif Vir Geneeskunde. 1994 July; 84(7): 453-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=7709317](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=7709317)
- **Colorectal visceral perception in diverticular disease.**  
 Author(s): Clemens CH, Samsom M, Roelofs J, van Berge Henegouwen GP, Smout AJ.  
 Source: Gut. 2004 May; 53(5): 717-22.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=15082591](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=15082591)
- **Colosalpigeal fistula: a rare complication of diverticular disease of the colon.**  
 Author(s): Parikh VA.  
 Source: Journal of Clinical Gastroenterology. 1997 April; 24(3): 187-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=9179743](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=9179743)
- **Colovaginal fistula secondary to diverticular disease.**  
 Author(s): Grissom R, Snyder TE.  
 Source: Diseases of the Colon and Rectum. 1991 November; 34(11): 1043-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1935471](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1935471)
- **Colovaginal fistula secondary to diverticular disease. A report of two cases.**  
 Author(s): Cross SB, Copas PR.  
 Source: J Reprod Med. 1993 November; 38(11): 905-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=8277491](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=8277491)
- **Complicated colonic diverticular disease in two young adult brothers.**  
 Author(s): Grainger R, Edwards MH.  
 Source: Journal of the Royal College of Surgeons of Edinburgh. 1987 August; 32(4): 255-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=3681805](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=3681805)

- **Complications of colonic diverticular disease. Comparative study of two series.**  
 Author(s): Vinas-Salas J, Villalba-Acosta J, Scaramucci M, Rodas JH, Rodriguez G, Tiziana Ciutto S, Torres S, Ferminan A, Pelayo A, Pinol C.  
 Source: Rev Esp Enferm Dig. 2001 October; 93(10): 649-58. English, Spanish.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=11767489](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=11767489)
- **Complications of diverticular disease and non-steroidal anti-inflammatory drugs: a prospective study.**  
 Author(s): Wilson RG, Smith AN, Macintyre IM.  
 Source: The British Journal of Surgery. 1990 October; 77(10): 1103-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=2121310](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=2121310)
- **Computed tomographic angiography with three-dimensional reconstruction in patients with complex diverticular disease and portal hypertension: report of a case.**  
 Author(s): Armstrong N, Pozniak M, Helgersen R, Harms B.  
 Source: Diseases of the Colon and Rectum. 1998 March; 41(3): 391-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=9514439](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=9514439)
- **Cost structure of laparoscopic and open sigmoid colectomy for diverticular disease: similarities and differences.**  
 Author(s): Senagore AJ, Duepre HJ, Delaney CP, Dissanaik S, Brady KM, Fazio VW.  
 Source: Diseases of the Colon and Rectum. 2002 April; 45(4): 485-90.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=12006930](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=12006930)
- **Crohn's colitis in patients with diverticular disease.**  
 Author(s): Petros JG, Happ RA.  
 Source: The American Journal of Gastroenterology. 1991 February; 86(2): 247-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1992645](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1992645)
- **Crohn's-like reaction in diverticular disease.**  
 Author(s): Gledhill A, Dixon MF.  
 Source: Gut. 1998 March; 42(3): 392-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=9577347](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=9577347)
- **Diverticular disease and treatment with gastric acid inhibitors do not predispose to peritonitis of enteric origin in peritoneal dialysis patients.**  
 Author(s): del Peso G, Bajo MA, Gadola L, Millan I, Codoceo R, Celadilla O, Castro MJ, Aguilera A, Gil F, Selgas R.  
 Source: Perit Dial Int. 2001 July-August; 21(4): 360-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=11587398](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=11587398)

- **Diverticular disease as a risk factor for sigmoid colon adenomas.**  
 Author(s): Morini S, Hassan C, Zullo A, De Francesco V, Festa V, Barberani F, Faleo D, Stroffolini T.  
 Source: Dig Liver Dis. 2002 September; 34(9): 635-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12405250](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12405250)
- **Diverticular disease has an impact on quality of life -- results of a preliminary study.**  
 Author(s): Bolster LT, Papagrigoriadis S.  
 Source: Colorectal Disease : the Official Journal of the Association of Coloproctology of Great Britain and Ireland. 2003 July; 5(4): 320-3.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12814409](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12814409)
- **Diverticular disease in adolescence.**  
 Author(s): Afzal NA, Thomson M.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 621-34. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406455](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406455)
- **Diverticular disease in CT colonography.**  
 Author(s): Lefere P, Gryspeerdt S, Baekelandt M, Dewyspelaere J, van Holsbeeck B.  
 Source: European Radiology. 2003 December; 13 Suppl 4: L62-74.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15018168](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15018168)
- **Diverticular disease in the elderly.**  
 Author(s): Farrell RJ, Farrell JJ, Morrin MM.  
 Source: Gastroenterology Clinics of North America. 2001 June; 30(2): 475-96. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11432301](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11432301)
- **Diverticular disease of the colon and laparoscopic surgery.**  
 Author(s): Torres Garcia AJ.  
 Source: Rev Esp Enferm Dig. 2000 November; 92(11): 711-7. English, Spanish. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11468852](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11468852)
- **Diverticular disease of the colon in Accra, Ghana.**  
 Author(s): Baako BN.  
 Source: The British Journal of Surgery. 2001 December; 88(12): 1595.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11736970](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11736970)

- **Diverticular disease of the colon in Kampala, Uganda.**  
 Author(s): Kiguli-Malwadde E, Kasozi H.  
 Source: Afr Health Sci. 2002 April; 2(1): 29-32.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12789112](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12789112)
- **Diverticular disease of the colon.**  
 Author(s): Makins RJ, Irving PM.  
 Source: Lancet. 2004 April 24; 363(9418): 1397.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15110504](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15110504)
- **Diverticular disease of the colon.**  
 Author(s): Stollman N, Raskin JB.  
 Source: Lancet. 2004 February 21; 363(9409): 631-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14987890](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14987890)
- **Diverticular disease of the colon: new perspectives in symptom development and treatment.**  
 Author(s): Colecchia A, Sandri L, Capodicasa S, Vestito A, Mazzella G, Staniscia T, Roda E, Festi D.  
 Source: World Journal of Gastroenterology : Wjg. 2003 July; 9(7): 1385-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12854126](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12854126)
- **Diverticular disease of the colon—on the rise: a study of hospital admissions in England between 1989/1990 and 1999/2000.**  
 Author(s): Kang JY, Hoare J, Tinto A, Subramanian S, Ellis C, Majeed A, Melville D, Maxwell JD.  
 Source: Alimentary Pharmacology & Therapeutics. 2003 May 1; 17(9): 1189-95.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12752356](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12752356)
- **Diverticular disease of the small bowel.**  
 Author(s): Chiu EJ, Shyr YM, Su CH, Wu CW, Lui WY.  
 Source: Hepatogastroenterology. 2000 January-February; 47(31): 181-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10690606](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10690606)
- **Diverticular disease of the small bowel: report of 27 cases.**  
 Author(s): Kouraklis G, Mantas D, Glivanou A, Kouskos E, Raftopoulos J, Karatzas G.  
 Source: Int Surg. 2001 October-December; 86(4): 235-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12056468](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12056468)



- **Diverticular disease.**  
 Author(s): Place RJ, Simmang CL.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 February; 16(1): 135-48. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11977933](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11977933)
- **Diverticular disease.**  
 Author(s): Hyde C.  
 Source: Nursing Standard : Official Newspaper of the Royal College of Nursing. 2000 September 6-12; 14(51): 38-42; Quiz 44-5. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11974090](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11974090)
- **Diverticular disease-associated hemorrhage in the elderly.**  
 Author(s): Buttenschoen K, Buttenschoen DC, Odermath R, Beger HG.  
 Source: Langenbeck's Archives of Surgery / Deutsche Gesellschaft Fur Chirurgie. 2001 February; 386(1): 8-16. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11405093](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11405093)
- **Do calcium channel blockers and antimuscarinics protect against perforated colonic diverticular disease? A case control study.**  
 Author(s): Morris CR, Harvey IM, Stebbings WS, Speakman CT, Kennedy HJ, Hart AR.  
 Source: Gut. 2003 December; 52(12): 1734-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14633952](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14633952)
- **Effect of preoperative risk factors on the outcome after surgery for complicated diverticular disease.**  
 Author(s): Konsten J, Gouma DJ, Obertop H, Soeters PB.  
 Source: Neth J Surg. 1990 August; 42(4): 101-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2216003](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2216003)
- **Effect of secoverine on colonic myoelectric activity in diverticular disease of the colon.**  
 Author(s): Suchowiecky M, Clarke DD, Bhasker M, Perry RJ, Snape WJ Jr.  
 Source: Digestive Diseases and Sciences. 1987 August; 32(8): 833-40.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3608731](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3608731)
- **Efficacy of rifaximin in the treatment of symptomatic diverticular disease of the colon. A multicentre double-blind placebo-controlled trial.**  
 Author(s): Papi C, Ciaco A, Koch M, Capurso L.  
 Source: Alimentary Pharmacology & Therapeutics. 1995 February; 9(1): 33-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7766741](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7766741)

- **Elastosis in diverticular disease of the sigmoid colon.**  
 Author(s): Whiteway J, Morson BC.  
 Source: Gut. 1985 March; 26(3): 258-66.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3972272](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3972272)
- **Elective laparoscopic colonic resection for diverticular disease: results of a multicenter study in 179 patients.**  
 Author(s): Bouillot JL, Berthou JC, Champault G, Meyer C, Arnaud JP, Samama G, Collet D, Bressler P, Gainant A, Delaitre B.  
 Source: Surgical Endoscopy. 2002 September; 16(9): 1320-3. Epub 2002 May 03.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11984674](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11984674)
- **Elective laparoscopic-assisted colectomy for diverticular disease. A prospective study in 50 patients.**  
 Author(s): Bouillot JL, Aouad K, Badawy A, Alamowitch B, Alexandre JH.  
 Source: Surgical Endoscopy. 1998 December; 12(12): 1393-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9822464](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9822464)
- **Elective laparoscopic-assisted sigmoid resection for diverticular disease.**  
 Author(s): Eijssbouts QA, Cuesta MA, de Brauw LM, Sietses C.  
 Source: Surgical Endoscopy. 1997 July; 11(7): 750-3.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9214325](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9214325)
- **Elective resection for diverticular disease of the sigmoid colon.**  
 Author(s): Moreaux J, Vons C.  
 Source: The British Journal of Surgery. 1990 September; 77(9): 1036-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2207569](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2207569)
- **Electrophysiological differences in normal colon mucosa from diverticular disease vs cancer.**  
 Author(s): Mullin JM, Laughlin KV, Tongue JN, Russell WR, Reindl DV, Thornton JJ, Schulzke JD.  
 Source: Digestive Diseases and Sciences. 2000 December; 45(12): 2374-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11258561](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11258561)
- **Emergency surgery for complicated diverticular disease. A five-year experience.**  
 Author(s): Berry AR, Turner WH, Mortensen NJ, Kettlewell MG.  
 Source: Diseases of the Colon and Rectum. 1989 October; 32(10): 849-54.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2791771](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2791771)

- **Emergency surgery for diverticular disease complicated by generalized and faecal peritonitis: a review.**  
 Author(s): Krukowski ZH, Matheson NA.  
 Source: The British Journal of Surgery. 1984 December; 71(12): 921-7. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6388723](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6388723)
- **Encysted pneumatocele: a complication of diverticular disease.**  
 Author(s): Ritchie AJ, Carson JG, Humphreys WG.  
 Source: The British Journal of Surgery. 1991 June; 78(6): 683.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2070233](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2070233)
- **Epidemiology and management of diverticular disease of the colon.**  
 Author(s): Kang JY, Melville D, Maxwell JD.  
 Source: Drugs & Aging. 2004; 21(4): 211-28. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15012168](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15012168)
- **Epidemiology of diverticular disease.**  
 Author(s): Jun S, Stollman N.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 529-42. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406449](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406449)
- **Epidemiology of perforated colonic diverticular disease.**  
 Author(s): Morris CR, Harvey IM, Stebbings WS, Speakman CT, Kennedy HJ, Hart AR.  
 Source: Postgraduate Medical Journal. 2002 November; 78(925): 654-8. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12496319](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12496319)
- **Etiology of diverticular disease with classic illustrations.**  
 Author(s): McCarthy DW, Bumpers HL, Hoover EL.  
 Source: Journal of the National Medical Association. 1996 June; 88(6): 389-90.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8691502](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8691502)
- **Evaluation of current surgical management of acute inflammatory diverticular disease.**  
 Author(s): Sarin S, Boulos PB.  
 Source: Annals of the Royal College of Surgeons of England. 1991 September; 73(5): 278-82.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1929127](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1929127)

- **Evaluation of the effect of rifaximin in colon diverticular disease by means of lactulose hydrogen breath test.**  
 Author(s): Ventrucchi M, Ferrieri A, Bergami R, Roda E.  
 Source: Current Medical Research and Opinion. 1994; 13(4): 202-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7882699](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7882699)
- **Exercise and diverticular disease.**  
 Author(s): Heaton KW, Thompson WG.  
 Source: Bmj (Clinical Research Ed.). 1995 May 20; 310(6990): 1332.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7773067](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7773067)
- **Factors and consequences of conversion in laparoscopic sigmoidectomy for diverticular disease.**  
 Author(s): Le Moine MC, Fabre JM, Vacher C, Navarro F, Picot MC, Domergue J.  
 Source: The British Journal of Surgery. 2003 February; 90(2): 232-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12555302](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12555302)
- **Faecal bile acid excretion in diverticular disease.**  
 Author(s): Flynn M, Hyland J, Hammond P, Darby C, Taylor I.  
 Source: The British Journal of Surgery. 1980 September; 67(9): 629-32.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7427061](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7427061)
- **Faecal characteristics and colonic intraluminal pressure in diverticular disease.**  
 Author(s): Eastwood MA, Smith AN, Mitchell WD, Pritchard JL.  
 Source: Digestion. 1980; 20(6): 399-402.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7409350](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7409350)
- **Faecal stasis and diverticular disease in ulcerative colitis.**  
 Author(s): Jalan KN, Walker RJ, Prescott RJ, Butterworth ST, Smith AN, Sircus W.  
 Source: Gut. 1970 August; 11(8): 688-96.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5471035](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5471035)
- **Fecal characteristics contrasted in the irritable bowel syndrome and diverticular disease.**  
 Author(s): Goy JA, Eastwood MA, Mitchell WD, Pritchard JL, Smith AN.  
 Source: The American Journal of Clinical Nutrition. 1976 December; 29(12): 1480-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=826153](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=826153)
- **Fibre, intra-colonic pressure and diverticular disease.**  
 Author(s): Smith AN.  
 Source: Health Bull (Edinb). 1977 January; 35(1): 49-54. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=832999](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=832999)

- **Fistula and conditions associated with diverticular disease of the colon.**  
 Author(s): Small WP, Smith AN.  
 Source: Clin Gastroenterol. 1975 January; 4(1): 171-99. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1167350](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1167350)
- **Fistulas complicating diverticular disease of the sigmoid colon.**  
 Author(s): Colcock BP, Stahmann FD.  
 Source: Annals of Surgery. 1972 June; 175(6): 838-46.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5029841](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5029841)
- **Five-year audit of the acute complications of diverticular disease.**  
 Author(s): Elliott TB, Yego S, Irvin TT.  
 Source: The British Journal of Surgery. 1997 April; 84(4): 535-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9112911](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9112911)
- **Flatus retention is the major factor in diverticular disease.**  
 Author(s): Wynne-Jones G.  
 Source: Lancet. 1975 August 2; 2(7927): 211-2.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=51965](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=51965)
- **Gallstones, carcinoma of the colon and diverticular disease.**  
 Author(s): Castleden WM, Doouss TW, Jennings KP, Leighton M.  
 Source: Clin Oncol. 1978 June; 4(2): 139-44. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=668244](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=668244)
- **General peritonitis and haemorrhage complicating colonic diverticular disease.**  
 Author(s): Tagart RE.  
 Source: Annals of the Royal College of Surgeons of England. 1974 October; 55(4): 175-83.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4547577](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4547577)
- **Genital fistulas caused by diverticular disease of the sigmoid colon.**  
 Author(s): Tancer ML, Veridiano NP.  
 Source: American Journal of Obstetrics and Gynecology. 1996 May; 174(5): 1547-50.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9065127](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9065127)
- **Genital fistulas secondary to diverticular disease of the colon: a review.**  
 Author(s): Tancer ML, Veridiano NP.  
 Source: Obstetrical & Gynecological Survey. 1996 January; 51(1): 67-73. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8657399](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8657399)

- **Giant cysts in diverticular disease of the sigmoid colon.**  
 Author(s): van Vugt AB, Sleeboom C, Dekker LA, Mallens WM, ten Velde J.  
 Source: *Neth J Surg*. 1985 December; 37(6): 183-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4088522](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4088522)
- **Giant sigmoid diverticulum: a rare manifestation of diverticular disease.**  
 Author(s): Kuganeswaran E, Fisher JK.  
 Source: *Southern Medical Journal*. 1998 October; 91(10): 952-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9786292](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9786292)
- **Haemorrhage--the main presenting feature of diverticular disease of the colon in blacks.**  
 Author(s): Mokoena T, Madiba TE.  
 Source: *South African Medical Journal*. Suid-Afrikaanse Tydskrif Vir Geneeskunde. 1994 February; 84(2): 83-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8042103](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8042103)
- **Hemorrhage from diverticular disease of the colon. The role of emergency subtotal colectomy.**  
 Author(s): Olsen WR.  
 Source: *American Journal of Surgery*. 1968 February; 115(2): 247-63.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5299876](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5299876)
- **Hemorrhage from the large bowel with special reference to angiodysplasia and diverticular disease.**  
 Author(s): Welch CE, Athanasoulis CA, Galdabini JJ.  
 Source: *World Journal of Surgery*. 1978 January; 2(1): 73-83.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=307312](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=307312)
- **High bulk diet for diverticular disease of the colon.**  
 Author(s): Shulman AG.  
 Source: *The Western Journal of Medicine*. 1974 April; 120(4): 278-81.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4821705](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4821705)
- **Hip sepsis from retroperitoneal rupture of diverticular disease.**  
 Author(s): Messieh M, Turner R, Bunch F, Camer S.  
 Source: *Orthop Rev*. 1993 May; 22(5): 597-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8316423](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8316423)

- Histology of the mucosa in sigmoid colon specimens with diverticular disease: observations for the interpretation of sigmoid colonoscopic biopsy specimens.**  
 Author(s): Goldstein NS, Ahmad E.  
 Source: American Journal of Clinical Pathology. 1997 April; 107(4): 438-44.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9124212](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9124212)
- Imaging diverticular disease.**  
 Author(s): Halligan S, Saunders B.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 595-610. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406453](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406453)
- Increased distribution of collagen type III and reduced expression of matrix metalloproteinase 1 in patients with diverticular disease.**  
 Author(s): Stumpf M, Cao W, Klinge U, Klosterhalfen B, Kasperk R, Schumpelick V.  
 Source: International Journal of Colorectal Disease. 2001 September; 16(5): 271-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11686522](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11686522)
- Increased risk of left sided colon cancer in patients with diverticular disease.**  
 Author(s): Stefansson T, Ekblom A, Sparen P, Pahlman L.  
 Source: Gut. 1993 April; 34(4): 499-502.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8491397](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8491397)
- Influence of sigmoid resection on progression of diverticular disease of the colon.**  
 Author(s): Wolff BG, Ready RL, MacCarty RL, Dozois RR, Beart RW Jr.  
 Source: Diseases of the Colon and Rectum. 1984 October; 27(10): 645-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6489070](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6489070)
- Internal fistulas in diverticular disease.**  
 Author(s): Woods RJ, Lavery IC, Fazio VW, Jagelman DG, Weakley FL.  
 Source: Diseases of the Colon and Rectum. 1988 August; 31(8): 591-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3402284](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3402284)
- Intestinal streaming patterns in cholerrhoeic enteropathy and diverticular disease.**  
 Author(s): Findlay JM, Mitchell WD, Eastwood MA, Anderson AJ, Smith AN.  
 Source: Gut. 1974 March; 15(3): 207-12.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4841277](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4841277)
- Intramural gas cysts in a case of diverticular disease of the jejunum.**  
 Author(s): Zakhour HD, Clark RG.  
 Source: Histopathology. 1982 May; 6(3): 363-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6807798](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6807798)

- **Intramural masses secondary to diverticular disease of the colon.**  
 Author(s): Beachley MC.  
 Source: Am J Roentgenol Radium Ther Nucl Med. 1972 June; 115(2): 368-73. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=5037798](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=5037798)
- **Intraoperative colonic lavage in nonelective surgery for diverticular disease.**  
 Author(s): Lee EC, Murray JJ, Collier JA, Roberts PL, Schoetz DJ Jr.  
 Source: Diseases of the Colon and Rectum. 1997 June; 40(6): 669-74.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=9194460](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=9194460)
- **Intraoperative colonic lavage with primary anastomosis vs. Hartmann's procedure for perforated diverticular disease of the colon: a consecutive study.**  
 Author(s): Regenet N, Tuech JJ, Pessaix P, Ziani M, Rouge C, Hennekinne S, Arnaud JP.  
 Source: Hepatogastroenterology. 2002 May-June; 49(45): 664-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=12063965](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=12063965)
- **Investigative measures in diverticular disease: radiology, colonoscopy.**  
 Author(s): Samuel E, Dean AC.  
 Source: Clin Gastroenterol. 1975 January; 4(1): 71-84. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1078559](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1078559)
- **Irritable bowel syndrome and symptomatic diverticular disease--different diseases?**  
 Author(s): Otte JJ, Larsen L, Andersen JR.  
 Source: The American Journal of Gastroenterology. 1986 July; 81(7): 529-31.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=3717113](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=3717113)
- **Is ADPKD associated with small-bowel diverticular disease?**  
 Author(s): Pena JM, Pernaute R, Vicente de Vera C.  
 Source: Nephrology, Dialysis, Transplantation : Official Publication of the European Dialysis and Transplant Association - European Renal Association. 2000 November; 15(11): 1890-1.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=11071990](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=11071990)
- **Is bran useful in diverticular disease?**  
 Author(s): Math MV.  
 Source: British Medical Journal (Clinical Research Ed.). 1982 May 8; 284(6326): 1408-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=6280802](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=6280802)



- **Is bran useful in diverticular disease?**  
 Author(s): Allen-Mersh T, De Jode LR.  
 Source: British Medical Journal (Clinical Research Ed.). 1982 March 6; 284(6317): 740.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6279226](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6279226)
- **Is colonoscopy necessary in diverticular disease?**  
 Author(s): Boulos PB, Karamanolis DG, Salmon PR, Clark CG.  
 Source: Lancet. 1984 January 14; 1(8368): 95-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6140435](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6140435)
- **Is laparoscopic surgery applicable to complicated colonic diverticular disease?**  
 Author(s): Franklin ME Jr, Dorman JP, Jacobs M, Plasencia G.  
 Source: Surgical Endoscopy. 1997 October; 11(10): 1021-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9381341](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9381341)
- **Is prophylactic resection valid as an indication for elective surgery in diverticular disease?**  
 Author(s): Lorimer JW.  
 Source: Canadian Journal of Surgery. Journal Canadien De Chirurgie. 1997 December; 40(6): 445-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9416254](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9416254)
- **Is segmental colitis a complication of diverticular disease?**  
 Author(s): Sladen GE, Filipe MI.  
 Source: Diseases of the Colon and Rectum. 1984 August; 27(8): 513-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6147239](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6147239)
- **Juxtapapillary duodenal diverticula and diverticula of the colon: is there a general "gastrointestinal diverticular disease"?**  
 Author(s): De Koster E, Mante M, Denis P, Nyst JF, Otero J, Van Geel J, Buset M, Bellemans M, Deltenre M.  
 Source: Acta Gastroenterol Belg. 1991 March-April; 54(2): 191-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1755272](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1755272)
- **Laparoscopic sigmoid colectomy for diverticular disease in a patient with situs inversus.**  
 Author(s): Davies H, Slater GH, Bailey M.  
 Source: Surgical Endoscopy. 2003 January; 17(1): 160-1. Epub 2002 October 29.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12399858](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12399858)

- **Laparoscopic colectomy vs. open colectomy for sigmoid diverticular disease.**  
 Author(s): Dwivedi A, Chahin F, Agrawal S, Chau WY, Tootla A, Tootla F, Silva YJ.  
 Source: Diseases of the Colon and Rectum. 2002 October; 45(10): 1309-14; Discussion 1314-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12394427](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12394427)
- **Laparoscopic elective treatment of diverticular disease. A comparison between laparoscopic-assisted and resection-facilitated techniques.**  
 Author(s): Eijssbouts QA, de Haan J, Berends F, Sietses C, Cuesta MA.  
 Source: Surgical Endoscopy. 2000 August; 14(8): 726-30.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10954818](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10954818)
- **Laparoscopic left colon resection for diverticular disease.**  
 Author(s): Trebuchet G, Lechaux D, Lecalve JL.  
 Source: Surgical Endoscopy. 2002 January; 16(1): 18-21. Epub 2001 October 13.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11961597](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11961597)
- **Laparoscopic resection for diverticular disease.**  
 Author(s): Bruce CJ, Collier JA, Murray JJ, Schoetz DJ Jr, Roberts PL, Rusin LC.  
 Source: Diseases of the Colon and Rectum. 1996 October; 39(10 Suppl): S1-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8831539](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8831539)
- **Laparoscopic surgery for fistulas that complicate diverticular disease.**  
 Author(s): Menenakos E, Hahnloser D, Nassiopoulos K, Chanson C, Sinclair V, Petropoulos P.  
 Source: Langenbeck's Archives of Surgery / Deutsche Gesellschaft Fur Chirurgie. 2003 July; 388(3): 189-93. Epub 2003 June 26.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12836027](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12836027)
- **Laparoscopic therapy of colonic diverticular disease.**  
 Author(s): Szinicz G.  
 Source: International Journal of Surgical Investigation. 1999; 1(3): 251-2.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11341617](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11341617)
- **Laparoscopically assisted anterior resection for diverticular disease: follow-up of 100 consecutive patients.**  
 Author(s): Stevenson AR, Stitz RW, Lumley JW, Fielding GA.  
 Source: Annals of Surgery. 1998 March; 227(3): 335-42.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9527055](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9527055)

- **Leg pain: an uncommon presentation of perforated diverticular disease.**  
 Author(s): Haiart DC, Stevenson P, Hartley RC.  
 Source: Journal of the Royal College of Surgeons of Edinburgh. 1989 February; 34(1): 17-20.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2709351](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2709351)
- **Long-term outcome of patients presenting with acute complications of diverticular disease.**  
 Author(s): Sarin S, Boulos PB.  
 Source: Annals of the Royal College of Surgeons of England. 1994 March; 76(2): 117-20.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8154804](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8154804)
- **Long-term treatment with mesalazine and rifaximin versus rifaximin alone for patients with recurrent attacks of acute diverticulitis of colon.**  
 Author(s): Tursi A, Brandimarte G, Daffina R.  
 Source: Dig Liver Dis. 2002 July; 34(7): 510-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12236485](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12236485)
- **Lower bowel disorders. 2. Diverticular disease.**  
 Author(s): Davis WD Jr.  
 Source: Postgraduate Medicine. 1980 October; 68(4): 69-72.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6968437](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6968437)
- **Lower gastrointestinal tract. 2. Diarrhoea and diverticular disease.**  
 Author(s): Balson R, Gibson PR.  
 Source: The Medical Journal of Australia. 1995 February 20; 162(4): 217-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7877547](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7877547)
- **Major acute inflammatory complications of diverticular disease of the colon: planning of surgical management.**  
 Author(s): Tucci G, Torquati A, Grande M, Stroppa I, Sianesi M, Farinon AM.  
 Source: Hepatogastroenterology. 1996 July-August; 43(10): 839-45.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8884300](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8884300)
- **Management of lower gastrointestinal bleeding in colonic diverticular disease.**  
 Author(s): Rodriguez Romano D, Jimenez Romero C, Moreno Gonzalez E, Hidalgo Pascual M, Rey Perez P, Manzanera Diaz M, Castellon Pavon C.  
 Source: Rev Esp Enferm Dig. 1998 June; 90(6): 411-8. English, Spanish.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9708006](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9708006)

- **Management of perforated diverticular disease.**  
 Author(s): Senapati A, Marks CG.  
 Source: Annals of the Royal College of Surgeons of England. 1995 May; 77(3): 161-2.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7598410](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7598410)
- **Management of the acute complications of diverticular disease: acute perforation of colonic diverticula.**  
 Author(s): Griffen WO Jr.  
 Source: Diseases of the Colon and Rectum. 1976 May-June; 19(4): 293-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1277971](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1277971)
- **Management of the acute complications of diverticular disease: hemorrhage.**  
 Author(s): Blaisdell FW.  
 Source: Diseases of the Colon and Rectum. 1976 May-June; 19(4): 287-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1084259](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1084259)
- **Management of the acute complications of diverticular disease: peritonitis and septicemia.**  
 Author(s): Condon RE.  
 Source: Diseases of the Colon and Rectum. 1976 May-June; 19(4): 296-300.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1277972](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1277972)
- **Management of the acute complications of diverticular disease: the dangers of colostomy.**  
 Author(s): Alexander-Williams J.  
 Source: Diseases of the Colon and Rectum. 1976 May-June; 19(4): 289-92.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1277970](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1277970)
- **Management of the septic complications of diverticular disease.**  
 Author(s): Lambert ME, Knox RA, Schofield PF, Hancock BD.  
 Source: The British Journal of Surgery. 1986 July; 73(7): 576-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3730793](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3730793)
- **Management of uncomplicated diverticular disease by colonic resection in patients at St. Mark's Hospital, 1964-9.**  
 Author(s): Penfold JC.  
 Source: The British Journal of Surgery. 1973 September; 60(9): 695-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4741181](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4741181)

- **Managing diverticular disease.**  
 Author(s): Hall NR.  
 Source: The Practitioner. 2003 May; 247(1646): 392-6, 400, 402 Passim. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12760128](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12760128)
- **Managing the complications of diverticular disease.**  
 Author(s): Sidebotham J.  
 Source: Nurs Times. 2003 March 25-31; 99(12): 28-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12710240](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12710240)
- **Massive bleeding from colonic diverticular disease with NSAID use.**  
 Author(s): Muthu A, Qureshi A, Ismail MA.  
 Source: Med J Malaysia. 1999 September; 54(3): 374-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11045068](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11045068)
- **Medical and surgical therapy in diverticular disease: a comparative study.**  
 Author(s): Larson DM, Masters SS, Spiro HM.  
 Source: Gastroenterology. 1976 November; 71(5): 734-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=964566](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=964566)
- **Medical progress. Diverticular disease of the colon.**  
 Author(s): Almy TP, Howell DA.  
 Source: The New England Journal of Medicine. 1980 February 7; 302(6): 324-31. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6985709](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6985709)
- **Medical therapy of colonic diverticular disease.**  
 Author(s): Herrera AF.  
 Source: Postgraduate Medicine. 1976 December; 60(6): 107-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=792840](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=792840)
- **Motility effects of anterior resection of the rectum performed for diverticular disease.**  
 Author(s): Cortesini C, Bruno L, Pantalone D.  
 Source: Ital J Surg Sci. 1989; 19(4): 369-73.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2628390](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2628390)
- **Motility effects of operations performed for diverticular disease.**  
 Author(s): Smith AN, Kirwan WO, Shariff S.  
 Source: Proc R Soc Med. 1974 October; 67(10): 1041-3. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4427896](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4427896)

- **Multiple transverse taeniamyotomy for diverticular disease.**  
 Author(s): Landi E, Fianchini A, Landa L, Maniscalco L.  
 Source: Surg Gynecol Obstet. 1979 February; 148(2): 221-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=419425](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=419425)
- **Myoelectrical activity of the sigmoid colon in patients with diverticular disease and the irritable colon syndrome suffering from diarrhoea.**  
 Author(s): Hyland JM, Darby CF, Hammond P, Taylor I.  
 Source: Digestion. 1980; 20(5): 293-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7390053](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7390053)
- **National audit of complicated diverticular disease: analysis of index cases.**  
 Author(s): Tudor RG, Farmakis N, Keighley MR.  
 Source: The British Journal of Surgery. 1994 May; 81(5): 730-2.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8044565](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8044565)
- **Natural history of diverticular disease of the colon in young patients.**  
 Author(s): Eusebio EB, Eisenberg MM.  
 Source: American Journal of Surgery. 1973 March; 125(3): 308-11.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4690116](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4690116)
- **Natural history of diverticular disease of the colon.**  
 Author(s): Parks TG.  
 Source: Clin Gastroenterol. 1975 January; 4(1): 53-69. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1109820](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1109820)
- **Natural history of diverticular disease of the colon. A review of 521 cases.**  
 Author(s): Parks TG.  
 Source: British Medical Journal. 1969 December 13; 4(684): 639-42.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5359917](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5359917)
- **Natural history of diverticular disease: when to operate?**  
 Author(s): Makela J, Vuolio S, Kiviniemi H, Laitinen S.  
 Source: Diseases of the Colon and Rectum. 1998 December; 41(12): 1523-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9860333](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9860333)
- **New developments in diverticular disease.**  
 Author(s): Cima RR, Young-Fadok TM.  
 Source: Current Gastroenterology Reports. 2001 October; 3(5): 420-4. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11560801](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11560801)

- **Newly developing diverticular disease of the colon in patients undergoing repeated endoscopic evaluation.**  
 Author(s): Clin Evid. 2002 Dec;(8):436-44  
 Source: Journal of Clinical Gastroenterology. 2002 August; 35(2): 205-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12603892](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12603892)
- **Nodular intra-abdominal panniculitis: an accompaniment of colorectal carcinoma and diverticular disease.**  
 Author(s): Bak M.  
 Source: Histopathology. 1996 July; 29(1): 21-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8818690](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8818690)
- **Noncolonic diverticular disease.**  
 Author(s): Brian JE Jr, Stair JM.  
 Source: Surg Gynecol Obstet. 1985 August; 161(2): 189-95. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3927497](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3927497)
- **Non-steroidal anti-inflammatory drugs and complicated diverticular disease: a case-control study.**  
 Author(s): Wilson RG, Smith AN, Macintyre IM.  
 Source: The British Journal of Surgery. 1991 September; 78(9): 1148.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1933208](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1933208)
- **Non-steroidal anti-inflammatory drugs and complicated diverticular disease: a case-control study.**  
 Author(s): Campbell K, Steele RJ.  
 Source: The British Journal of Surgery. 1991 February; 78(2): 190-1.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2015469](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2015469)
- **Non-steroidal anti-inflammatory drugs and perforated diverticular disease: a case-control study.**  
 Author(s): Goh H, Bourne R.  
 Source: Annals of the Royal College of Surgeons of England. 2002 March; 84(2): 93-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11995772](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11995772)
- **Observations on diverticular disease of the colon.**  
 Author(s): Jesseph JE.  
 Source: J Indiana State Med Assoc. 1979 January; 72(1): 39-41. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=758352](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=758352)

- **Observations on the muscle abnormality of the human sigmoid colon in diverticular disease.**  
 Author(s): Rees BI, Bond J, Spriggs TL, Hughes LE.  
 Source: British Journal of Clinical Pharmacology. 1980 March; 9(3): 229-32.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7362732](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7362732)
- **One-stage operation for diverticular disease.**  
 Author(s): Fiora U, Calvo F, Carpani G, De Giuli M, Freddi M.  
 Source: Ital J Surg Sci. 1987; 17(3): 233-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3667206](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3667206)
- **Operations for diverticular disease.**  
 Author(s): Pescatori M, Castiglioni GC.  
 Source: Lancet. 1978 September 2; 2(8088): 534.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=79911](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=79911)
- **Operative treatment of acute complications of diverticular disease: primary or secondary anastomosis after sigmoid resection.**  
 Author(s): Gooszen AW, Gooszen HG, Veerman W, Van Dongen VM, Hermans J, Klien Kranenbarg E, Tollenaar RA.  
 Source: The European Journal of Surgery = Acta Chirurgica. 2001 January; 167(1): 35-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11213818](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11213818)
- **Optimal operative treatment in acute septic complications of diverticular disease.**  
 Author(s): Yeo R.  
 Source: Annals of the Royal College of Surgeons of England. 1990 September; 72(5): 345.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2221775](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2221775)
- **Optimal operative treatment in acute septic complications of diverticular disease.**  
 Author(s): Corder AP, Williams JD.  
 Source: Annals of the Royal College of Surgeons of England. 1990 March; 72(2): 82-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2334102](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2334102)
- **Origin of symptoms in diverticular disease.**  
 Author(s): Simpson J, Scholefield JH, Spiller RC.  
 Source: The British Journal of Surgery. 2003 August; 90(8): 899-908. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12905541](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12905541)
- **Overview and treatment of diverticular disease.**  
 Author(s): Angott BE, Bross RJ, Still CD.  
 Source: J Am Osteopath Assoc. 2001 April; 101(4 Suppl Pt 1): S19-21. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11392213](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11392213)



- **Pathogenesis, diagnosis, and treatment of diverticular disease of the colon.**  
 Author(s): Ozick LA, Salazar CO, Donelson SS.  
 Source: Gastroenterologist. 1994 December; 2(4): 299-310. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=7866737](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=7866737)
- **Pathophysiological aspects of diverticular disease of colon and role of large bowel motility.**  
 Author(s): Bassotti G, Chistolini F, Morelli A.  
 Source: World Journal of Gastroenterology : Wjg. 2003 October; 9(10): 2140-2. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=14562365](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=14562365)
- **Pathophysiology of diverticular disease.**  
 Author(s): Mimura T, Emanuel A, Kamm MA.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 563-76. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=12406451](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=12406451)
- **Pattern of diverticular disease among Africans.**  
 Author(s): Madiba TE, Mokoena T.  
 Source: East Afr Med J. 1994 October; 71(10): 644-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=7821243](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=7821243)
- **Patterns of pain in diverticular disease and the influence of acute diverticulitis.**  
 Author(s): Simpson J, Neal KR, Scholefield JH, Spiller RC.  
 Source: European Journal of Gastroenterology & Hepatology. 2003 September; 15(9): 1005-10.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=12923374](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=12923374)
- **Physiological studies on nitric oxide in the right sided colon of patients with diverticular disease.**  
 Author(s): Tomita R, Tanjoh K, Fujisaki S, Fukuzawa M.  
 Source: Hepatogastroenterology. 1999 September-October; 46(29): 2839-44.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=10576357](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=10576357)
- **Pneumatosis cystoides intestinalis arising in jejunal diverticular disease: report of a case and a suggestion to its pathogenesis.**  
 Author(s): Kuo SW, Chai CY, Chou CK, Chan HM.  
 Source: Gaoxiong Yi Xue Ke Xue Za Zhi. 1992 September; 8(9): 486-94.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1294764](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1294764)

- **Polypoid prolapsing mucosal folds associated with diverticular disease in the sigmoid colon: usefulness of colonoscopy and endoscopic ultrasonography for the diagnosis.**  
 Author(s): Yoshida M, Kawabata K, Kutsumi H, Fujita T, Soga T, Nishimura K, Kawanami C, Kinoshita Y, Chiba T, Fujimoto S.  
 Source: Gastrointestinal Endoscopy. 1996 October; 44(4): 489-91.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8905378](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8905378)
- **Polypoid prolapsing mucosal folds in diverticular disease.**  
 Author(s): Kelly JK.  
 Source: The American Journal of Surgical Pathology. 1991 September; 15(9): 871-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1951844](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1951844)
- **Polyp-simulating mucosal prolapse syndrome in (pre-) diverticular disease.**  
 Author(s): Mathus-Vliegen EM, Tytgat GN.  
 Source: Endoscopy. 1986 May; 18(3): 84-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3720687](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3720687)
- **Population-based incidence of complicated diverticular disease of the sigmoid colon based on gender and age.**  
 Author(s): McConnell EJ, Tessier DJ, Wolff BG.  
 Source: Diseases of the Colon and Rectum. 2003 August; 46(8): 1110-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12907908](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12907908)
- **Preservation of the inferior mesenteric artery in colorectal resection for complicated diverticular disease.**  
 Author(s): Tocchi A, Mazzoni G, Fornasari V, Miccini M, Daddi G, Tagliacozzo S.  
 Source: American Journal of Surgery. 2001 August; 182(2): 162-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11574089](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11574089)
- **Prevalence of diverticular disease, hiatus hernia, and pelvic phleboliths in black and white Americans.**  
 Author(s): Burkitt DP, Clements JL Jr, Eaton SB.  
 Source: Lancet. 1985 October 19; 2(8460): 880-1.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2864589](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2864589)
- **Primary anastomosis after intraoperative colonic lavage vs. Hartmann's procedure in generalized peritonitis complicating diverticular disease of the colon.**  
 Author(s): Regenet N, Pessaux P, Hennekinne S, Lermite E, Tuech JJ, Brehant O, Arnaud JP.  
 Source: International Journal of Colorectal Disease. 2003 November; 18(6): 503-7. Epub 2003 August 09.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12910361](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12910361)

- **Prospective study of primary anastomosis following sigmoid resection for suspected acute complicated diverticular disease (Br J Surgery 2001;88:693-7).**  
 Author(s): Menon VS.  
 Source: The British Journal of Surgery. 2002 February; 89(2): 246-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11862955](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11862955)
- **Prospective study of primary anastomosis following sigmoid resection for suspected acute complicated diverticular disease.**  
 Author(s): Gooszen AW, Tollenaar RA, Geelkerken RH, Smeets HJ, Bemelman WA, Van Schaardenburgh P, Gooszen HG.  
 Source: The British Journal of Surgery. 2001 May; 88(5): 693-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11350443](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11350443)
- **Pyoderma gangrenosum as a cutaneous manifestation of diverticular disease.**  
 Author(s): Kurgansky D, Foxwell MM Jr.  
 Source: Southern Medical Journal. 1993 May; 86(5): 581-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8488412](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8488412)
- **Radiology case of the month. Diverticular disease of the colon (with abscess formation).**  
 Author(s): Hiremagalur SR, Wilhoite SL, Gibson JW, Thomas E.  
 Source: J Tenn Med Assoc. 1992 August; 85(8): 378-9. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1507886](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1507886)
- **Radiology of colonic diverticular disease.**  
 Author(s): Stein GN.  
 Source: Postgraduate Medicine. 1976 December; 60(6): 95-102.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1087015](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1087015)
- **Radiology of diverticular disease.**  
 Author(s): Chapman M.  
 Source: Proc R Soc Med. 1970; 63 Suppl: 50-1. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5525502](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5525502)
- **Rational treatment of diverticular disease.**  
 Author(s): Barbezat GO.  
 Source: Drugs. 1980 January; 19(1): 63-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7363837](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7363837)

- **Reappraisal of clinical features of diverticular disease of the colon.**  
 Author(s): Parks TG.  
 Source: British Medical Journal. 1969 December 13; 4(684): 642-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5359918](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5359918)
- **Rectal and colonic studies after resection of the sigmoid for diverticular disease.**  
 Author(s): Parks TG.  
 Source: Gut. 1970 February; 11(2): 121-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5441880](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5441880)
- **Relation between pelvic phleboliths and diverticular disease of the colon.**  
 Author(s): Hunter TB, Merkley R, Pitt MJ.  
 Source: Ajr. American Journal of Roentgenology. 1984 July; 143(1): 105-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6610300](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6610300)
- **Relationship between nutritional status indicators and length of hospital stay for patients with diverticular disease.**  
 Author(s): Wunderlich SM, Tobias A.  
 Source: Journal of the American Dietetic Association. 1992 April; 92(4): 429-33.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1556344](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1556344)
- **Restoration of continuity after Hartmann's procedure for the complications of diverticular disease.**  
 Author(s): Sweeney JL, Hoffmann DC.  
 Source: The Australian and New Zealand Journal of Surgery. 1987 November; 57(11): 823-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3439923](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3439923)
- **Results of changing trends in the surgical management of complications of diverticular disease.**  
 Author(s): Alexander J, Karl RC, Skinner DB.  
 Source: Surgery. 1983 October; 94(4): 683-90.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6623368](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6623368)
- **Results of colectomy for diverticular disease of the colon.**  
 Author(s): Charnock FM, Rennie JR, Wellwood JM, Todd IP.  
 Source: The British Journal of Surgery. 1977 June; 64(6): 417-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=871616](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=871616)

- Results of elective surgery in diverticular disease of the colon.**  
 Author(s): Morgan B.  
 Source: Proc R Soc Med. 1970; 63 Suppl: 61-2. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5525506](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5525506)
- Results of resection for diverticular disease and its complications.**  
 Author(s): Rennie JA, Charnock MC, Wellwood JM, Todd IP.  
 Source: Proc R Soc Med. 1975 September; 68(9): 575. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1197344](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1197344)
- Rifaximin improves symptoms of acquired uncomplicated diverticular disease of the colon.**  
 Author(s): Latella G, Pimpo MT, Sottili S, Zippi M, Viscido A, Chiaramonte M, Frieri G.  
 Source: International Journal of Colorectal Disease. 2003 January; 18(1): 55-62. Epub 2002 May 09.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12458383](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12458383)
- Rifaximin plus mesalazine followed by mesalazine alone is highly effective in obtaining remission of symptomatic uncomplicated diverticular disease.**  
 Author(s): Brandimarte G, Tursi A.  
 Source: Medical Science Monitor : International Medical Journal of Experimental and Clinical Research. 2004 May; 10(5): Pi70-3. Epub 2004 April 28.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15114281](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15114281)
- Right-sided colonic diverticular disease as a source of lower gastrointestinal bleeding.**  
 Author(s): So JB, Kok K, Ngoi SS.  
 Source: The American Surgeon. 1999 April; 65(4): 299-302.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=10190349](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=10190349)
- Right-sided diverticular disease of the colon: a morphological analysis of 16 cases.**  
 Author(s): Pieterse AS, Rowland R, Miliauskas JR, Hoffmann DC.  
 Source: The Australian and New Zealand Journal of Surgery. 1986 June; 56(6): 471-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3488056](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3488056)
- Role of CT in diagnosis and management of complications of diverticular disease.**  
 Author(s): Feldberg MA, Hendriks MJ, van Waes PF.  
 Source: Gastrointest Radiol. 1985; 10(4): 370-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4054506](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4054506)

- **Role of nitric oxide in the left-sided colon of patients with diverticular disease.**  
 Author(s): Tomita R, Fujisaki S, Tanjoh K, Fukuzawa M.  
 Source: Hepatogastroenterology. 2000 May-June; 47(33): 692-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=10919013](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=10919013)
- **Roles of substance P receptors in human colon circular muscle: alterations in diverticular disease.**  
 Author(s): Liu L, Shang F, Markus I, Burcher E.  
 Source: The Journal of Pharmacology and Experimental Therapeutics. 2002 August; 302(2): 627-35.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=12130725](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=12130725)
- **Safe resection for diverticular disease of the colon.**  
 Author(s): Levien DH, Mazier WP, Surrell JA, Raiman PJ.  
 Source: Diseases of the Colon and Rectum. 1989 January; 32(1): 30-2.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=2910658](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=2910658)
- **Segmental colitis complicating diverticular disease.**  
 Author(s): Van Rosendaal GM, Andersen MA.  
 Source: Canadian Journal of Gastroenterology = Journal Canadien De Gastroenterologie. 1996 October; 10(6): 361-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=9193770](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=9193770)
- **Sigmoid motility in diverticular disease and the irritable bowel syndrome.**  
 Author(s): Trotman IF, Misiewicz JJ.  
 Source: Gut. 1988 February; 29(2): 218-22.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=3345933](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=3345933)
- **Sigmoid-appendiceal fistula in diverticular disease.**  
 Author(s): Libson E, Bloom RA, Verstandig A, Lax E, Lutwak E.  
 Source: Diagn Imaging Clin Med. 1984; 53(5): 262-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=6567494](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=6567494)
- **Sigmoidovaginal fistula secondary to diverticular disease. A report of three cases.**  
 Author(s): Reeves KO, Young RL, Gordon AN, Thomas SJ Jr, Redwine WA, Edwards GR.  
 Source: J Reprod Med. 1988 March; 33(3): 313-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=3361523](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=3361523)

- **Sigmoidovesicular fistula in a hemophiliac with diverticular disease.**  
 Author(s): Parker S, Cobb CF, Spero JA, Van Thiel DH.  
 Source: Journal of Clinical Gastroenterology. 1986 August; 8(4): 461-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3760526](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3760526)
- **Small bowel diverticular disease complicated by perforation.**  
 Author(s): Nightingale S, Nikfarjam M, Iles L, Djeri M.  
 Source: Anz Journal of Surgery. 2003 October; 73(10): 867-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14525588](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14525588)
- **Smooth muscle cholinergic denervation hypersensitivity in diverticular disease.**  
 Author(s): Golder M, Burleigh DE, Belai A, Ghali L, Ashby D, Luniss PJ, Navsaria HA, Williams NS.  
 Source: Lancet. 2003 June 7; 361(9373): 1945-51.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12801738](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12801738)
- **Spectrum of disease and outcome of complicated diverticular disease.**  
 Author(s): Bahadursingh AM, Virgo KS, Kaminski DL, Longo WE.  
 Source: American Journal of Surgery. 2003 December; 186(6): 696-701.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14672782](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14672782)
- **Spontaneous ureterocolic fistula: a rare complication of colonic diverticular disease.**  
 Author(s): Cirocco WC, Priolo SR, Golub RW.  
 Source: The American Surgeon. 1994 November; 60(11): 832-5. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7978675](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7978675)
- **Steroids, non-steroidal anti-inflammatory drugs, and serious septic complications of diverticular disease.**  
 Author(s): Corder A.  
 Source: British Medical Journal (Clinical Research Ed.). 1987 November 14; 295(6608): 1238.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3120962](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3120962)
- **Studies on complications of diverticular disease of the colon.**  
 Author(s): Kubo A, Kagaya T, Nakagawa H.  
 Source: Jpn J Med. 1985 February; 24(1): 39-43.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3873561](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3873561)
- **Submucosal collagen changes in the normal colon and in diverticular disease.**  
 Author(s): Thomson HJ, Busuttill A, Eastwood MA, Smith AN, Elton RA.  
 Source: International Journal of Colorectal Disease. 1987 November; 2(4): 208-13.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3694019](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3694019)

- **Success in treatment of complicated diverticular disease is stage related.**  
 Author(s): Illert B, Engemann R, Thiede A.  
 Source: International Journal of Colorectal Disease. 2001 September; 16(5): 276-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=11686523](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=11686523)
- **Surgical management of perforating diverticular disease in Austria.**  
 Author(s): Hold M, Denck H, Bull P.  
 Source: International Journal of Colorectal Disease. 1990 December; 5(4): 195-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=2286801](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=2286801)
- **Surgical management of the septic complications of diverticular disease.**  
 Author(s): Hocken DB.  
 Source: Annals of the Royal College of Surgeons of England. 1995 May; 77(3): 233-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=7598428](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=7598428)
- **Surgical management of the septic complications of diverticular disease.**  
 Author(s): Khan AL, Ah-See AK, Crofts TJ, Heys SD, Eremin O.  
 Source: Annals of the Royal College of Surgeons of England. 1995 January; 77(1): 16-20.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=7717637](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=7717637)
- **Surgical treatment of perforated diverticular disease: evaluation of factors predicting prognosis in the elderly.**  
 Author(s): Pisanu A, Cois A, Uccheddu A.  
 Source: Int Surg. 2004 January-March; 89(1): 35-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=15085996](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=15085996)
- **The 5-year natural history of complicated diverticular disease.**  
 Author(s): Farmakis N, Tudor RG, Keighley MR.  
 Source: The British Journal of Surgery. 1994 May; 81(5): 733-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=8044566](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=8044566)
- **The cause of diverticular disease of the colon, its symptoms and its complications. Review and hypothesis.**  
 Author(s): Painter NS.  
 Source: Journal of the Royal College of Surgeons of Edinburgh. 1985 April; 30(2): 118-22.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=2991507](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=2991507)
- **The changing epidemiology of diverticular disease in Israel.**  
 Author(s): Levy N, Stermer E, Simon J.  
 Source: Diseases of the Colon and Rectum. 1985 June; 28(6): 416-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=4006637](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=4006637)



- **The distributional pattern of diverticular disease.**  
 Author(s): Segal I, Leibowitz B.  
 Source: Diseases of the Colon and Rectum. 1989 March; 32(3): 227-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2493362](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2493362)
- **The elderly patient and colon surgery for cancer or diverticular disease.**  
 Author(s): Watne AL, Boyd JB, Bradford B.  
 Source: The American Surgeon. 1984 August; 50(8): 460-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6431861](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6431861)
- **The Hartmann procedure. First choice or last resort in diverticular disease?**  
 Author(s): Belmonte C, Klas JV, Perez JJ, Wong WD, Rothenberger DA, Goldberg SM, Madoff RD.  
 Source: Archives of Surgery (Chicago, Ill. : 1960). 1996 June; 131(6): 612-5; Discussion 616-7.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8645067](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8645067)
- **The management of inflammatory complications of colonic diverticular disease.**  
 Author(s): Morris DL, Tudor RG.  
 Source: Br J Hosp Med. 1987 January; 37(1): 36, 40-1. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3545337](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3545337)
- **The natural history diverticular disease: is there a role for elective colectomy?**  
 Author(s): Somasekar K, Foster ME, Haray PN.  
 Source: Journal of the Royal College of Surgeons of Edinburgh. 2002 April; 47(2): 481-2, 484.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12018691](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12018691)
- **The natural history of diverticular disease of the colon: a role for antibiotics in preventing complications? A retrospective study.**  
 Author(s): Porta E, Germano A, Ferrieri A, Koch M.  
 Source: Riv Eur Sci Med Farmacol. 1994 January-April; 16(1-2): 33-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7761680](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7761680)
- **The options in surgical treatment of diverticular disease.**  
 Author(s): Tudor RG, Keighley MR.  
 Source: Surg Annu. 1987; 19: 135-49. Review. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3547705](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3547705)

- **The pathology of diverticular disease.**  
 Author(s): Ludeman L, Warren BF, Shepherd NA.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 543-62.  
 Review. Erratum In: Best Pract Res Clin Gastroenterol. 2003 April; 17(2): 323-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406450](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406450)
- **The protective role of dietary fiber in diverticular disease.**  
 Author(s): Aldoori WH.  
 Source: Advances in Experimental Medicine and Biology. 1997; 427: 291-308.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9361853](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9361853)
- **The treatment of internal fistulae that complicate diverticular disease of the sigmoid colon by laparoscopically assisted colectomy.**  
 Author(s): Hewett PJ, Stitz R.  
 Source: Surgical Endoscopy. 1995 April; 9(4): 411-3.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7660265](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7660265)
- **Thoughts on the epidemiology of diverticular disease.**  
 Author(s): Mendeloff AI.  
 Source: Clin Gastroenterol. 1986 October; 15(4): 855-77. Review. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3096618](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3096618)
- **Trends of diverticular disease of the large bowel in a newly developed country.**  
 Author(s): Chia JG, Wilde CC, Ngoi SS, Goh PM, Ong CL.  
 Source: Diseases of the Colon and Rectum. 1991 June; 34(6): 498-501.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1645247](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1645247)
- **Twenty-four hour recordings of colonic motility in patients with diverticular disease: evidence for abnormal motility and propulsive activity.**  
 Author(s): Bassotti G, Battaglia E, Spinozzi F, Pelli MA, Tonini M.  
 Source: Diseases of the Colon and Rectum. 2001 December; 44(12): 1814-20.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=11742167](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=11742167)
- **Two kinds of diverticular disease.**  
 Author(s): Ornstein MH.  
 Source: Annals of the Royal College of Surgeons of England. 1991 November; 73(6): 400.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1759778](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1759778)
- **Two kinds of diverticular disease.**  
 Author(s): Nathan B.  
 Source: Annals of the Royal College of Surgeons of England. 1991 July; 73(4): 267.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1863055](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1863055)

- **Two kinds of diverticular disease.**  
 Author(s): Ryan P.  
 Source: Annals of the Royal College of Surgeons of England. 1991 March; 73(2): 73-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1741807](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1741807)
- **Ulcerative colitis in association with diverticular disease of the colon.**  
 Author(s): Beranbaum SL, Yaghamai M, Beranbaum ER.  
 Source: Radiology. 1965 November; 85(5): 880-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5844526](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5844526)
- **Understanding diverticular disease.**  
 Author(s): Coellen D.  
 Source: J Enterostomal Ther. 1989 July-August; 16(4): 176-80. Review. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2668368](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2668368)
- **Unpredictable course of 'minimal' diverticular disease.**  
 Author(s): Stephenson BM, Wheeler MH.  
 Source: The British Journal of Surgery. 1994 July; 81(7): 1050.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7922061](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7922061)
- **Unprocessed bran in treatment of diverticular disease of the colon.**  
 Author(s): Painter NS, Almeida AZ, Colebourne KW.  
 Source: British Medical Journal. 1972 April 15; 2(806): 137-40.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4622783](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4622783)
- **Up-regulation of collagen and tissue inhibitors of matrix metalloproteinase in colonic diverticular disease.**  
 Author(s): Mimura T, Bateman AC, Lee RL, Johnson PA, McDonald PJ, Talbot IC, Kamm MA, MacDonald TT, Pender SL.  
 Source: Diseases of the Colon and Rectum. 2004 March; 47(3): 371-8; Discussion 378-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14991500](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14991500)
- **Use of acetaminophen and nonsteroidal anti-inflammatory drugs: a prospective study and the risk of symptomatic diverticular disease in men.**  
 Author(s): Aldoori WH, Giovannucci EL, Rimm EB, Wing AL, Willett WC.  
 Source: Archives of Family Medicine. 1998 May-June; 7(3): 255-60.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9596460](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9596460)

- **Usefulness of colonic motility study in identifying patients at risk for complicated diverticular disease.**  
 Author(s): Cortesini C, Pantalone D.  
 Source: Diseases of the Colon and Rectum. 1991 April; 34(4): 339-42.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=2007352](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=2007352)
- **Value of colonoscopy in the detection of sigmoid malignancy in patients with diverticular disease.**  
 Author(s): Wesdorp IC, Glerum J, Agenant A, Schrijver M, Tytgat GN.  
 Source: Acta Chir Belg. 1979 November-December; 78(6): 355-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=525169](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=525169)
- **Value of coloscopy in the detection of sigmoid malignancy in patients with diverticular disease.**  
 Author(s): Glerum J, Agenant D, Tytgat GN.  
 Source: Endoscopy. 1977 November; 9(4): 228-30.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=590214](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=590214)
- **Variation in the incidence of diverticular disease within the city of Edinburgh.**  
 Author(s): Eastwood MA, Sanderson J, Pocock SJ, Mitchell WD.  
 Source: Gut. 1977 July; 18(7): 571-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=873339](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=873339)
- **Vasoactive intestinal polypeptide levels in sigmoid colon in idiopathic constipation and diverticular disease.**  
 Author(s): Milner P, Crowe R, Kamm MA, Lennard-Jones JE, Burnstock G.  
 Source: Gastroenterology. 1990 September; 99(3): 666-75.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1696228](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1696228)
- **Vesico-colic fistula complicating diverticular disease.**  
 Author(s): Henderson MA, Small WP.  
 Source: British Journal of Urology. 1969 June; 41(3): 314-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=5784600](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=5784600)
- **Virulent diverticular disease in young obese men.**  
 Author(s): Schauer PR, Ramos R, Ghiatas AA, Sirinek KR.  
 Source: American Journal of Surgery. 1992 November; 164(5): 443-6; Discussion 446-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list\\_uids=1443367](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr&list_uids=1443367)

- **Wheat bran for diverticular disease of the colon.**  
 Author(s): Painter NS.  
 Source: Compr Ther. 1976 June; 2(6): 51-5. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=791568](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=791568)
- **When the Dx is diverticular disease.**  
 Author(s): Marchiondo K.  
 Source: Rn. 1994 February; 57(2): 42-6; Quiz 47.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8128134](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8128134)
- **Which operation for diverticular disease?**  
 Author(s): Hilton HD, Griffin WT.  
 Source: Med Times. 1972 March; 100(3): 214 Passim. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5042584](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5042584)
- **X-ray dose received by patients in a population survey for colonic diverticular disease.**  
 Author(s): Ardran GM, Nolan DJ, Gear JS, Fursdon PS, Brodribb AJ.  
 Source: The British Journal of Radiology. 1978 June; 51(606): 472.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=656750](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=656750)



## CHAPTER 2. NUTRITION AND DIVERTICULAR DISEASE

### Overview

In this chapter, we will show you how to find studies dedicated specifically to nutrition and diverticular disease.

### Finding Nutrition Studies on Diverticular Disease

The National Institutes of Health's Office of Dietary Supplements (ODS) offers a searchable bibliographic database called the IBIDS (International Bibliographic Information on Dietary Supplements; National Institutes of Health, Building 31, Room 1B29, 31 Center Drive, MSC 2086, Bethesda, Maryland 20892-2086, Tel: 301-435-2920, Fax: 301-480-1845, E-mail: [ods@nih.gov](mailto:ods@nih.gov)). The IBIDS contains over 460,000 scientific citations and summaries about dietary supplements and nutrition as well as references to published international, scientific literature on dietary supplements such as vitamins, minerals, and botanicals.<sup>4</sup> The IBIDS includes references and citations to both human and animal research studies.

As a service of the ODS, access to the IBIDS database is available free of charge at the following Web address: <http://ods.od.nih.gov/databases/ibids.html>. After entering the search area, you have three choices: (1) IBIDS Consumer Database, (2) Full IBIDS Database, or (3) Peer Reviewed Citations Only.

Now that you have selected a database, click on the "Advanced" tab. An advanced search allows you to retrieve up to 100 fully explained references in a comprehensive format. Type "diverticular disease" (or synonyms) into the search box, and click "Go." To narrow the search, you can also select the "Title" field.

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<sup>4</sup> Adapted from <http://ods.od.nih.gov>. IBIDS is produced by the Office of Dietary Supplements (ODS) at the National Institutes of Health to assist the public, healthcare providers, educators, and researchers in locating credible, scientific information on dietary supplements. IBIDS was developed and will be maintained through an interagency partnership with the Food and Nutrition Information Center of the National Agricultural Library, U.S. Department of Agriculture.

The following information is typical of that found when using the “Full IBIDS Database” to search for “diverticular disease” (or a synonym):

- **Answers to 10 key questions on diverticular disease of the colon.**  
 Author(s): Department of Medicine, Loyola University Medical Center Maywood, Illinois 60153, USA.  
 Source: Kennedy, M V Zarling, E J Compr-Ther. 1998 August; 24(8): 364-9 0098-8243
- **Diagnosis and management of diverticular disease of the colon in adults. Ad Hoc Practice Parameters Committee of the American College of Gastroenterology.**  
 Author(s): Division of Gastroenterology, University of Miami School of Medicine, Florida, USA.  
 Source: Stollman, N H Raskin, J B Am-J-Gastroenterol. 1999 November; 94(11): 3110-21 0002-9270
- **Non-absorbable antibiotics in the treatment of diverticular disease of the colon.**  
 Author(s): Servizio Gastroenterologia, Ospedale S. Filippo Neri, Roma, Italy.  
 Source: Papi, C Camarri, E Ital-J-Gastroenterol. 1992 Nov-December; 24(9 Suppl 2): 19-22 0392-0623
- **Prospective study of physical activity and the risk of symptomatic diverticular disease in men.**  
 Author(s): Department of Nutrition and Epidemiology, Harvard School of Public Health, Boston, MA 02115.  
 Source: Aldoori, W H Giovannucci, E L Rimm, E B Ascherio, A Stampfer, M J Colditz, G A Wing, A L Trichopoulos, D V Willett, W C Gut. 1995 February; 36(2): 276-82 0017-5749

## Federal Resources on Nutrition

In addition to the IBIDS, the United States Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA) provide many sources of information on general nutrition and health. Recommended resources include:

- healthfinder®, HHS’s gateway to health information, including diet and nutrition: <http://www.healthfinder.gov/scripts/SearchContext.asp?topic=238&page=0>
- The United States Department of Agriculture’s Web site dedicated to nutrition information: [www.nutrition.gov](http://www.nutrition.gov)
- The Food and Drug Administration’s Web site for federal food safety information: [www.foodsafety.gov](http://www.foodsafety.gov)
- The National Action Plan on Overweight and Obesity sponsored by the United States Surgeon General: <http://www.surgeongeneral.gov/topics/obesity/>
- The Center for Food Safety and Applied Nutrition has an Internet site sponsored by the Food and Drug Administration and the Department of Health and Human Services: <http://vm.cfsan.fda.gov/>
- Center for Nutrition Policy and Promotion sponsored by the United States Department of Agriculture: <http://www.usda.gov/cnpp/>
- Food and Nutrition Information Center, National Agricultural Library sponsored by the United States Department of Agriculture: <http://www.nal.usda.gov/fnic/>
- Food and Nutrition Service sponsored by the United States Department of Agriculture: <http://www.fns.usda.gov/fns/>



## Additional Web Resources

A number of additional Web sites offer encyclopedic information covering food and nutrition. The following is a representative sample:

- AOL: <http://search.aol.com/cat.adp?id=174&layer=&from=subcats>
- Family Village: [http://www.familyvillage.wisc.edu/med\\_nutrition.html](http://www.familyvillage.wisc.edu/med_nutrition.html)
- Google: <http://directory.google.com/Top/Health/Nutrition/>
- Healthnotes: <http://www.healthnotes.com/>
- Open Directory Project: <http://dmoz.org/Health/Nutrition/>
- Yahoo.com: <http://dir.yahoo.com/Health/Nutrition/>
- WebMD®Health: <http://my.webmd.com/nutrition>
- WholeHealthMD.com: <http://www.wholehealthmd.com/reflib/0,1529,00.html>

The following is a specific Web list relating to diverticular disease; please note that any particular subject below may indicate either a therapeutic use, or a contraindication (potential danger), and does not reflect an official recommendation:

- **Food and Diet**

- High-Fiber Diet**

- Source: Healthnotes, Inc.; [www.healthnotes.com](http://www.healthnotes.com)



## CHAPTER 3. ALTERNATIVE MEDICINE AND DIVERTICULAR DISEASE

### Overview

In this chapter, we will begin by introducing you to official information sources on complementary and alternative medicine (CAM) relating to diverticular disease. At the conclusion of this chapter, we will provide additional sources.

### National Center for Complementary and Alternative Medicine

The National Center for Complementary and Alternative Medicine (NCCAM) of the National Institutes of Health (<http://nccam.nih.gov/>) has created a link to the National Library of Medicine's databases to facilitate research for articles that specifically relate to diverticular disease and complementary medicine. To search the database, go to the following Web site: <http://www.nlm.nih.gov/nccam/camonpubmed.html>. Select "CAM on PubMed." Enter "diverticular disease" (or synonyms) into the search box. Click "Go." The following references provide information on particular aspects of complementary and alternative medicine that are related to diverticular disease:

- **A case of ruptured diverticulum of the left ventricle with hemopericardium in a neonate, treated successfully by surgery.**  
 Author(s): Pettersson G, Bergstrom T.  
 Source: Scand J Thorac Cardiovasc Surg. 1969; 3(2): 203-6. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4245507](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4245507)
- **A prospective study of diet and the risk of symptomatic diverticular disease in men.**  
 Author(s): Aldoori WH, Giovannucci EL, Rimm EB, Wing AL, Trichopoulos DV, Willett WC.  
 Source: The American Journal of Clinical Nutrition. 1994 November; 60(5): 757-64.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7942584](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7942584)

- **Acute diverticulitis of the colon--current medical therapeutic management.**  
 Author(s): Tursi A.  
 Source: Expert Opinion on Pharmacotherapy. 2004 January; 5(1): 55-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14680435](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14680435)
- **Answers to 10 key questions on diverticular disease of the colon.**  
 Author(s): Kennedy MV, Zarling EJ.  
 Source: Compr Ther. 1998 August; 24(8): 364-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=9740981](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9740981)
- **Cereal dietary fiber consumption and diverticular disease: a lifespan study in rats.**  
 Author(s): Fisher N, Berry CS, Fearn T, Gregory JA, Hardy J.  
 Source: The American Journal of Clinical Nutrition. 1985 November; 42(5): 788-804.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2998175](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2998175)
- **Changes in dietary fiber intake among Japanese in the 20th century: a relationship to the prevalence of diverticular disease.**  
 Author(s): Ohi G, Minowa K, Oyama T, Nagahashi M, Yamazaki N, Yamamoto S, Nagasako K, Hayakawa K, Kimura K, Mori B.  
 Source: The American Journal of Clinical Nutrition. 1983 July; 38(1): 115-21.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6305184](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6305184)
- **Clinical picture of diverticular disease of the colon.**  
 Author(s): Thompson WG, Patel DG.  
 Source: Clin Gastroenterol. 1986 October; 15(4): 903-16. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3536213](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3536213)
- **Colonic muscle in diverticular disease.**  
 Author(s): Smith AN.  
 Source: Clin Gastroenterol. 1986 October; 15(4): 917-35. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3536214](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3536214)
- **Dietary fibre and asymptomatic diverticular disease of the colon.**  
 Author(s): Gear JS, Ware AC, Nolan DJ, Fursdon PS, Brodribb AJ, Mann JL.  
 Source: The Proceedings of the Nutrition Society. 1978 May; 37(1): 13A.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=662838](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=662838)
- **Diverticular disease in an indigenous African community.**  
 Author(s): Archampong EQ, Christian F, Badoe EA.

Source: Annals of the Royal College of Surgeons of England. 1978 November; 60(6): 464-70.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=718074](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=718074)

- **Diverticular disease of the colon and constipation. 3. High fibre diet with added bran.**  
 Author(s): Painter NS.  
 Source: Nurs Times. 1972 May 18; 68(20): 620-1. No Abstract Available.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=5027869](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=5027869)
- **Diverticular disease of the colon.**  
 Author(s): Tursi A.  
 Source: Lancet. 2004 April 24; 363(9418): 1397-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=15110505](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15110505)
- **Diverticular disease of the colon. The first of the Western diseases shown to be due to a deficiency of dietary fibre.**  
 Author(s): Painter NS.  
 Source: South African Medical Journal. Suid-Afrikaanse Tydskrif Vir Geneeskunde. 1982 June 26; 61(26): 1016-20.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6283684](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6283684)
- **Diverticular disease.**  
 Author(s): Wayne JD.  
 Source: Primary Care. 1976 March; 3(1): 91-105.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1085003](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1085003)
- **Diverticular disease: three studies. Part II - Treatment with bran.**  
 Author(s): Brodribb AJ, Humphreys DM.  
 Source: British Medical Journal. 1976 February 21; 1(6007): 425-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=766894](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=766894)
- **Diverticular disease-associated chronic colitis.**  
 Author(s): Makapugay LM, Dean PJ.  
 Source: The American Journal of Surgical Pathology. 1996 January; 20(1): 94-102.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=8540614](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=8540614)
- **Does a high fibre diet prevent the complications of diverticular disease?**  
 Author(s): Hyland JM, Taylor I.  
 Source: The British Journal of Surgery. 1980 February; 67(2): 77-9.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6244871](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6244871)

- **Does ispaghula husk stimulate the entire colon in diverticular disease?**  
 Author(s): Thorburn HA, Carter KB, Goldberg JA, Finlay IG.  
 Source: Gut. 1992 March; 33(3): 352-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1568654](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1568654)
- **Efficacy of rifaximin on symptoms of uncomplicated diverticular disease of the colon. A pilot multicentre open trial. Diverticular Disease Study Group.**  
 Author(s): Papi C, Ciaco A, Koch M, Capurso L.  
 Source: Ital J Gastroenterol. 1992 October; 24(8): 452-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1330083](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1330083)
- **Fecal beta-sitosterol in patients with diverticular disease of the colon and in vegetarians.**  
 Author(s): Miettinen TA, Tarpila S.  
 Source: Scandinavian Journal of Gastroenterology. 1978; 13(5): 573-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=705252](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=705252)
- **High fibre diet in symptomatic diverticular disease of the colon.**  
 Author(s): Leahy AL, Ellis RM, Quill DS, Peel AL.  
 Source: Annals of the Royal College of Surgeons of England. 1985 May; 67(3): 173-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2988400](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2988400)
- **Influence on symptoms and transit-time of Vi-SiblinR in diverticular disease.**  
 Author(s): Ewerth S, Ahlberg J, Holmstrom B, Persson U, Uden R.  
 Source: Acta Chir Scand Suppl. 1980; 500: 49-50.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7013392](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7013392)
- **Lactulose in the treatment of symptomatic diverticular disease: a comparative study with high-fibre diet.**  
 Author(s): Smits BJ, Whitehead AM, Prescott P.  
 Source: Br J Clin Pract. 1990 August; 44(8): 314-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2169839](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2169839)
- **Medical management of diverticular disease.**  
 Author(s): Murray CD, Emmanuel AV.  
 Source: Best Practice & Research. Clinical Gastroenterology. 2002 August; 16(4): 611-20. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12406454](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12406454)
- **Methylcellulose in diverticular disease.**  
 Author(s): Almeda AZ.

Source: British Medical Journal. 1972 December 30; 4(843): 792.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4646524](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4646524)

- **Non-absorbable antibiotics in the treatment of diverticular disease of the colon.**  
 Author(s): Papi C, Camarri E.  
 Source: Ital J Gastroenterol. 1992 November-December; 24(9 Suppl 2): 19-22. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=1336684](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=1336684)
- **Pathology of the ageing--diverticular disease.**  
 Author(s): Whiteway J, Morson BC.  
 Source: Clin Gastroenterol. 1985 October; 14(4): 829-46. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=3910310](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=3910310)
- **Preventing diverticular disease. Review of recent evidence on high-fibre diets.**  
 Author(s): Aldoori W, Ryan-Harshman M.  
 Source: Can Fam Physician. 2002 October; 48: 1632-7. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12449547](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12449547)
- **Prospective study of physical activity and the risk of symptomatic diverticular disease in men.**  
 Author(s): Aldoori WH, Giovannucci EL, Rimm EB, Ascherio A, Stampfer MJ, Colditz GA, Wing AL, Trichopoulos DV, Willett WC.  
 Source: Gut. 1995 February; 36(2): 276-82.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7883230](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7883230)
- **Role of dietary fiber in diverticular disease and colon cancer.**  
 Author(s): Talbot JM.  
 Source: Fed Proc. 1981 July; 40(9): 2337-42.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=6265284](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=6265284)
- **Sterculia bulk-forming agent with smooth-muscle relaxant versus bran in diverticular disease.**  
 Author(s): Srivastava GS, Smith AN, Painter NS.  
 Source: British Medical Journal. 1976 February 7; 1(6005): 315-8.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=764934](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=764934)
- **Strength of the colon wall in diverticular disease.**  
 Author(s): Watters DA, Smith AN.  
 Source: The British Journal of Surgery. 1990 March; 77(3): 257-9. Review.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=2157518](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2157518)

- **Symptomless diverticular disease and intake of dietary fibre.**  
 Author(s): Gear JS, Ware A, Fursdon P, Mann JI, Nolan DJ, Brodribb AJ, Vessey MP.  
 Source: Lancet. 1979 March 10; 1(8115): 511-4.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=85104](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=85104)
- **The effect of non-pathogenic Escherichia coli in symptomatic uncomplicated diverticular disease of the colon.**  
 Author(s): Fric P, Zavoral M.  
 Source: European Journal of Gastroenterology & Hepatology. 2003 March; 15(3): 313-5.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12610327](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12610327)
- **The high fibre diet in the treatment of diverticular disease of the colon.**  
 Author(s): Painter NS.  
 Source: Postgraduate Medical Journal. 1974 October; 50(588): 629-35.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4467859](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4467859)
- **The treatment of uncomplicated diverticular disease of the colon with a high fibre diet.**  
 Author(s): Painter NS.  
 Source: Acta Chir Belg. 1979 November-December; 78(6): 359-68.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=525170](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=525170)
- **Treatment of symptomatic diverticular disease with a high-fibre diet.**  
 Author(s): Brodribb AJ.  
 Source: Lancet. 1977 March 26; 1(8013): 664-6.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=66471](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=66471)
- **Unprocessed bran and diverticular disease.**  
 Author(s): Jones FA, Godding EW.  
 Source: British Medical Journal. 1972 June 10; 2(814): 651.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=4555653](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=4555653)

## Additional Web Resources

A number of additional Web sites offer encyclopedic information covering CAM and related topics. The following is a representative sample:

- Alternative Medicine Foundation, Inc.: <http://www.herbmed.org/>
- AOL: <http://search.aol.com/cat.adp?id=169&layer=&from=subcats>
- Chinese Medicine: <http://www.newcenturynutrition.com/>
- drkoop.com®: <http://www.drkoop.com/InteractiveMedicine/IndexC.html>



- Family Village: [http://www.familyvillage.wisc.edu/med\\_altn.htm](http://www.familyvillage.wisc.edu/med_altn.htm)
- Google: <http://directory.google.com/Top/Health/Alternative/>
- Healthnotes: <http://www.healthnotes.com/>
- MedWebPlus:  
[http://medwebplus.com/subject/Alternative\\_and\\_Complementary\\_Medicine](http://medwebplus.com/subject/Alternative_and_Complementary_Medicine)
- Open Directory Project: <http://dmoz.org/Health/Alternative/>
- HealthGate: <http://www.tnp.com/>
- WebMD® Health: [http://my.webmd.com/drugs\\_and\\_herbs](http://my.webmd.com/drugs_and_herbs)
- WholeHealthMD.com: <http://www.wholehealthmd.com/reflib/0,1529,00.html>
- Yahoo.com: [http://dir.yahoo.com/Health/Alternative\\_Medicine/](http://dir.yahoo.com/Health/Alternative_Medicine/)

The following is a specific Web list relating to diverticular disease; please note that any particular subject below may indicate either a therapeutic use, or a contraindication (potential danger), and does not reflect an official recommendation:

- **General Overview**

**Diverticular Disease**

Source: Healthnotes, Inc.; [www.healthnotes.com](http://www.healthnotes.com)

**Diverticular Disease**

Source: Integrative Medicine Communications; [www.drkoop.com](http://www.drkoop.com)

- **Herbs and Supplements**

**Chamomile**

Source: WholeHealthMD.com, LLC.; [www.wholehealthmd.com](http://www.wholehealthmd.com)

Hyperlink:

[http://www.wholehealthmd.com/refshelf/substances\\_view/0,1525,766,00.html](http://www.wholehealthmd.com/refshelf/substances_view/0,1525,766,00.html)

**Fiber**

Source: Healthnotes, Inc.; [www.healthnotes.com](http://www.healthnotes.com)

**Fiber**

Source: Integrative Medicine Communications; [www.drkoop.com](http://www.drkoop.com)

**Glucomannan**

Source: Healthnotes, Inc.; [www.healthnotes.com](http://www.healthnotes.com)

**Psyllium**

Source: Healthnotes, Inc.; [www.healthnotes.com](http://www.healthnotes.com)

## General References

A good place to find general background information on CAM is the National Library of Medicine. It has prepared within the MEDLINEplus system an information topic page dedicated to complementary and alternative medicine. To access this page, go to the MEDLINEplus site at <http://www.nlm.nih.gov/medlineplus/alternativemedicine.html>. This Web site provides a general overview of various topics and can lead to a number of general sources.

## CHAPTER 4. BOOKS ON DIVERTICULAR DISEASE

### Overview

This chapter provides bibliographic book references relating to diverticular disease. In addition to online booksellers such as **www.amazon.com** and **www.bn.com**, excellent sources for book titles on diverticular disease include the Combined Health Information Database and the National Library of Medicine. Your local medical library also may have these titles available for loan.

### Book Summaries: Federal Agencies

The Combined Health Information Database collects various book abstracts from a variety of healthcare institutions and federal agencies. To access these summaries, go directly to the following hyperlink: <http://chid.nih.gov/detail/detail.html>. You will need to use the "Detailed Search" option. To find book summaries, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer. For the format option, select "Monograph/Book." Now type "diverticular disease" (or synonyms) into the "For these words:" box. You should check back periodically with this database which is updated every three months. The following is a typical result when searching for books on diverticular disease:

- **ABC of Colorectal Diseases. 2nd ed**

Source: London, UK: BMJ Publishing Group. 1999. 120 p.

Contact: Available from BMJ Publishing Group. BMA Books, BMA House, Tavistock Square, London WC1H 9JR. Fax 44 (0)20 7383 6402. E-mail: [orders@bmjbooks.com](mailto:orders@bmjbooks.com).

Website: [www.bmjbooks.com](http://www.bmjbooks.com). PRICE: Contact publisher for price. ISBN: 0727911058.

Summary: Colorectal diseases are common and patients may present to doctors in almost any sphere of medical practice. This atlas is a reference to all the major colorectal diseases, covering signs and symptoms, initial diagnoses, and patient care management, as well as advice on when to refer for specialist treatment. The editor notes that minor anorectal problems, such as hemorrhoids, may be regarded by doctor and patient as being of little consequence, but they can cause considerable distress and may indicate serious underlying pathology. Fortunately, most anorectal conditions are easily

diagnosed and can be effectively treated. The atlas includes 26 chapters, covering anatomy and physiology, investigation of colorectal disorders, constipation, diarrhea, lower gastrointestinal hemorrhage, irritable bowel syndrome (IBS), hemorrhoids, anal fissures and fistulas, pilonidal sinus, pruritis (itching) ani, rectal prolapse, fecal incontinence, appendicitis, **diverticular disease**, inflammatory bowel disease (IBD), colorectal neoplasia (benign tumors and bowel cancer), anal cancer, intestinal stomas, large bowel volvulus, colorectal trauma, sexually transmitted diseases and papillomas, tropical colonic diseases, pediatric problems, and drugs in the management of colorectal diseases. Each chapter includes full color photographs and illustrations, sidebars that summarize the information presented, and patient care management algorithms. A subject index concludes the text.

- **Mayo Clinic Gastrointestinal Surgery**

Source: St. Louis, MO: Elsevier Science. 2004. 1020 p.

Contact: Available from Elsevier Science. Customer Service Department, 11830 Westline Industrial Drive, St. Louis, MO 63146 (800) 545-2522. Fax (800) 535-9935. Email: [usbkinfo@elsevier.com](mailto:usbkinfo@elsevier.com). Website: [www.elsevierhealth.com](http://www.elsevierhealth.com). PRICE: \$195.00. ISBN: 721692877.

Summary: This book focuses on the major diseases treated by gastrointestinal surgeons, from the esophagus to the anal canal. The presentation has a definite clinical orientation and a major emphasis on practical applications as they are applied at the Mayo Clinic. Sections on etiology, pathophysiology, pathology, and diagnosis are also included by are purposely not the emphasis of the chapters. The book offers 49 chapters: the experience of being a Mayo Clinic surgeon; gastroesophageal reflux disease (GERD) and esophageal hiatal hernia; achalasia and other esophageal motility disorders; epiphrenic esophageal diverticula; cancer of the esophagus; gastric adenocarcinoma, primary gastric lymphoma; peptic ulcer; disorders of gastrointestinal motility and emptying after gastric operations; morbid obesity; hepatocellular carcinoma and intrahepatic cholangiocarcinoma; hepatic metastases from extrahepatic cancers; benign tumors and cysts of the liver; liver diseases necessitating liver transplantation; biliary stone disease; benign biliary strictures; cancer of the gallbladder; pancreatic and periampullary carcinoma; islet cell tumors; acute and chronic pancreatitis; pancreas transplantation after complications of diabetes mellitus; cystic tumors of the pancreas; thrombocytopenia and other hematologic disorders; malignant tumors of the small intestine; villous tumors of the duodenum; small intestinal diverticula; Crohn's disease; small bowel obstruction; acute mesenteric ischemia; acute mesenteric venous thrombosis; chronic mesenteric ischemia; visceral artery aneurysms; colonic motor disorders (constipation); **diverticular disease** of the colon; colon cancer; ischemic colitis; appendicitis; chronic ulcerative colitis; colonic volvulus; familial adenomatous polyposis; cancer of the rectum; common anorectal problems; rectal prolapse and solitary rectal ulcer syndrome; abdominal trauma; unclosable abdomen and the dehiscence wound; ventral and incisional hernias; open repair of inguinal hernia; endoscopic inguinal hernia repair; and common pediatric gastrointestinal disorders. Each chapter is illustrated with line drawings, black and white photographs, and some color plates. References are provided with each chapter and a detailed subject index concludes the text.

- **Gastroenterology**

Source: St. Louis, MO: Elsevier Science. 2003. 623 p.

Contact: Available from Elsevier Science. Customer Service Department, 11830 Westline Industrial Drive, St. Louis, MO 63146. (800) 545-2522. Fax (800) 535-9935. Email: [usbkinfo@elsevier.com](mailto:usbkinfo@elsevier.com). Website: [www.elsevierhealth.com](http://www.elsevierhealth.com). PRICE: \$39.95. ISBN: 932141049.

Summary: This book on gastroenterology is from a series that provides the latest on evaluation, diagnosis, management, outcomes and prevention. The book offers concise, action-oriented recommendations for primary care medicine. It includes MediFiles (sections) on acute appendicitis, Budd-Chiari syndrome, celiac disease, cholecystitis, cirrhosis, Crohn's disease, **diverticular disease**, gastroesophageal reflux disease (GERD) in adults, hemorrhoids, alcoholic hepatitis, viral hepatitis, femoral and inguinal hernia, irritable bowel syndrome, lactose intolerance, Mallory-Weiss syndrome, pancreatitis, peptic ulcer, acute peritonitis, proctitis, pseudomembranous colitis, pyloric stenosis, rectal malignancy, and ulcerative colitis. Each MediFile covers summary information and background on the condition, and comprehensive information on diagnosis, treatment, outcomes, and prevention. Each section concludes with a list of resources.

- **Understanding Indigestion and Other Tummy Troubles**

Source: Woollahra, New South Wales, Australia: Health Books, Gore and Osment Publications. 1993. 64 p.

Contact: Available from Health Books, Gore and Osment Publications, Private Box 427, 150 Queen Street, Woollahra, NSW 2025, Australia. (02) 361-5244. Fax (02) 360-7558. PRICE: \$9.95 (as of 1995). ISBN: 187553136X.

Summary: This book presents basic information on the causes and treatments of common stomach and digestive tract ailments. After an introductory section that reviews the anatomy and physiology of the gastrointestinal (GI) tract, the book features nine chapters on the following topics: indigestion; ulcers; food poisoning and other causes of upset stomachs and diarrhea; irritable bowel syndrome (IBS); inflammatory bowel disease (IBD); dealing with **diverticular disease**; bowel cancer; other GI problems, including hiccups, gas, hepatitis, food allergies, appendicitis, and sexually transmitted diseases of the bowel; and children's GI problems, including colic, food intolerance, gastroenteritis, reflux, celiac disease, constipation, IBS, IBD, polyps, and phantom pains. The book is written in clear, easy-to-understand language and focuses on practical, self-care tips for many of the disorders covered.

- **Mayo Clinic on Digestive Health**

Source: Rochester, MN: Mayo Clinic. 2000. 194 p.

Contact: Available from Mayo Clinic Health Information. 5505 36th Street, SE, Grand Rapids, MI 49512. (800) 291-1128. Website: [www.mayoclinic.com](http://www.mayoclinic.com). PRICE: \$14.95 plus shipping and handling. ISBN: 1893005046.

Summary: This comprehensive guidebook from the Mayo Clinic focuses on a variety of digestive symptoms, including heartburn, abdominal pain, constipation, and diarrhea, and the common conditions that are often responsible for these symptoms. Written in nontechnical language, the book includes practical information on how the digestive system works, factors that can interfere with its normal functioning, and how to prevent digestive problems. After two introductory chapters in which the authors review the anatomy and physiology of the digestive tract and practical suggestions for maintaining a healthy digestive tract, the book includes 12 chapters on symptoms, common diagnostic tests, gastroesophageal reflux disease (GERD), ulcers and stomach pain,

irritable bowel syndrome, Crohn's disease and ulcerative colitis (together called inflammatory bowel disease or IBD), celiac disease, **diverticular disease**, gallstones, pancreatitis, liver disease, and cancer. Each chapter on a specific condition reviews the symptoms, diagnosis, risk factors, prognosis, and treatment options for that condition. The book concludes with a list of resource organizations through which readers can obtain more information, and a subject index.

- **Handbook of Colon and Rectal Surgery**

Source: Philadelphia, PA: Lippincott Williams and Wilkins. 2002. 931 p.

Contact: Available from Lippincott Williams and Wilkins. P.O. Box 1600, Hagerstown, MD 21741. (800) 638-3030 or (301) 223-2300. Fax (301) 223-2365. PRICE: \$79.00 plus shipping and handling. ISBN: 0781725860.

Summary: This handbook provides a more portable version of the larger textbook with the same title: *Colon and Rectal Surgery*, 4th Edition. The coverage addresses the entire range of diseases affecting the colon, rectum, and anus. A stepwise approach to treatment guides physicians from evaluation to follow up with incisive coverage of symptoms, testing and diagnosis, preparation, medical and surgical management, and postoperative care. Thirty-three chapters cover anatomy and embryology of the anus, rectum, and colon; physiology of the colon; diet and drugs in colorectal surgery; evaluation and diagnostic techniques; flexible sigmoidoscopy and colonoscopy; setting up a colorectal physiology laboratory; analgesia (pain killing) in colon and rectal surgery; hemorrhoids; anal fissure; anorectal abscess; anal fistula; rectovaginal and rectourethral fistulas; anal incontinence; colorectal trauma; management of foreign bodies; disorders of defecation; rectal prolapse, solitary rectal ulcer, syndrome of the descending perineum, and rectocele; pediatric surgical problems; cutaneous conditions; colorectal manifestations of acquired immunodeficiency syndrome (HIV); polypoid diseases; carcinoma (cancer) of the colon; carcinoma of the rectum; malignant tumors of the anal canal; less common tumors and tumorlike lesions of the colon, rectum, and anus; **diverticular disease**; laparoscopic-assisted colon and rectal surgery; vascular diseases; ulcerative colitis; Crohn's disease and indeterminate colitis; intestinal stomas; enterostomal therapy; and miscellaneous colitides. The handbook includes the same illustrations as the larger text. A subject index concludes the volume.

- **Office Management of Digestive Diseases**

Source: Malvern, PA: Lea and Febiger. 1992. 246 p.

Contact: Available from Lea and Febiger. Box 3024, Malvern, PA 19355-9725. (215) 251-2230. PRICE: \$39.50. ISBN: 0812114361.

Summary: This medical textbook presents information for primary care physicians dealing with the office management of common gastrointestinal diseases. Twenty-one chapters, each written by experts in the field, cover reflux esophagitis, dysphagia, peptic ulcer disease, chronic abdominal pain, diarrhea, **diverticular disease**, inflammatory bowel disease, colonic neoplasms, flexible sigmoidoscopy, chronic pancreatitis, irritable bowel syndrome, gallstones, hepatitis, cirrhosis, perianal diseases, premalignant gastrointestinal lesions, liver chemistry abnormalities, and flexible endoscopy. Each chapter includes numerous references and a subject index concludes the volume.

- **Instructions for Patients. 5th ed**

Source: Philadelphia, PA: W.B. Saunders Company. 1994. 598 p.

Contact: Available from W.B. Saunders Company. Book Order Fulfillment, 6277 Sea Harbor Drive, Orlando, FL 32887-4430. (800) 545-2522. Fax (800) 874-6418. PRICE: \$49.95. ISBN: 0721649300 (English); 0721669972 (Spanish).

Summary: This paper-bound book presents a number of patient instruction fact sheets. Each fact sheet includes three sections: basic information on signs and symptoms, causes, risk factors, etc.; treatment; and when to contact one's health care provider. Digestive system topics include food allergy, anal fissure, celiac disease, appendicitis, Crohn's disease, constipation, ulcerative colitis, cirrhosis of the liver, cholecystitis or cholangitis, diarrhea, **diverticular disease**, gallstones, gastritis, hiatal hernia, hemorrhoids, heartburn, irritable bowel syndrome, and lactose intolerance, among others. The fact sheets are designed to be photocopied and distributed to patients as a reinforcement of oral instructions and as a teaching tool. The book is available in English or Spanish.

## Chapters on Diverticular Disease

In order to find chapters that specifically relate to diverticular disease, an excellent source of abstracts is the Combined Health Information Database. You will need to limit your search to book chapters and diverticular disease using the "Detailed Search" option. Go to the following hyperlink: <http://chid.nih.gov/detail/detail.html>. To find book chapters, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Book Chapter." Type "diverticular disease" (or synonyms) into the "For these words:" box. The following is a typical result when searching for book chapters on diverticular disease:

- **Diverticular Diseases**

Source: in Bonci, L. American Dietetic Association Guide to Better Digestion. Hoboken, NJ: John Wiley and Sons, Inc. 2003. p. 114-126.

Contact: Available from John Wiley and Sons, Inc. Customer Care Department, One Wiley Drive, Somerset, NJ 08875. (800) 762-2974 or (317) 572-3993. Fax (317) 572-4002. Website: [www.wiley.com](http://www.wiley.com). PRICE: \$14.95 plus shipping and handling. ISBN: 0471442232.

Summary: Coping with a gastrointestinal disorder, whether it is irritable bowel syndrome (IBS), gas (flatulence), constipation, heartburn, or another condition, can be embarrassing and debilitating. While medical treatments and prescriptions can offer relief, one of the most important ways patients can help themselves is in their dietary choices. This chapter on **diverticular diseases** is from a book that describes how patients can self-manage their digestive disorders through dietary choices. **Diverticular disease** is characterized by the presence of small, bulging, abnormal pouches in the intestinal wall. In this chapter, the author defines **diverticular diseases** (diverticulosis and diverticulitis), including their symptoms, then discusses the diagnostic tests that are used to confirm diverticular problems, treatment options, the use of nutritional supplements (notably dietary fiber), the impact of diet on diverticular symptoms, foods to choose for diverticulosis, and foods to choose for diverticulitis. The author notes that the treatment for **diverticular disease** is a combination of specialized diet to increase fecal mass, medications, surgery, stress management, and exercise. Diverticulitis is an acute disease, which means that patients may need to make temporary changes in eating to allow their bodies a chance to heal, but once improvement is seen, patients should go

right back on a maintenance eating plan to keep the gut healthy and to decrease the risk of future diverticula forming. 4 figures.



## CHAPTER 5. MULTIMEDIA ON DIVERTICULAR DISEASE

### Overview

In this chapter, we show you how to keep current on multimedia sources of information on diverticular disease. We start with sources that have been summarized by federal agencies, and then show you how to find bibliographic information catalogued by the National Library of Medicine.

### Video Recordings

An excellent source of multimedia information on diverticular disease is the Combined Health Information Database. You will need to limit your search to "Videorecording" and "diverticular disease" using the "Detailed Search" option. Go directly to the following hyperlink: <http://chid.nih.gov/detail/detail.html>. To find video productions, use the drop boxes at the bottom of the search page where "You may refine your search by." Select the dates and language you prefer, and the format option "Videorecording (videotape, videocassette, etc.)." Type "diverticular disease" (or synonyms) into the "For these words:" box. The following is a typical result when searching for video recordings on diverticular disease:

- **Diverticular Disease and the Older Adult**

Source: Madison, WI: University of Wisconsin Hospitals and Clinics, Department of Outreach Education. 1995. (videocassette).

Contact: Available from University of Wisconsin Hospital and Clinics. Picture of Health, 702 North Blackhawk Avenue, Suite 215, Madison, WI 53705-3357. (800) 757-4354 or (608) 263-6510. Fax (608) 262-7172. PRICE: \$19.95 plus shipping and handling; bulk copies available. Order number 091395B.

Summary: Diverticular disease, including diverticulosis and diverticulitis, occurs when pouches (diverticula) form in the intestines. This videotape on coping with **diverticular disease** is one in a series of health promotion programs called 'Picture of Health,' produced by the University of Wisconsin. In this program, moderated by Mary Lee and featuring gastroenterologist John Wyman, the common etiology (causes), symptoms, diagnosis, and management of **diverticular disease** are covered. Dr. Wyman focuses on

the role of diet as the major culprit in **diverticular disease** and also reviews why the condition can be difficult to diagnose. Dr. Wyman stresses the preferred term of 'diverticular disease' to connote a degenerative disease process, rather than a finite problem with a simple treatment. Diverticulosis is herniation of the colon lining, resulting in pouch like abnormalities; diverticulitis is what happens when these pouches become inflamed or infected (complications can include hemorrhage and abscess). Although 90 percent of people with **diverticular disease** have no symptoms, people with symptoms can experience pain (in the left lower abdomen) and chronic inflammation. Dr. Wyman reviews irritable bowel syndrome (IBS) and how it differs from **diverticular disease**, primarily in the symptoms of diarrhea, constipation, and other disorder bowel habits. A high fiber diet results in bulkier stools, more active and stable colonic bacteria, and an increase in bowel diameter (which reduces overall pressure through the colon). Dr. Wyman reiterates the importance of eating high fiber foods, which are on the bottom of the food pyramid and considers whether diet can actually prevent **diverticular disease** (probably, but it is not yet proven). The program briefly discusses the diagnostic tests used to confirm complications and treatment of **diverticular disease**. The program includes simple drawings of the intestines and other pictures used to explain the subject matter under discussion. The program concludes by referring viewers to the National Digestive Diseases Information Clearinghouse (NDDIC).

## CHAPTER 6. PERIODICALS AND NEWS ON DIVERTICULAR DISEASE

### Overview

In this chapter, we suggest a number of news sources and present various periodicals that cover diverticular disease.

### News Services and Press Releases

One of the simplest ways of tracking press releases on diverticular disease is to search the news wires. In the following sample of sources, we will briefly describe how to access each service. These services only post recent news intended for public viewing.

#### PR Newswire

To access the PR Newswire archive, simply go to <http://www.prnewswire.com/>. Select your country. Type “diverticular disease” (or synonyms) into the search box. You will automatically receive information on relevant news releases posted within the last 30 days. The search results are shown by order of relevance.

#### Reuters Health

The Reuters’ Medical News and Health eLine databases can be very useful in exploring news archives relating to diverticular disease. While some of the listed articles are free to view, others are available for purchase for a nominal fee. To access this archive, go to <http://www.reutershealth.com/en/index.html> and search by “diverticular disease” (or synonyms).

### The NIH

Within MEDLINEplus, the NIH has made an agreement with the New York Times Syndicate, the AP News Service, and Reuters to deliver news that can be browsed by the public. Search news releases at [http://www.nlm.nih.gov/medlineplus/alphanews\\_a.html](http://www.nlm.nih.gov/medlineplus/alphanews_a.html). MEDLINEplus allows you to browse across an alphabetical index. Or you can search by date at the following Web page: <http://www.nlm.nih.gov/medlineplus/newsbydate.html>. Often, news items are indexed by MEDLINEplus within its search engine.

### Business Wire

Business Wire is similar to PR Newswire. To access this archive, simply go to <http://www.businesswire.com/>. You can scan the news by industry category or company name.

### Market Wire

Market Wire is more focused on technology than the other wires. To browse the latest press releases by topic, such as alternative medicine, biotechnology, fitness, healthcare, legal, nutrition, and pharmaceuticals, access Market Wire's Medical/Health channel at [http://www.marketwire.com/mw/release\\_index?channel=MedicalHealth](http://www.marketwire.com/mw/release_index?channel=MedicalHealth). Or simply go to Market Wire's home page at <http://www.marketwire.com/mw/home>, type "diverticular disease" (or synonyms) into the search box, and click on "Search News." As this service is technology oriented, you may wish to use it when searching for press releases covering diagnostic procedures or tests.

### Search Engines

Medical news is also available in the news sections of commercial Internet search engines. See the health news page at Yahoo ([http://dir.yahoo.com/Health/News\\_and\\_Media/](http://dir.yahoo.com/Health/News_and_Media/)), or you can use this Web site's general news search page at <http://news.yahoo.com/>. Type in "diverticular disease" (or synonyms). If you know the name of a company that is relevant to diverticular disease, you can go to any stock trading Web site (such as <http://www.etrade.com/>) and search for the company name there. News items across various news sources are reported on indicated hyperlinks. Google offers a similar service at <http://news.google.com/>.

### BBC

Covering news from a more European perspective, the British Broadcasting Corporation (BBC) allows the public free access to their news archive located at <http://www.bbc.co.uk/>. Search by "diverticular disease" (or synonyms).

## Newsletter Articles

Use the Combined Health Information Database, and limit your search criteria to "newsletter articles." Again, you will need to use the "Detailed Search" option. Go directly to the following hyperlink: <http://chid.nih.gov/detail/detail.html>. Go to the bottom of the search page where "You may refine your search by." Select the dates and language that you prefer. For the format option, select "Newsletter Article." Type "diverticular disease" (or synonyms) into the "For these words:" box. You should check back periodically with this database as it is updated every three months. The following is a typical result when searching for newsletter articles on diverticular disease:

- **Dietary Recommendations for Diverticular Disease**

Source: *Intestinal Fortitude*. 9(4): 4. 1999.

Contact: Available from Intestinal Disease Foundation. 1323 Forbes Avenue, Suite 200, Pittsburgh, PA 15219. (412) 261-5888.

Summary: Diverticular disease occurs when outpouches or bulges appear in the intestinal membrane. These bulges are known as diverticula and are not typically a problem unless they become infected (diverticulitis). This article offers dietary recommendations for patients with **diverticular disease**. The standard diet therapy for **diverticular disease** is an increase in dietary fiber, to increase stool bulk, speed up transit time, and decrease the accumulation of residue in the diverticuli. The current recommendations are 25 grams of fiber per day. The article recommends that readers keep a food diary for a few days to assess their baseline fiber intake and then develop a plan to increase fiber as necessary. The author notes that many people with **diverticular disease** have been cautioned against consuming nuts, seeds, hulls (popcorn), and berries because it had been assumed that these foods could get caught in the diverticuli and cause pain. However, the author maintains that if the patient is ingesting a high fiber diet on a regular basis, the likelihood of these foods getting trapped is greatly diminished. The author also recommends that readers eat slowly and chew their food well, which will increase the pleasure of eating and help the body be more able to tolerate a variety of foods.

- **Diverticular Disease Fact Sheet**

Source: *Intestinal Fortitude*. 9(3): 13. 1999.

Contact: Available from Intestinal Disease Foundation. 1323 Forbes Avenue, Suite 200, Pittsburgh, PA 15219. (412) 261-5888. Fax (412) 471-2722.

Summary: This mini fact sheet describes diverticulosis, the presence of abnormal pouches that extend out from weakened areas of the intestinal wall (most commonly in the sigmoid colon in the lower left side of the body). The cause is uncertain, but diverticulosis is thought to be the result of increased pressure inside the colon which pushes on soft areas along the bowel wall, causing these weakened areas to balloon outward. Symptoms may include tenderness or muscle spasms in the abdomen. The diagnosis may be made when the physician examines the intestine for another reason. In addition to a medical history and physical examination of the abdomen, the physician may use a barium enema and or a colonoscopy to help make the diagnosis. Treatment is individualized based on symptoms and personal history. The treatment plan can include diet therapy (such as a high fiber and low fat diet), a nondietary bulking agent such as psyllium mucilloid (Metamucil), stress reduction relaxation techniques, and

medications to help control pain or cramps. Diverticulitis, an inflammatory process that develops when diverticulosis pouches get infected, is the most common complication. Symptoms of diverticulitis can range from mild to severe abdominal pain as well as fever and increased white blood cell count. The usual treatment for diverticulitis is antibiotics.

- **Diverticular Disease (Diverticulosis and Diverticulitis)**

Source: Intestinal Fortitude. 9(4): 1-3. 1999.

Contact: Available from Intestinal Disease Foundation. 1323 Forbes Avenue, Suite 200, Pittsburgh, PA 15219. (412) 261-5888.

Summary: This patient education article reviews **diverticular disease** (diverticulosis and diverticulitis) and its management. Diverticulosis is a condition in which pouches of intestinal lining balloon out through weak areas of the wall of the large intestine (colon). If the diverticula become infected, the condition is called diverticulitis, which can lead to serious complications. Diverticulosis is very common in North America, where diets tend to be low in fiber. Once formed, diverticula are permanent and cannot be reversed. The goal of management is to keep new diverticula from forming and to prevent complications. Patients with diverticulosis should follow the same advice given to people with constipation: eat regular meals that are high in fiber, drink plenty of fluids, exercise daily, respond right away to the urge to move the bowels, and avoid laxatives. High fiber diets are recommended because they help to create heavier, softer stools which move through the lower part of the gastrointestinal tract more easily than do small, hard stools. The goal is to consume 25 to 40 grams of dietary fiber per day. The article offers suggestions for increasing the amount of dietary fiber, noting that it is a good idea to increase fiber intake slowly (too much fiber too quickly can cause gas and bloating). Symptoms of diverticulitis may include fever and chills, abdominal pain (particularly on the lower left side), disruption of normal bowel activity, and abdominal tenderness. Infection can lead to complications such as rupturing of the diverticula, abscesses, bowel blockage, or leaks through the bowel wall. The article concludes by discussing the treatment options for diverticulitis, including surgical techniques that may be used.

## Academic Periodicals covering Diverticular Disease

Numerous periodicals are currently indexed within the National Library of Medicine's PubMed database that are known to publish articles relating to diverticular disease. In addition to these sources, you can search for articles covering diverticular disease that have been published by any of the periodicals listed in previous chapters. To find the latest studies published, go to <http://www.ncbi.nlm.nih.gov/pubmed>, type the name of the periodical into the search box, and click "Go."

If you want complete details about the historical contents of a journal, you can also visit the following Web site: <http://www.ncbi.nlm.nih.gov/entrez/jrbrowser.cgi>. Here, type in the name of the journal or its abbreviation, and you will receive an index of published articles. At <http://locatorplus.gov/>, you can retrieve more indexing information on medical periodicals (e.g. the name of the publisher). Select the button "Search LOCATORplus." Then type in the name of the journal and select the advanced search option "Journal Title Search."

## CHAPTER 7. RESEARCHING MEDICATIONS

### Overview

While a number of hard copy or CD-ROM resources are available for researching medications, a more flexible method is to use Internet-based databases. Broadly speaking, there are two sources of information on approved medications: public sources and private sources. We will emphasize free-to-use public sources.

### U.S. Pharmacopeia

Because of historical investments by various organizations and the emergence of the Internet, it has become rather simple to learn about the medications recommended for diverticular disease. One such source is the United States Pharmacopeia. In 1820, eleven physicians met in Washington, D.C. to establish the first compendium of standard drugs for the United States. They called this compendium the U.S. Pharmacopeia (USP). Today, the USP is a non-profit organization consisting of 800 volunteer scientists, eleven elected officials, and 400 representatives of state associations and colleges of medicine and pharmacy. The USP is located in Rockville, Maryland, and its home page is located at <http://www.usp.org/>. The USP currently provides standards for over 3,700 medications. The resulting USP DI® Advice for the Patient® can be accessed through the National Library of Medicine of the National Institutes of Health. The database is partially derived from lists of federally approved medications in the Food and Drug Administration's (FDA) Drug Approvals database, located at <http://www.fda.gov/cder/da/da.htm>.

While the FDA database is rather large and difficult to navigate, the Pharmacopeia is both user-friendly and free to use. It covers more than 9,000 prescription and over-the-counter medications. To access this database, simply type the following hyperlink into your Web browser: <http://www.nlm.nih.gov/medlineplus/druginformation.html>. To view examples of a given medication (brand names, category, description, preparation, proper use, precautions, side effects, etc.), simply follow the hyperlinks indicated within the United States Pharmacopeia (USP).

Below, we have compiled a list of medications associated with diverticular disease. If you would like more information on a particular medication, the provided hyperlinks will direct you to ample documentation (e.g. typical dosage, side effects, drug-interaction risks, etc.).

The following drugs have been mentioned in the Pharmacopeia and other sources as being potentially applicable to diverticular disease:

#### **Buspirone**

- **Systemic - U.S. Brands:** BuSpar; BuSpar DIVIDOSE  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202100.html>

#### **Cephalosporins**

- **Systemic - U.S. Brands:** Ancef; Ceclor; Ceclor CD; Cedax; Cefadyl; Cefditoren; Cefizox; Cefobid; Cefotan; Ceftin; Cefzil; Ceptaz; Claforan; Duricef; Fortaz; Keflex; Keftab; Kefurox; Kefzol; Mandol; Maxipime; Mefoxin; Monocid; Omnicef; Rocephin; Tazicef; Tazidime; Vantin; Velosef; Zinacef  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202119.html>

#### **Ciprofloxacin**

- **Ophthalmic - U.S. Brands:** Ciloxan  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202655.html>

#### **Clindamycin**

- **Systemic - U.S. Brands:** Cleocin; Cleocin Pediatric  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202145.html>
- **Topical - U.S. Brands:** Cleocin T Gel; Cleocin T Lotion; Cleocin T Topical Solution; Clinda-Derm  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202146.html>
- **Vaginal - U.S. Brands:** Cleocin  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202700.html>

#### **Gentamicin**

- **Ophthalmic - U.S. Brands:** Garamycin; Genoptic Liquifilm; Genoptic S.O.P.; Gentacidin; Gentafair; Gentak; Ocu-Mycin; Spectro-Genta  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202604.html>
- **Topical - U.S. Brands:** Garamycin; Gentamar; G-Myticin  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202258.html>

#### **Metronidazole**

- **Systemic - U.S. Brands:** Flagyl; Flagyl 375; Flagyl ER; Flagyl I.V.; Flagyl I.V. RTU; Metric 21; Metro I.V.; Protostat  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202365.html>
- **Vaginal - U.S. Brands:** MetroGel-Vaginal  
<http://www.nlm.nih.gov/medlineplus/druginfo/uspdi/202704.html>

### **Commercial Databases**

In addition to the medications listed in the USP above, a number of commercial sites are available by subscription to physicians and their institutions. Or, you may be able to access these sources from your local medical library.



### **Mosby's Drug Consult™**

Mosby's Drug Consult™ database (also available on CD-ROM and book format) covers 45,000 drug products including generics and international brands. It provides prescribing information, drug interactions, and patient information. Subscription information is available at the following hyperlink: <http://www.mosbysdrugconsult.com/>.

### ***PDRhealth***

The *PDRhealth* database is a free-to-use, drug information search engine that has been written for the public in layman's terms. It contains FDA-approved drug information adapted from the Physicians' Desk Reference (PDR) database. *PDRhealth* can be searched by brand name, generic name, or indication. It features multiple drug interactions reports. Search *PDRhealth* at [http://www.pdrhealth.com/drug\\_info/index.html](http://www.pdrhealth.com/drug_info/index.html).

### **Other Web Sites**

Drugs.com ([www.drugs.com](http://www.drugs.com)) reproduces the information in the Pharmacopeia as well as commercial information. You may also want to consider the Web site of the Medical Letter, Inc. (<http://www.medletter.com/>) which allows users to download articles on various drugs and therapeutics for a nominal fee.

If you have any questions about a medical treatment, the FDA may have an office near you. Look for their number in the blue pages of the phone book. You can also contact the FDA through its toll-free number, 1-888-INFO-FDA (1-888-463-6332), or on the World Wide Web at [www.fda.gov](http://www.fda.gov).



# APPENDICES



## APPENDIX A. PHYSICIAN RESOURCES

### Overview

In this chapter, we focus on databases and Internet-based guidelines and information resources created or written for a professional audience.

### NIH Guidelines

Commonly referred to as “clinical” or “professional” guidelines, the National Institutes of Health publish physician guidelines for the most common diseases. Publications are available at the following by relevant Institute<sup>5</sup>:

- Office of the Director (OD); guidelines consolidated across agencies available at <http://www.nih.gov/health/consumer/conkey.htm>
- National Institute of General Medical Sciences (NIGMS); fact sheets available at <http://www.nigms.nih.gov/news/facts/>
- National Library of Medicine (NLM); extensive encyclopedia (A.D.A.M., Inc.) with guidelines: <http://www.nlm.nih.gov/medlineplus/healthtopics.html>
- National Cancer Institute (NCI); guidelines available at <http://www.cancer.gov/cancerinfo/list.aspx?viewid=5f35036e-5497-4d86-8c2c-714a9f7c8d25>
- National Eye Institute (NEI); guidelines available at <http://www.nei.nih.gov/order/index.htm>
- National Heart, Lung, and Blood Institute (NHLBI); guidelines available at <http://www.nhlbi.nih.gov/guidelines/index.htm>
- National Human Genome Research Institute (NHGRI); research available at <http://www.genome.gov/page.cfm?pageID=10000375>
- National Institute on Aging (NIA); guidelines available at <http://www.nia.nih.gov/health/>

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<sup>5</sup> These publications are typically written by one or more of the various NIH Institutes.

- National Institute on Alcohol Abuse and Alcoholism (NIAAA); guidelines available at <http://www.niaaa.nih.gov/publications/publications.htm>
- National Institute of Allergy and Infectious Diseases (NIAID); guidelines available at <http://www.niaid.nih.gov/publications/>
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS); fact sheets and guidelines available at <http://www.niams.nih.gov/hi/index.htm>
- National Institute of Child Health and Human Development (NICHD); guidelines available at <http://www.nichd.nih.gov/publications/pubskey.cfm>
- National Institute on Deafness and Other Communication Disorders (NIDCD); fact sheets and guidelines at <http://www.nidcd.nih.gov/health/>
- National Institute of Dental and Craniofacial Research (NIDCR); guidelines available at <http://www.nidr.nih.gov/health/>
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); guidelines available at <http://www.niddk.nih.gov/health/health.htm>
- National Institute on Drug Abuse (NIDA); guidelines available at <http://www.nida.nih.gov/DrugAbuse.html>
- National Institute of Environmental Health Sciences (NIEHS); environmental health information available at <http://www.niehs.nih.gov/external/facts.htm>
- National Institute of Mental Health (NIMH); guidelines available at <http://www.nimh.nih.gov/practitioners/index.cfm>
- National Institute of Neurological Disorders and Stroke (NINDS); neurological disorder information pages available at [http://www.ninds.nih.gov/health\\_and\\_medical/disorder\\_index.htm](http://www.ninds.nih.gov/health_and_medical/disorder_index.htm)
- National Institute of Nursing Research (NINR); publications on selected illnesses at <http://www.nih.gov/ninr/news-info/publications.html>
- National Institute of Biomedical Imaging and Bioengineering; general information at [http://grants.nih.gov/grants/becon/becon\\_info.htm](http://grants.nih.gov/grants/becon/becon_info.htm)
- Center for Information Technology (CIT); referrals to other agencies based on keyword searches available at [http://kb.nih.gov/www\\_query\\_main.asp](http://kb.nih.gov/www_query_main.asp)
- National Center for Complementary and Alternative Medicine (NCCAM); health information available at <http://nccam.nih.gov/health/>
- National Center for Research Resources (NCRR); various information directories available at <http://www.ncrr.nih.gov/publications.asp>
- Office of Rare Diseases; various fact sheets available at [http://rarediseases.info.nih.gov/html/resources/rep\\_pubs.html](http://rarediseases.info.nih.gov/html/resources/rep_pubs.html)
- Centers for Disease Control and Prevention; various fact sheets on infectious diseases available at <http://www.cdc.gov/publications.htm>

## NIH Databases

In addition to the various Institutes of Health that publish professional guidelines, the NIH has designed a number of databases for professionals.<sup>6</sup> Physician-oriented resources provide a wide variety of information related to the biomedical and health sciences, both past and present. The format of these resources varies. Searchable databases, bibliographic citations, full-text articles (when available), archival collections, and images are all available. The following are referenced by the National Library of Medicine:<sup>7</sup>

- **Bioethics:** Access to published literature on the ethical, legal, and public policy issues surrounding healthcare and biomedical research. This information is provided in conjunction with the Kennedy Institute of Ethics located at Georgetown University, Washington, D.C.: [http://www.nlm.nih.gov/databases/databases\\_bioethics.html](http://www.nlm.nih.gov/databases/databases_bioethics.html)
- **HIV/AIDS Resources:** Describes various links and databases dedicated to HIV/AIDS research: <http://www.nlm.nih.gov/pubs/factsheets/aidsinfo.html>
- **NLM Online Exhibitions:** Describes “Exhibitions in the History of Medicine”: <http://www.nlm.nih.gov/exhibition/exhibition.html>. Additional resources for historical scholarship in medicine: <http://www.nlm.nih.gov/hmd/hmd.html>
- **Biotechnology Information:** Access to public databases. The National Center for Biotechnology Information conducts research in computational biology, develops software tools for analyzing genome data, and disseminates biomedical information for the better understanding of molecular processes affecting human health and disease: <http://www.ncbi.nlm.nih.gov/>
- **Population Information:** The National Library of Medicine provides access to worldwide coverage of population, family planning, and related health issues, including family planning technology and programs, fertility, and population law and policy: [http://www.nlm.nih.gov/databases/databases\\_population.html](http://www.nlm.nih.gov/databases/databases_population.html)
- **Cancer Information:** Access to cancer-oriented databases: [http://www.nlm.nih.gov/databases/databases\\_cancer.html](http://www.nlm.nih.gov/databases/databases_cancer.html)
- **Profiles in Science:** Offering the archival collections of prominent twentieth-century biomedical scientists to the public through modern digital technology: <http://www.profiles.nlm.nih.gov/>
- **Chemical Information:** Provides links to various chemical databases and references: <http://sis.nlm.nih.gov/Chem/ChemMain.html>
- **Clinical Alerts:** Reports the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity and mortality: [http://www.nlm.nih.gov/databases/alerts/clinical\\_alerts.html](http://www.nlm.nih.gov/databases/alerts/clinical_alerts.html)
- **Space Life Sciences:** Provides links and information to space-based research (including NASA): [http://www.nlm.nih.gov/databases/databases\\_space.html](http://www.nlm.nih.gov/databases/databases_space.html)
- **MEDLINE:** Bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the healthcare system, and the pre-clinical sciences: [http://www.nlm.nih.gov/databases/databases\\_medline.html](http://www.nlm.nih.gov/databases/databases_medline.html)

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<sup>6</sup> Remember, for the general public, the National Library of Medicine recommends the databases referenced in MEDLINEplus (<http://medlineplus.gov/> or <http://www.nlm.nih.gov/medlineplus/databases.html>).

<sup>7</sup> See <http://www.nlm.nih.gov/databases/databases.html>.

- **Toxicology and Environmental Health Information (TOXNET):** Databases covering toxicology and environmental health: <http://sis.nlm.nih.gov/Tox/ToxMain.html>
- **Visible Human Interface:** Anatomically detailed, three-dimensional representations of normal male and female human bodies:  
[http://www.nlm.nih.gov/research/visible/visible\\_human.html](http://www.nlm.nih.gov/research/visible/visible_human.html)

### The NLM Gateway<sup>8</sup>

The NLM (National Library of Medicine) Gateway is a Web-based system that lets users search simultaneously in multiple retrieval systems at the U.S. National Library of Medicine (NLM). It allows users of NLM services to initiate searches from one Web interface, providing one-stop searching for many of NLM's information resources or databases.<sup>9</sup> To use the NLM Gateway, simply go to the search site at <http://gateway.nlm.nih.gov/gw/Cmd>. Type "diverticular disease" (or synonyms) into the search box and click "Search." The results will be presented in a tabular form, indicating the number of references in each database category.

### Results Summary

Category	Items Found
Journal Articles	10134
Books / Periodicals / Audio Visual	80
Consumer Health	704
Meeting Abstracts	2
Other Collections	4
Total	10924

### HSTAT<sup>10</sup>

HSTAT is a free, Web-based resource that provides access to full-text documents used in healthcare decision-making.<sup>11</sup> These documents include clinical practice guidelines, quick-reference guides for clinicians, consumer health brochures, evidence reports and technology assessments from the Agency for Healthcare Research and Quality (AHRQ), as well as AHRQ's Put Prevention Into Practice.<sup>12</sup> Simply search by "diverticular disease" (or synonyms) at the following Web site: <http://text.nlm.nih.gov>.

<sup>8</sup> Adapted from NLM: <http://gateway.nlm.nih.gov/gw/Cmd?Overview.x>.

<sup>9</sup> The NLM Gateway is currently being developed by the Lister Hill National Center for Biomedical Communications (LHNCBC) at the National Library of Medicine (NLM) of the National Institutes of Health (NIH).

<sup>10</sup> Adapted from HSTAT: <http://www.nlm.nih.gov/pubs/factsheets/hstat.html>.

<sup>11</sup> The HSTAT URL is <http://hstat.nlm.nih.gov/>.

<sup>12</sup> Other important documents in HSTAT include: the National Institutes of Health (NIH) Consensus Conference Reports and Technology Assessment Reports; the HIV/AIDS Treatment Information Service (ATIS) resource documents; the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment (SAMHSA/CSAT) Treatment Improvement Protocols (TIP) and Center for Substance Abuse Prevention (SAMHSA/CSAP) Prevention Enhancement Protocols System (PEPS); the Public Health Service (PHS) Preventive Services Task Force's *Guide to Clinical Preventive Services*; the independent, nonfederal Task Force on Community Services' *Guide to Community Preventive Services*; and the Health Technology Advisory Committee (HTAC) of the Minnesota Health Care Commission (MHCC) health technology evaluations.



### Coffee Break: Tutorials for Biologists<sup>13</sup>

Coffee Break is a general healthcare site that takes a scientific view of the news and covers recent breakthroughs in biology that may one day assist physicians in developing treatments. Here you will find a collection of short reports on recent biological discoveries. Each report incorporates interactive tutorials that demonstrate how bioinformatics tools are used as a part of the research process. Currently, all Coffee Breaks are written by NCBI staff.<sup>14</sup> Each report is about 400 words and is usually based on a discovery reported in one or more articles from recently published, peer-reviewed literature.<sup>15</sup> This site has new articles every few weeks, so it can be considered an online magazine of sorts. It is intended for general background information. You can access the Coffee Break Web site at the following hyperlink: <http://www.ncbi.nlm.nih.gov/Coffeebreak/>.

### Other Commercial Databases

In addition to resources maintained by official agencies, other databases exist that are commercial ventures addressing medical professionals. Here are some examples that may interest you:

- **CliniWeb International:** Index and table of contents to selected clinical information on the Internet; see <http://www.ohsu.edu/clinweb/>.
- **Medical World Search:** Searches full text from thousands of selected medical sites on the Internet; see <http://www.mwsearch.com/>.

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<sup>13</sup> Adapted from <http://www.ncbi.nlm.nih.gov/Coffeebreak/Archive/FAQ.html>.

<sup>14</sup> The figure that accompanies each article is frequently supplied by an expert external to NCBI, in which case the source of the figure is cited. The result is an interactive tutorial that tells a biological story.

<sup>15</sup> After a brief introduction that sets the work described into a broader context, the report focuses on how a molecular understanding can provide explanations of observed biology and lead to therapies for diseases. Each vignette is accompanied by a figure and hypertext links that lead to a series of pages that interactively show how NCBI tools and resources are used in the research process.



## **APPENDIX B. PATIENT RESOURCES**

### **Overview**

Official agencies, as well as federally funded institutions supported by national grants, frequently publish a variety of guidelines written with the patient in mind. These are typically called “Fact Sheets” or “Guidelines.” They can take the form of a brochure, information kit, pamphlet, or flyer. Often they are only a few pages in length. Since new guidelines on diverticular disease can appear at any moment and be published by a number of sources, the best approach to finding guidelines is to systematically scan the Internet-based services that post them.

### **Patient Guideline Sources**

The remainder of this chapter directs you to sources which either publish or can help you find additional guidelines on topics related to diverticular disease. Due to space limitations, these sources are listed in a concise manner. Do not hesitate to consult the following sources by either using the Internet hyperlink provided, or, in cases where the contact information is provided, contacting the publisher or author directly.

#### **The National Institutes of Health**

The NIH gateway to patients is located at <http://health.nih.gov/>. From this site, you can search across various sources and institutes, a number of which are summarized below.

#### **Topic Pages: MEDLINEplus**

The National Library of Medicine has created a vast and patient-oriented healthcare information portal called MEDLINEplus. Within this Internet-based system are “health topic pages” which list links to available materials relevant to diverticular disease. To access this system, log on to <http://www.nlm.nih.gov/medlineplus/healthtopics.html>. From there you can either search using the alphabetical index or browse by broad topic areas. Recently, MEDLINEplus listed the following when searched for “diverticular disease”:

**Anal and Rectal Diseases**

<http://www.nlm.nih.gov/medlineplus/analandrectaldiseases.html>

**Bladder Diseases**

<http://www.nlm.nih.gov/medlineplus/bladderdiseases.html>

**Colonic Diseases**

<http://www.nlm.nih.gov/medlineplus/colonicdiseases.html>

**Colonic Polyps**

<http://www.nlm.nih.gov/medlineplus/colonicpolyps.html>

**Colorectal Cancer**

<http://www.nlm.nih.gov/medlineplus/colorectalcancer.html>

**Digestive Diseases**

<http://www.nlm.nih.gov/medlineplus/digestivediseases.html>

**Diverticulosis and Diverticulitis**

<http://www.nlm.nih.gov/medlineplus/diverticulosisanddiverticulitis.html>

**Ulcerative Colitis**

<http://www.nlm.nih.gov/medlineplus/ulcerativecolitis.html>

You may also choose to use the search utility provided by MEDLINEplus at the following Web address: <http://www.nlm.nih.gov/medlineplus/>. Simply type a keyword into the search box and click "Search." This utility is similar to the NIH search utility, with the exception that it only includes materials that are linked within the MEDLINEplus system (mostly patient-oriented information). It also has the disadvantage of generating unstructured results. We recommend, therefore, that you use this method only if you have a very targeted search.

**The Combined Health Information Database (CHID)**

CHID Online is a reference tool that maintains a database directory of thousands of journal articles and patient education guidelines on diverticular disease. CHID offers summaries that describe the guidelines available, including contact information and pricing. CHID's general Web site is <http://chid.nih.gov/>. To search this database, go to <http://chid.nih.gov/detail/detail.html>. In particular, you can use the advanced search options to look up pamphlets, reports, brochures, and information kits. The following was recently posted in this archive:

- **Diverticular Disease: Questions and Answers**

Source: Arlington Heights, IL: American Society of Colon and Rectal Surgeons. 1999. [2 p.].

Contact: Available from American Society of Colon and Rectal Surgeons. 85 West Algonquin Road, Suite 550, Arlington Heights, IL 60005. (800) 791-0001 or (847) 290-9184. Fax (847) 290-9203. E-mail: [ascrs@fascrs.org](mailto:ascrs@fascrs.org). Website: [www.fascrs.org](http://www.fascrs.org). PRICE: Full-text available online at no charge; Single copy free; bulk copies available.

Summary: Diverticulosis of the colon is a common condition that afflicts about 50 percent of Americans by age 60 and nearly all by age 80. Only a small percentage of those with diverticulosis have symptoms, however, and even fewer will ever require surgery. This brochure describe diverticular disease: diverticula are pockets that

develop in the colon wall. Diverticulosis means the presence of these pockets; diverticulitis describes inflammation or complications of these pockets. The major symptoms of **diverticular disease** are abdominal pain, diarrhea, cramps, alteration of bowel habit and occasionally, severe rectal bleeding. Diverticulitis may cause one or more of these symptoms: pain, chills, fever, and change in bowel habits. More intense symptoms are associated with serious complications such as perforation, abscess, or fistula formation. Indications are that a low fiber diet over the years creates increased colon pressure and results in pockets or diverticula. Diverticulosis is usually treated by diet and sometimes medications to help control pain, cramps, and changes in bowel habits. Mild cases of diverticulitis are treated by oral antibiotics, dietary restrictions, and possibly stool softeners. Severe cases require hospitalization with intravenous antibiotics and strict dietary restraints. Surgery is reserved for recurrent episodes, complications or severe attacks when there is little or no response to medication. The brochure concludes with a brief description of the specialty of colon and rectal surgeons. 1 figure.

- **Relief from Diverticular Disease: Recognizing Symptoms, Relieving Discomfort**

Source: Cincinnati, OH: Procter and Gamble. 1994. 12 p.

Contact: Available from Metamucil-Procter and Gamble. P.O. Box 9032, Cincinnati, OH 45209-9970. PRICE: Single copy free; bulk copies available.

Summary: This brochure provides a general overview of diverticular disease: what it is, what causes it, how it is diagnosed and treated, and how to prevent it. Topics include the typical symptoms of **diverticular disease**; the physiology of the digestive system; diagnostic tests used to confirm **diverticular disease**; treatment options, including diet, stress management, and medications; the role of a high fiber diet; facts about fiber; and the use of fiber supplements, including the product Metamucil. The brochure is produced by the manufacturer of Metamucil. The brochure includes a reply card to obtain more information about Metamucil products. 3 figures. 2 tables.

- **Diverticular Disease**

Source: Fort Worth, TX: Konsyl Pharmaceuticals, Inc. 1998. [2 p.].

Contact: Available from Konsyl Pharmaceuticals, Inc. 4200 South Hulen Street, Suite 513, Fort Worth, TX 76109-4912. (800) 356-6795 or (817) 763-8011. Fax (817) 731-9389. Website: [www.konsyl.com](http://www.konsyl.com). PRICE: Single copy free.

Summary: This brochure provides basic information about **diverticular disease**, a condition in which balloonlike sacs or pouches develop in the walls of the colon (large intestine). Diverticulosis is a term indicating that the pouches are present, but there may be no symptoms. Diverticulitis, means that some of the pouches are irritated or infected; the resulting symptoms can include pain and fever. The brochure investigates why the colon is a problem site and outlines strategies to avoid excess pressure on the colon (primarily those that avoid constipation). The author emphasizes the use of fiber supplements, such as Konsyl (the manufacturer of which is the producer of this brochure). The brochure also lists good dietary habits: eating at regular intervals; chewing food well; drinking plenty of water, milk, and fruit and vegetable juices; exercising daily; and being sensitive to bowel function (especially avoiding straining). The brochure is illustrated with full color drawings and photographs. 3 figures.

- **All About Diverticular Disease**

Source: London, England: British Digestive Foundation. 1993. 3 p.

Contact: Available from British Digestive Foundation. 7 Chandos Street, London W1A 2LN England. PRICE: Single copy free.

Summary: This patient education brochure provides basic information about **diverticular disease**. Written in a question-and-answer format, it addresses a definition of **diverticular disease**, including diverticulitis; prevalence; symptoms; etiology; diagnostic tests; treatment; and complications. The brochure also outlines the need for more research on this area and asks readers to support this research with financial assistance. The brochure includes an insert summarizing guidelines for the early diagnosis of digestive disorders. This insert, entitled 'When Should I See My Doctor' lists symptoms that suggest a health care provider should be consulted. The brochure concludes with a brief description of the activities of the British Digestive Foundation.

### Healthfinder™

Healthfinder™ is sponsored by the U.S. Department of Health and Human Services and offers links to hundreds of other sites that contain healthcare information. This Web site is located at <http://www.healthfinder.gov>. Again, keyword searches can be used to find guidelines. The following was recently found in this database:

- **Diverticulosis and Diverticulitis**

Summary: This online document discusses diverticular disease -- causes, symptoms, diagnosis and treatment. Includes also recommended reading and other related sources.

Source: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

<http://www.healthfinder.gov/scripts/recordpass.asp?RecordType=0&RecordID=2000>

### The NIH Search Utility

The NIH search utility allows you to search for documents on over 100 selected Web sites that comprise the NIH-WEB-SPACE. Each of these servers is "crawled" and indexed on an ongoing basis. Your search will produce a list of various documents, all of which will relate in some way to diverticular disease. The drawbacks of this approach are that the information is not organized by theme and that the references are often a mix of information for professionals and patients. Nevertheless, a large number of the listed Web sites provide useful background information. We can only recommend this route, therefore, for relatively rare or specific disorders, or when using highly targeted searches. To use the NIH search utility, visit the following Web page: <http://search.nih.gov/index.html>.

### Additional Web Sources

A number of Web sites are available to the public that often link to government sites. These can also point you in the direction of essential information. The following is a representative sample:

- AOL: <http://search.aol.com/cat.adp?id=168&layer=&from=subcats>
- Family Village: <http://www.familyvillage.wisc.edu/specific.htm>
- Google: [http://directory.google.com/Top/Health/Conditions\\_and\\_Diseases/](http://directory.google.com/Top/Health/Conditions_and_Diseases/)

- Med Help International: <http://www.medhelp.org/HealthTopics/A.html>
- Open Directory Project: [http://dmoz.org/Health/Conditions\\_and\\_Diseases/](http://dmoz.org/Health/Conditions_and_Diseases/)
- Yahoo.com: [http://dir.yahoo.com/Health/Diseases\\_and\\_Conditions/](http://dir.yahoo.com/Health/Diseases_and_Conditions/)
- WebMD®Health: [http://my.webmd.com/health\\_topics](http://my.webmd.com/health_topics)

## Finding Associations

There are several Internet directories that provide lists of medical associations with information on or resources relating to diverticular disease. By consulting all of associations listed in this chapter, you will have nearly exhausted all sources for patient associations concerned with diverticular disease.

### The National Health Information Center (NHIC)

The National Health Information Center (NHIC) offers a free referral service to help people find organizations that provide information about diverticular disease. For more information, see the NHIC's Web site at <http://www.health.gov/NHIC/> or contact an information specialist by calling 1-800-336-4797.

### Directory of Health Organizations

The Directory of Health Organizations, provided by the National Library of Medicine Specialized Information Services, is a comprehensive source of information on associations. The Directory of Health Organizations database can be accessed via the Internet at <http://www.sis.nlm.nih.gov/Dir/DirMain.html>. It is composed of two parts: DIRLINE and Health Hotlines.

The DIRLINE database comprises some 10,000 records of organizations, research centers, and government institutes and associations that primarily focus on health and biomedicine. To access DIRLINE directly, go to the following Web site: <http://dirline.nlm.nih.gov/>. Simply type in "diverticular disease" (or a synonym), and you will receive information on all relevant organizations listed in the database.

Health Hotlines directs you to toll-free numbers to over 300 organizations. You can access this database directly at <http://www.sis.nlm.nih.gov/hotlines/>. On this page, you are given the option to search by keyword or by browsing the subject list. When you have received your search results, click on the name of the organization for its description and contact information.

### The Combined Health Information Database

Another comprehensive source of information on healthcare associations is the Combined Health Information Database. Using the "Detailed Search" option, you will need to limit your search to "Organizations" and "diverticular disease". Type the following hyperlink into your Web browser: <http://chid.nih.gov/detail/detail.html>. To find associations, use the drop boxes at the bottom of the search page where "You may refine your search by." For

publication date, select "All Years." Then, select your preferred language and the format option "Organization Resource Sheet." Type "diverticular disease" (or synonyms) into the "For these words:" box. You should check back periodically with this database since it is updated every three months.

#### **The National Organization for Rare Disorders, Inc.**

The National Organization for Rare Disorders, Inc. has prepared a Web site that provides, at no charge, lists of associations organized by health topic. You can access this database at the following Web site: <http://www.rarediseases.org/search/orgsearch.html>. Type "diverticular disease" (or a synonym) into the search box, and click "Submit Query."



## APPENDIX C. FINDING MEDICAL LIBRARIES

### Overview

In this Appendix, we show you how to quickly find a medical library in your area.

### Preparation

Your local public library and medical libraries have interlibrary loan programs with the National Library of Medicine (NLM), one of the largest medical collections in the world. According to the NLM, most of the literature in the general and historical collections of the National Library of Medicine is available on interlibrary loan to any library. If you would like to access NLM medical literature, then visit a library in your area that can request the publications for you.<sup>16</sup>

### Finding a Local Medical Library

The quickest method to locate medical libraries is to use the Internet-based directory published by the National Network of Libraries of Medicine (NN/LM). This network includes 4626 members and affiliates that provide many services to librarians, health professionals, and the public. To find a library in your area, simply visit <http://nnlm.gov/members/adv.html> or call 1-800-338-7657.

### Medical Libraries in the U.S. and Canada

In addition to the NN/LM, the National Library of Medicine (NLM) lists a number of libraries with reference facilities that are open to the public. The following is the NLM's list and includes hyperlinks to each library's Web site. These Web pages can provide information on hours of operation and other restrictions. The list below is a small sample of

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<sup>16</sup> Adapted from the NLM: <http://www.nlm.nih.gov/psd/cas/interlibrary.html>.

libraries recommended by the National Library of Medicine (sorted alphabetically by name of the U.S. state or Canadian province where the library is located)<sup>17</sup>:

- **Alabama:** Health InfoNet of Jefferson County (Jefferson County Library Cooperative, Lister Hill Library of the Health Sciences), <http://www.uab.edu/infonet/>
- **Alabama:** Richard M. Scrushy Library (American Sports Medicine Institute)
- **Arizona:** Samaritan Regional Medical Center: The Learning Center (Samaritan Health System, Phoenix, Arizona), <http://www.samaritan.edu/library/bannerlibs.htm>
- **California:** Kris Kelly Health Information Center (St. Joseph Health System, Humboldt), <http://www.humboldt1.com/~kkhic/index.html>
- **California:** Community Health Library of Los Gatos, <http://www.healthlib.org/orgresources.html>
- **California:** Consumer Health Program and Services (CHIPS) (County of Los Angeles Public Library, Los Angeles County Harbor-UCLA Medical Center Library) - Carson, CA, <http://www.colapublib.org/services/chips.html>
- **California:** Gateway Health Library (Sutter Gould Medical Foundation)
- **California:** Health Library (Stanford University Medical Center), <http://www-med.stanford.edu/healthlibrary/>
- **California:** Patient Education Resource Center - Health Information and Resources (University of California, San Francisco), <http://sfghdean.ucsf.edu/barnett/PERC/default.asp>
- **California:** Redwood Health Library (Petaluma Health Care District), <http://www.phcd.org/rdwdlib.html>
- **California:** Los Gatos PlaneTree Health Library, <http://planetreesanjose.org/>
- **California:** Sutter Resource Library (Sutter Hospitals Foundation, Sacramento), <http://suttermedicalcenter.org/library/>
- **California:** Health Sciences Libraries (University of California, Davis), <http://www.lib.ucdavis.edu/healthsci/>
- **California:** ValleyCare Health Library & Ryan Comer Cancer Resource Center (ValleyCare Health System, Pleasanton), <http://gaenet.stmarys-ca.edu/other.libs/gbal/east/vchl.html>
- **California:** Washington Community Health Resource Library (Fremont), <http://www.healthlibrary.org/>
- **Colorado:** William V. Gervasini Memorial Library (Exempla Healthcare), <http://www.saintjosephdenver.org/yourhealth/libraries/>
- **Connecticut:** Hartford Hospital Health Science Libraries (Hartford Hospital), <http://www.harthosp.org/library/>
- **Connecticut:** Healthnet: Connecticut Consumer Health Information Center (University of Connecticut Health Center, Lyman Maynard Stowe Library), <http://library.uchc.edu/departm/hnet/>

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<sup>17</sup> Abstracted from <http://www.nlm.nih.gov/medlineplus/libraries.html>.

- **Connecticut:** Waterbury Hospital Health Center Library (Waterbury Hospital, Waterbury), <http://www.waterburyhospital.com/library/consumer.shtml>
- **Delaware:** Consumer Health Library (Christiana Care Health System, Eugene du Pont Preventive Medicine & Rehabilitation Institute, Wilmington), [http://www.christianacare.org/health\\_guide/health\\_guide\\_pmri\\_health\\_info.cfm](http://www.christianacare.org/health_guide/health_guide_pmri_health_info.cfm)
- **Delaware:** Lewis B. Flinn Library (Delaware Academy of Medicine, Wilmington), <http://www.delamed.org/chls.html>
- **Georgia:** Family Resource Library (Medical College of Georgia, Augusta), [http://cmc.mcg.edu/kids\\_families/fam\\_resources/fam\\_res\\_lib/frl.htm](http://cmc.mcg.edu/kids_families/fam_resources/fam_res_lib/frl.htm)
- **Georgia:** Health Resource Center (Medical Center of Central Georgia, Macon), <http://www.mccg.org/hrc/hrchome.asp>
- **Hawaii:** Hawaii Medical Library: Consumer Health Information Service (Hawaii Medical Library, Honolulu), <http://hml.org/CHIS/>
- **Idaho:** DeArmond Consumer Health Library (Kootenai Medical Center, Coeur d'Alene), <http://www.nicon.org/DeArmond/index.htm>
- **Illinois:** Health Learning Center of Northwestern Memorial Hospital (Chicago), [http://www.nmh.org/health\\_info/hlc.html](http://www.nmh.org/health_info/hlc.html)
- **Illinois:** Medical Library (OSF Saint Francis Medical Center, Peoria), <http://www.osfsaintfrancis.org/general/library/>
- **Kentucky:** Medical Library - Services for Patients, Families, Students & the Public (Central Baptist Hospital, Lexington), <http://www.centralbap.com/education/community/library.cfm>
- **Kentucky:** University of Kentucky - Health Information Library (Chandler Medical Center, Lexington), <http://www.mc.uky.edu/PatientEd/>
- **Louisiana:** Alton Ochsner Medical Foundation Library (Alton Ochsner Medical Foundation, New Orleans), <http://www.ochsner.org/library/>
- **Louisiana:** Louisiana State University Health Sciences Center Medical Library-Shreveport, <http://lib-sh.lsuhscc.edu/>
- **Maine:** Franklin Memorial Hospital Medical Library (Franklin Memorial Hospital, Farmington), <http://www.fchn.org/fmh/lib.htm>
- **Maine:** Gerrish-True Health Sciences Library (Central Maine Medical Center, Lewiston), <http://www.cmmc.org/library/library.html>
- **Maine:** Hadley Parrot Health Science Library (Eastern Maine Healthcare, Bangor), <http://www.emh.org/hll/hpl/guide.htm>
- **Maine:** Maine Medical Center Library (Maine Medical Center, Portland), <http://www.mmc.org/library/>
- **Maine:** Parkview Hospital (Brunswick), <http://www.parkviewhospital.org/>
- **Maine:** Southern Maine Medical Center Health Sciences Library (Southern Maine Medical Center, Biddeford), <http://www.smmc.org/services/service.php3?choice=10>
- **Maine:** Stephens Memorial Hospital's Health Information Library (Western Maine Health, Norway), <http://www.wmhcc.org/Library/>

- **Manitoba, Canada:** Consumer & Patient Health Information Service (University of Manitoba Libraries), <http://www.umanitoba.ca/libraries/units/health/reference/chis.html>
- **Manitoba, Canada:** J.W. Crane Memorial Library (Deer Lodge Centre, Winnipeg), [http://www.deerlodge.mb.ca/crane\\_library/about.asp](http://www.deerlodge.mb.ca/crane_library/about.asp)
- **Maryland:** Health Information Center at the Wheaton Regional Library (Montgomery County, Dept. of Public Libraries, Wheaton Regional Library), <http://www.mont.lib.md.us/healthinfo/hic.asp>
- **Massachusetts:** Baystate Medical Center Library (Baystate Health System), <http://www.baystatehealth.com/1024/>
- **Massachusetts:** Boston University Medical Center Alumni Medical Library (Boston University Medical Center), <http://med-libwww.bu.edu/library/lib.html>
- **Massachusetts:** Lowell General Hospital Health Sciences Library (Lowell General Hospital, Lowell), <http://www.lowellgeneral.org/library/HomePageLinks/WWW.htm>
- **Massachusetts:** Paul E. Woodard Health Sciences Library (New England Baptist Hospital, Boston), [http://www.nebh.org/health\\_lib.asp](http://www.nebh.org/health_lib.asp)
- **Massachusetts:** St. Luke's Hospital Health Sciences Library (St. Luke's Hospital, Southcoast Health System, New Bedford), <http://www.southcoast.org/library/>
- **Massachusetts:** Treadwell Library Consumer Health Reference Center (Massachusetts General Hospital), <http://www.mgh.harvard.edu/library/chrcindex.html>
- **Massachusetts:** UMass HealthNet (University of Massachusetts Medical School, Worcester), <http://healthnet.umassmed.edu/>
- **Michigan:** Botsford General Hospital Library - Consumer Health (Botsford General Hospital, Library & Internet Services), <http://www.botsfordlibrary.org/consumer.htm>
- **Michigan:** Helen DeRoy Medical Library (Providence Hospital and Medical Centers), <http://www.providence-hospital.org/library/>
- **Michigan:** Marquette General Hospital - Consumer Health Library (Marquette General Hospital, Health Information Center), <http://www.mgh.org/center.html>
- **Michigan:** Patient Education Resource Center - University of Michigan Cancer Center (University of Michigan Comprehensive Cancer Center, Ann Arbor), <http://www.cancer.med.umich.edu/learn/leares.htm>
- **Michigan:** Sladen Library & Center for Health Information Resources - Consumer Health Information (Detroit), <http://www.henryford.com/body.cfm?id=39330>
- **Montana:** Center for Health Information (St. Patrick Hospital and Health Sciences Center, Missoula)
- **National:** Consumer Health Library Directory (Medical Library Association, Consumer and Patient Health Information Section), <http://caphis.mlanet.org/directory/index.html>
- **National:** National Network of Libraries of Medicine (National Library of Medicine) - provides library services for health professionals in the United States who do not have access to a medical library, <http://nnlm.gov/>
- **National:** NN/LM List of Libraries Serving the Public (National Network of Libraries of Medicine), <http://nnlm.gov/members/>

- **Nevada:** Health Science Library, West Charleston Library (Las Vegas-Clark County Library District, Las Vegas), [http://www.lvcld.org/special\\_collections/medical/index.htm](http://www.lvcld.org/special_collections/medical/index.htm)
- **New Hampshire:** Dartmouth Biomedical Libraries (Dartmouth College Library, Hanover), [http://www.dartmouth.edu/~biomed/resources.html#conshealth.html#](http://www.dartmouth.edu/~biomed/resources.html#conshealth.html#/)
- **New Jersey:** Consumer Health Library (Rahway Hospital, Rahway), <http://www.rahwayhospital.com/library.htm>
- **New Jersey:** Dr. Walter Phillips Health Sciences Library (Englewood Hospital and Medical Center, Englewood), <http://www.englewoodhospital.com/links/index.htm>
- **New Jersey:** Meland Foundation (Englewood Hospital and Medical Center, Englewood), <http://www.geocities.com/ResearchTriangle/9360/>
- **New York:** Choices in Health Information (New York Public Library) - NLM Consumer Pilot Project participant, <http://www.nypl.org/branch/health/links.html>
- **New York:** Health Information Center (Upstate Medical University, State University of New York, Syracuse), <http://www.upstate.edu/library/hic/>
- **New York:** Health Sciences Library (Long Island Jewish Medical Center, New Hyde Park), <http://www.lij.edu/library/library.html>
- **New York:** ViaHealth Medical Library (Rochester General Hospital), <http://www.nyam.org/library/>
- **Ohio:** Consumer Health Library (Akron General Medical Center, Medical & Consumer Health Library), <http://www.akrongeneral.org/hwlibrary.htm>
- **Oklahoma:** The Health Information Center at Saint Francis Hospital (Saint Francis Health System, Tulsa), <http://www.sfh-tulsa.com/services/healthinfo.asp>
- **Oregon:** Planetree Health Resource Center (Mid-Columbia Medical Center, The Dalles), <http://www.mcmc.net/phrc/>
- **Pennsylvania:** Community Health Information Library (Milton S. Hershey Medical Center, Hershey), <http://www.hmc.psu.edu/commhealth/>
- **Pennsylvania:** Community Health Resource Library (Geisinger Medical Center, Danville), <http://www.geisinger.edu/education/commmlib.shtml>
- **Pennsylvania:** HealthInfo Library (Moses Taylor Hospital, Scranton), <http://www.mth.org/healthwellness.html>
- **Pennsylvania:** Hopwood Library (University of Pittsburgh, Health Sciences Library System, Pittsburgh), [http://www.hsls.pitt.edu/guides/chi/hopwood/index\\_html](http://www.hsls.pitt.edu/guides/chi/hopwood/index_html)
- **Pennsylvania:** Koop Community Health Information Center (College of Physicians of Philadelphia), <http://www.collphyphil.org/kooppg1.shtml>
- **Pennsylvania:** Learning Resources Center - Medical Library (Susquehanna Health System, Williamsport), <http://www.shscare.org/services/lrc/index.asp>
- **Pennsylvania:** Medical Library (UPMC Health System, Pittsburgh), <http://www.upmc.edu/passavant/library.htm>
- **Quebec, Canada:** Medical Library (Montreal General Hospital), <http://www.mghlib.mcgill.ca/>

- **South Dakota:** Rapid City Regional Hospital Medical Library (Rapid City Regional Hospital), <http://www.rcrh.org/Services/Library/Default.asp>
- **Texas:** Houston HealthWays (Houston Academy of Medicine-Texas Medical Center Library), <http://hhw.library.tmc.edu/>
- **Washington:** Community Health Library (Kittitas Valley Community Hospital), <http://www.kvch.com/>
- **Washington:** Southwest Washington Medical Center Library (Southwest Washington Medical Center, Vancouver), <http://www.swmedicalcenter.com/body.cfm?id=72>

## ONLINE GLOSSARIES

The Internet provides access to a number of free-to-use medical dictionaries. The National Library of Medicine has compiled the following list of online dictionaries:

- ADAM Medical Encyclopedia (A.D.A.M., Inc.), comprehensive medical reference:  
<http://www.nlm.nih.gov/medlineplus/encyclopedia.html>
- MedicineNet.com Medical Dictionary (MedicineNet, Inc.):  
<http://www.medterms.com/Script/Main/hp.asp>
- Merriam-Webster Medical Dictionary (Inteli-Health, Inc.):  
<http://www.intelihealth.com/IH/>
- Multilingual Glossary of Technical and Popular Medical Terms in Eight European Languages (European Commission) - Danish, Dutch, English, French, German, Italian, Portuguese, and Spanish: <http://allserv.rug.ac.be/~rvdstich/eugloss/welcome.html>
- On-line Medical Dictionary (CancerWEB): <http://cancerweb.ncl.ac.uk/omd/>
- Rare Diseases Terms (Office of Rare Diseases):  
<http://ord.aspensys.com/asp/diseases/diseases.asp>
- Technology Glossary (National Library of Medicine) - Health Care Technology:  
<http://www.nlm.nih.gov/nichsr/ta101/ta10108.htm>

Beyond these, MEDLINEplus contains a very patient-friendly encyclopedia covering every aspect of medicine (licensed from A.D.A.M., Inc.). The ADAM Medical Encyclopedia can be accessed at <http://www.nlm.nih.gov/medlineplus/encyclopedia.html>. ADAM is also available on commercial Web sites such as drkoop.com (<http://www.drkoop.com/>) and Web MD ([http://my.webmd.com/adam/asset/adam\\_disease\\_articles/a\\_to\\_z/a](http://my.webmd.com/adam/asset/adam_disease_articles/a_to_z/a)). The NIH suggests the following Web sites in the ADAM Medical Encyclopedia when searching for information on diverticular disease:

- **Basic Guidelines for Diverticular Disease**

### **Diverticulitis**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/000257.htm>

- **Signs & Symptoms for Diverticular Disease**

### **Chills**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003091.htm>

### **Constipation**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003125.htm>

### **Diarrhea**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003126.htm>

### **Hematochezia**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003130.htm>

**Hernia**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003100.htm>

**Tension**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003211.htm>

**Vomiting**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003117.htm>

- **Diagnostics and Tests for Diverticular Disease**

**ANA**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003535.htm>

**Angiography**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003327.htm>

**Barium enema**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003817.htm>

**CT**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003330.htm>

**Differential**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003657.htm>

**Endoscopy**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003338.htm>

**Sigmoidoscopy**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/003885.htm>

- **Background Topics for Diverticular Disease**

**Acute**

Web site: <http://www.nlm.nih.gov/medlineplus/ency/article/002215.htm>

## **Online Dictionary Directories**

The following are additional online directories compiled by the National Library of Medicine, including a number of specialized medical dictionaries:

- Medical Dictionaries: Medical & Biological (World Health Organization): <http://www.who.int/hlt/virtuallibrary/English/diction.htm#Medical>
- MEL-Michigan Electronic Library List of Online Health and Medical Dictionaries (Michigan Electronic Library): <http://mel.lib.mi.us/health/health-dictionaries.html>
- Patient Education: Glossaries (DMOZ Open Directory Project): [http://dmoz.org/Health/Education/Patient\\_Education/Glossaries/](http://dmoz.org/Health/Education/Patient_Education/Glossaries/)



- Web of Online Dictionaries (Bucknell University):  
**<http://www.yourdictionary.com/diction5.html#medicine>**



# DIVERTICULAR DISEASE DICTIONARY

The definitions below are derived from official public sources, including the National Institutes of Health [NIH] and the European Union [EU].

**Abdomen:** That portion of the body that lies between the thorax and the pelvis. [NIH]

**Abdominal:** Having to do with the abdomen, which is the part of the body between the chest and the hips that contains the pancreas, stomach, intestines, liver, gallbladder, and other organs. [NIH]

**Abdominal Pain:** Sensation of discomfort, distress, or agony in the abdominal region. [NIH]

**Abscess:** A localized, circumscribed collection of pus. [NIH]

**Acetaminophen:** Analgesic antipyretic derivative of acetanilide. It has weak anti-inflammatory properties and is used as a common analgesic, but may cause liver, blood cell, and kidney damage. [NIH]

**Acetylcholine:** A neurotransmitter. Acetylcholine in vertebrates is the major transmitter at neuromuscular junctions, autonomic ganglia, parasympathetic effector junctions, a subset of sympathetic effector junctions, and at many sites in the central nervous system. It is generally not used as an administered drug because it is broken down very rapidly by cholinesterases, but it is useful in some ophthalmological applications. [NIH]

**Acquired Immunodeficiency Syndrome:** An acquired defect of cellular immunity associated with infection by the human immunodeficiency virus (HIV), a CD4-positive T-lymphocyte count under 200 cells/microliter or less than 14% of total lymphocytes, and increased susceptibility to opportunistic infections and malignant neoplasms. Clinical manifestations also include emaciation (wasting) and dementia. These elements reflect criteria for AIDS as defined by the CDC in 1993. [NIH]

**Acute Disease:** Disease having a short and relatively severe course. [NIH]

**Adenocarcinoma:** A malignant epithelial tumor with a glandular organization. [NIH]

**Adenosine:** A nucleoside that is composed of adenine and d-ribose. Adenosine or adenosine derivatives play many important biological roles in addition to being components of DNA and RNA. Adenosine itself is a neurotransmitter. [NIH]

**Adipose Tissue:** Connective tissue composed of fat cells lodged in the meshes of areolar tissue. [NIH]

**Adolescence:** The period of life beginning with the appearance of secondary sex characteristics and terminating with the cessation of somatic growth. The years usually referred to as adolescence lie between 13 and 18 years of age. [NIH]

**Adverse Effect:** An unwanted side effect of treatment. [NIH]

**Ageing:** A physiological or morphological change in the life of an organism or its parts, generally irreversible and typically associated with a decline in growth and reproductive vigor. [NIH]

**Alertness:** A state of readiness to detect and respond to certain specified small changes occurring at random intervals in the environment. [NIH]

**Algorithms:** A procedure consisting of a sequence of algebraic formulas and/or logical steps to calculate or determine a given task. [NIH]

**Alimentary:** Pertaining to food or nutritive material, or to the organs of digestion. [EU]

**Alkaline:** Having the reactions of an alkali. [EU]

**Alternative medicine:** Practices not generally recognized by the medical community as standard or conventional medical approaches and used instead of standard treatments. Alternative medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

**Amino Acids:** Organic compounds that generally contain an amino (-NH<sub>2</sub>) and a carboxyl (-COOH) group. Twenty alpha-amino acids are the subunits which are polymerized to form proteins. [NIH]

**Amino Acids:** Organic compounds that generally contain an amino (-NH<sub>2</sub>) and a carboxyl (-COOH) group. Twenty alpha-amino acids are the subunits which are polymerized to form proteins. [NIH]

**Ampulla:** A sac-like enlargement of a canal or duct. [NIH]

**Anal:** Having to do with the anus, which is the posterior opening of the large bowel. [NIH]

**Anal Fissure:** A small tear in the anus that may cause itching, pain, or bleeding. [NIH]

**Anal Fistula:** A channel that develops between the anus and the skin. Most fistulas are the result of an abscess (infection) that spreads to the skin. [NIH]

**Analgesic:** An agent that alleviates pain without causing loss of consciousness. [EU]

**Anastomosis:** A procedure to connect healthy sections of tubular structures in the body after the diseased portion has been surgically removed. [NIH]

**Anesthesia:** A state characterized by loss of feeling or sensation. This depression of nerve function is usually the result of pharmacologic action and is induced to allow performance of surgery or other painful procedures. [NIH]

**Angiodysplasia:** Degenerative, acquired lesions consisting of distorted, dilated, thin-walled vessels lined by vascular endothelium. This pathological state is seen especially in the gastrointestinal tract and is frequently a cause of upper and lower gastrointestinal hemorrhage in the elderly. [NIH]

**Angiography:** Radiography of blood vessels after injection of a contrast medium. [NIH]

**Anorectal:** Pertaining to the anus and rectum or to the junction region between the two. [EU]

**Anorexia:** Lack or loss of appetite for food. Appetite is psychologic, dependent on memory and associations. Anorexia can be brought about by unattractive food, surroundings, or company. [NIH]

**Antagonism:** Interference with, or inhibition of, the growth of a living organism by another living organism, due either to creation of unfavorable conditions (e. g. exhaustion of food supplies) or to production of a specific antibiotic substance (e. g. penicillin). [NIH]

**Antibacterial:** A substance that destroys bacteria or suppresses their growth or reproduction. [EU]

**Antibiotic:** A drug used to treat infections caused by bacteria and other microorganisms. [NIH]

**Antigen:** Any substance which is capable, under appropriate conditions, of inducing a specific immune response and of reacting with the products of that response, that is, with specific antibody or specifically sensitized T-lymphocytes, or both. Antigens may be soluble substances, such as toxins and foreign proteins, or particulate, such as bacteria and tissue cells; however, only the portion of the protein or polysaccharide molecule known as the antigenic determinant (q.v.) combines with antibody or a specific receptor on a lymphocyte. Abbreviated Ag. [EU]

**Anti-inflammatory:** Having to do with reducing inflammation. [NIH]

**Antipyretic:** An agent that relieves or reduces fever. Called also antifebrile, antithermic and febrifuge. [EU]

**Anus:** The opening of the rectum to the outside of the body. [NIH]

**Aorta:** The main trunk of the systemic arteries. [NIH]

**Appendicitis:** Acute inflammation of the vermiform appendix. [NIH]

**Arginine:** An essential amino acid that is physiologically active in the L-form. [NIH]

**Artery:** Vessel-carrying blood from the heart to various parts of the body. [NIH]

**Asymptomatic:** Having no signs or symptoms of disease. [NIH]

**Atrial:** Pertaining to an atrium. [EU]

**Atrial Fibrillation:** Disorder of cardiac rhythm characterized by rapid, irregular atrial impulses and ineffective atrial contractions. [NIH]

**Atrium:** A chamber; used in anatomical nomenclature to designate a chamber affording entrance to another structure or organ. Usually used alone to designate an atrium of the heart. [EU]

**Autodigestion:** Autolysis; a condition found in disease of the stomach: the stomach wall is digested by the gastric juice. [NIH]

**Bacteria:** Unicellular prokaryotic microorganisms which generally possess rigid cell walls, multiply by cell division, and exhibit three principal forms: round or coccil, rodlike or bacillary, and spiral or spirochetal. [NIH]

**Barium:** An element of the alkaline earth group of metals. It has an atomic symbol Ba, atomic number 56, and atomic weight 138. All of its acid-soluble salts are poisonous. [NIH]

**Barium enema:** A procedure in which a liquid with barium in it is put into the rectum and colon by way of the anus. Barium is a silver-white metallic compound that helps to show the image of the lower gastrointestinal tract on an x-ray. [NIH]

**Base:** In chemistry, the nonacid part of a salt; a substance that combines with acids to form salts; a substance that dissociates to give hydroxide ions in aqueous solutions; a substance whose molecule or ion can combine with a proton (hydrogen ion); a substance capable of donating a pair of electrons (to an acid) for the formation of a coordinate covalent bond. [EU]

**Bed Rest:** Confinement of an individual to bed for therapeutic or experimental reasons. [NIH]

**Benign:** Not cancerous; does not invade nearby tissue or spread to other parts of the body. [NIH]

**Benign tumor:** A noncancerous growth that does not invade nearby tissue or spread to other parts of the body. [NIH]

**Bile:** An emulsifying agent produced in the liver and secreted into the duodenum. Its composition includes bile acids and salts, cholesterol, and electrolytes. It aids digestion of fats in the duodenum. [NIH]

**Bile Acids:** Acids made by the liver that work with bile to break down fats. [NIH]

**Bile Acids and Salts:** Steroid acids and salts. The primary bile acids are derived from cholesterol in the liver and usually conjugated with glycine or taurine. The secondary bile acids are further modified by bacteria in the intestine. They play an important role in the digestion and absorption of fat. They have also been used pharmacologically, especially in the treatment of gallstones. [NIH]

**Bile duct:** A tube through which bile passes in and out of the liver. [NIH]

**Biliary:** Having to do with the liver, bile ducts, and/or gallbladder. [NIH]

**Biliary Stricture:** A narrowing of the biliary tract from scar tissue. The scar tissue may result from injury, disease, pancreatitis, infection, or gallstones. [NIH]

**Biliary Tract:** The gallbladder and its ducts. [NIH]

**Biopsy:** Removal and pathologic examination of specimens in the form of small pieces of tissue from the living body. [NIH]

**Biopsy specimen:** Tissue removed from the body and examined under a microscope to determine whether disease is present. [NIH]

**Biotechnology:** Body of knowledge related to the use of organisms, cells or cell-derived constituents for the purpose of developing products which are technically, scientifically and clinically useful. Alteration of biologic function at the molecular level (i.e., genetic engineering) is a central focus; laboratory methods used include transfection and cloning technologies, sequence and structure analysis algorithms, computer databases, and gene and protein structure function analysis and prediction. [NIH]

**Bladder:** The organ that stores urine. [NIH]

**Bloating:** Fullness or swelling in the abdomen that often occurs after meals. [NIH]

**Blood Coagulation:** The process of the interaction of blood coagulation factors that results in an insoluble fibrin clot. [NIH]

**Blood Platelets:** Non-nucleated disk-shaped cells formed in the megakaryocyte and found in the blood of all mammals. They are mainly involved in blood coagulation. [NIH]

**Blood pressure:** The pressure of blood against the walls of a blood vessel or heart chamber. Unless there is reference to another location, such as the pulmonary artery or one of the heart chambers, it refers to the pressure in the systemic arteries, as measured, for example, in the forearm. [NIH]

**Blood vessel:** A tube in the body through which blood circulates. Blood vessels include a network of arteries, arterioles, capillaries, venules, and veins. [NIH]

**Body Regions:** Anatomical areas of the body. [NIH]

**Bowel:** The long tube-shaped organ in the abdomen that completes the process of digestion. There is both a small and a large bowel. Also called the intestine. [NIH]

**Bowel Movement:** Body wastes passed through the rectum and anus. [NIH]

**Bradykinin:** A nonapeptide messenger that is enzymatically produced from kallidin in the blood where it is a potent but short-lived agent of arteriolar dilation and increased capillary permeability. Bradykinin is also released from mast cells during asthma attacks, from gut walls as a gastrointestinal vasodilator, from damaged tissues as a pain signal, and may be a neurotransmitter. [NIH]

**Caffeine:** A methylxanthine naturally occurring in some beverages and also used as a pharmacological agent. Caffeine's most notable pharmacological effect is as a central nervous system stimulant, increasing alertness and producing agitation. It also relaxes smooth muscle, stimulates cardiac muscle, stimulates diuresis, and appears to be useful in the treatment of some types of headache. Several cellular actions of caffeine have been observed, but it is not entirely clear how each contributes to its pharmacological profile. Among the most important are inhibition of cyclic nucleotide phosphodiesterases, antagonism of adenosine receptors, and modulation of intracellular calcium handling. [NIH]

**Calcium:** A basic element found in nearly all organized tissues. It is a member of the alkaline earth family of metals with the atomic symbol Ca, atomic number 20, and atomic weight 40. Calcium is the most abundant mineral in the body and combines with

phosphorus to form calcium phosphate in the bones and teeth. It is essential for the normal functioning of nerves and muscles and plays a role in blood coagulation (as factor IV) and in many enzymatic processes. [NIH]

**Calcium Channel Blockers:** A class of drugs that act by selective inhibition of calcium influx through cell membranes or on the release and binding of calcium in intracellular pools. Since they are inducers of vascular and other smooth muscle relaxation, they are used in the drug therapy of hypertension and cerebrovascular spasms, as myocardial protective agents, and in the relaxation of uterine spasms. [NIH]

**Carcinoma:** Cancer that begins in the skin or in tissues that line or cover internal organs. [NIH]

**Cardiac:** Having to do with the heart. [NIH]

**Cecum:** The beginning of the large intestine. The cecum is connected to the lower part of the small intestine, called the ileum. [NIH]

**Celiac Disease:** A disease characterized by intestinal malabsorption and precipitated by gluten-containing foods. The intestinal mucosa shows loss of villous structure. [NIH]

**Cell:** The individual unit that makes up all of the tissues of the body. All living things are made up of one or more cells. [NIH]

**Cell Division:** The fission of a cell. [NIH]

**Cell membrane:** Cell membrane = plasma membrane. The structure enveloping a cell, enclosing the cytoplasm, and forming a selective permeability barrier; it consists of lipids, proteins, and some carbohydrates, the lipids thought to form a bilayer in which integral proteins are embedded to varying degrees. [EU]

**Central Nervous System:** The main information-processing organs of the nervous system, consisting of the brain, spinal cord, and meninges. [NIH]

**Cerebral:** Of or pertaining of the cerebrum or the brain. [EU]

**Cerebrovascular:** Pertaining to the blood vessels of the cerebrum, or brain. [EU]

**Cerebrum:** The largest part of the brain. It is divided into two hemispheres, or halves, called the cerebral hemispheres. The cerebrum controls muscle functions of the body and also controls speech, emotions, reading, writing, and learning. [NIH]

**Character:** In current usage, approximately equivalent to personality. The sum of the relatively fixed personality traits and habitual modes of response of an individual. [NIH]

**Cholangitis:** Inflammation of a bile duct. [NIH]

**Cholecystitis:** Inflammation of the gallbladder. [NIH]

**Cholesterol:** The principal sterol of all higher animals, distributed in body tissues, especially the brain and spinal cord, and in animal fats and oils. [NIH]

**Cholinergic:** Resembling acetylcholine in pharmacological action; stimulated by or releasing acetylcholine or a related compound. [EU]

**Chronic:** A disease or condition that persists or progresses over a long period of time. [NIH]

**Cirrhosis:** A type of chronic, progressive liver disease. [NIH]

**Clinical trial:** A research study that tests how well new medical treatments or other interventions work in people. Each study is designed to test new methods of screening, prevention, diagnosis, or treatment of a disease. [NIH]

**Cloning:** The production of a number of genetically identical individuals; in genetic engineering, a process for the efficient replication of a great number of identical DNA molecules. [NIH]

**Cognitive restructuring:** A method of identifying and replacing fear-promoting, irrational beliefs with more realistic and functional ones. [NIH]

**Colectomy:** An operation to remove the colon. An open colectomy is the removal of the colon through a surgical incision made in the wall of the abdomen. Laparoscopic-assisted colectomy uses a thin, lighted tube attached to a video camera. It allows the surgeon to remove the colon without a large incision. [NIH]

**Colic:** Paroxysms of pain. This condition usually occurs in the abdominal region but may occur in other body regions as well. [NIH]

**Colitis:** Inflammation of the colon. [NIH]

**Collagen:** A polypeptide substance comprising about one third of the total protein in mammalian organisms. It is the main constituent of skin, connective tissue, and the organic substance of bones and teeth. Different forms of collagen are produced in the body but all consist of three alpha-polypeptide chains arranged in a triple helix. Collagen is differentiated from other fibrous proteins, such as elastin, by the content of proline, hydroxyproline, and hydroxylysine; by the absence of tryptophan; and particularly by the high content of polar groups which are responsible for its swelling properties. [NIH]

**Colon:** The long, coiled, tubelike organ that removes water from digested food. The remaining material, solid waste called stool, moves through the colon to the rectum and leaves the body through the anus. [NIH]

**Colonic Neoplasms:** Tumors or cancer of the colon. [NIH]

**Colonoscopy:** Endoscopic examination, therapy or surgery of the luminal surface of the colon. [NIH]

**Colorectal:** Having to do with the colon or the rectum. [NIH]

**Colorectal Cancer:** Cancer that occurs in the colon (large intestine) or the rectum (the end of the large intestine). A number of digestive diseases may increase a person's risk of colorectal cancer, including polyposis and Zollinger-Ellison Syndrome. [NIH]

**Colorectal Surgery:** A surgical specialty concerned with the diagnosis and treatment of disorders and abnormalities of the colon, rectum, and anal canal. [NIH]

**Colostomy:** An opening into the colon from the outside of the body. A colostomy provides a new path for waste material to leave the body after part of the colon has been removed. [NIH]

**Complement:** A term originally used to refer to the heat-labile factor in serum that causes immune cytolysis, the lysis of antibody-coated cells, and now referring to the entire functionally related system comprising at least 20 distinct serum proteins that is the effector not only of immune cytolysis but also of other biologic functions. Complement activation occurs by two different sequences, the classic and alternative pathways. The proteins of the classic pathway are termed 'components of complement' and are designated by the symbols C1 through C9. C1 is a calcium-dependent complex of three distinct proteins C1q, C1r and C1s. The proteins of the alternative pathway (collectively referred to as the properdin system) and complement regulatory proteins are known by semisystematic or trivial names. Fragments resulting from proteolytic cleavage of complement proteins are designated with lower-case letter suffixes, e.g., C3a. Inactivated fragments may be designated with the suffix 'i', e.g. C3bi. Activated components or complexes with biological activity are designated by a bar over the symbol e.g. C1 or C4b,2a. The classic pathway is activated by the binding of C1 to classic pathway activators, primarily antigen-antibody complexes containing IgM, IgG1, IgG3; C1q binds to a single IgM molecule or two adjacent IgG molecules. The alternative pathway can be activated by IgA immune complexes and also by nonimmunologic materials including bacterial endotoxins, microbial polysaccharides, and cell walls. Activation of the classic pathway triggers an enzymatic cascade involving C1, C4, C2 and C3; activation of the



alternative pathway triggers a cascade involving C3 and factors B, D and P. Both result in the cleavage of C5 and the formation of the membrane attack complex. Complement activation also results in the formation of many biologically active complement fragments that act as anaphylatoxins, opsonins, or chemotactic factors. [EU]

**Complementary and alternative medicine:** CAM. Forms of treatment that are used in addition to (complementary) or instead of (alternative) standard treatments. These practices are not considered standard medical approaches. CAM includes dietary supplements, megadose vitamins, herbal preparations, special teas, massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

**Complementary medicine:** Practices not generally recognized by the medical community as standard or conventional medical approaches and used to enhance or complement the standard treatments. Complementary medicine includes the taking of dietary supplements, megadose vitamins, and herbal preparations; the drinking of special teas; and practices such as massage therapy, magnet therapy, spiritual healing, and meditation. [NIH]

**Complete remission:** The disappearance of all signs of cancer. Also called a complete response. [NIH]

**Computational Biology:** A field of biology concerned with the development of techniques for the collection and manipulation of biological data, and the use of such data to make biological discoveries or predictions. This field encompasses all computational methods and theories applicable to molecular biology and areas of computer-based techniques for solving biological problems including manipulation of models and datasets. [NIH]

**Computed tomography:** CT scan. A series of detailed pictures of areas inside the body, taken from different angles; the pictures are created by a computer linked to an x-ray machine. Also called computerized tomography and computerized axial tomography (CAT) scan. [NIH]

**Computerized axial tomography:** A series of detailed pictures of areas inside the body, taken from different angles; the pictures are created by a computer linked to an x-ray machine. Also called CAT scan, computed tomography (CT scan), or computerized tomography. [NIH]

**Computerized tomography:** A series of detailed pictures of areas inside the body, taken from different angles; the pictures are created by a computer linked to an x-ray machine. Also called computerized axial tomography (CAT) scan and computed tomography (CT scan). [NIH]

**Connective Tissue:** Tissue that supports and binds other tissues. It consists of connective tissue cells embedded in a large amount of extracellular matrix. [NIH]

**Connective Tissue:** Tissue that supports and binds other tissues. It consists of connective tissue cells embedded in a large amount of extracellular matrix. [NIH]

**Consciousness:** Sense of awareness of self and of the environment. [NIH]

**Constipation:** Infrequent or difficult evacuation of feces. [NIH]

**Constriction:** The act of constricting. [NIH]

**Contraindications:** Any factor or sign that it is unwise to pursue a certain kind of action or treatment, e. g. giving a general anesthetic to a person with pneumonia. [NIH]

**Contrast medium:** A substance that is introduced into or around a structure and, because of the difference in absorption of x-rays by the contrast medium and the surrounding tissues, allows radiographic visualization of the structure. [EU]

**Curare:** Plant extracts from several species, including *Strychnos toxifera*, *S. castelnaei*, *S. crevauxii*, and *Chondodendron tomentosum*, that produce paralysis of skeletal muscle and

are used adjunctively with general anesthesia. These extracts are toxic and must be used with the administration of artificial respiration. [NIH]

**Curative:** Tending to overcome disease and promote recovery. [EU]

**Cutaneous:** Having to do with the skin. [NIH]

**Cyclic:** Pertaining to or occurring in a cycle or cycles; the term is applied to chemical compounds that contain a ring of atoms in the nucleus. [EU]

**Cyst:** A sac or capsule filled with fluid. [NIH]

**Defecation:** The normal process of elimination of fecal material from the rectum. [NIH]

**Degenerative:** Undergoing degeneration : tending to degenerate; having the character of or involving degeneration; causing or tending to cause degeneration. [EU]

**Dementia:** An acquired organic mental disorder with loss of intellectual abilities of sufficient severity to interfere with social or occupational functioning. The dysfunction is multifaceted and involves memory, behavior, personality, judgment, attention, spatial relations, language, abstract thought, and other executive functions. The intellectual decline is usually progressive, and initially spares the level of consciousness. [NIH]

**Deuterium:** Deuterium. The stable isotope of hydrogen. It has one neutron and one proton in the nucleus. [NIH]

**Developed Countries:** Countries that have reached a level of economic achievement through an increase of production, per capita income and consumption, and utilization of natural and human resources. [NIH]

**Diabetes Mellitus:** A heterogeneous group of disorders that share glucose intolerance in common. [NIH]

**Diagnostic procedure:** A method used to identify a disease. [NIH]

**Diaphragm:** The musculofibrous partition that separates the thoracic cavity from the abdominal cavity. Contraction of the diaphragm increases the volume of the thoracic cavity aiding inspiration. [NIH]

**Diarrhea:** Passage of excessively liquid or excessively frequent stools. [NIH]

**Diarrhoea:** Abnormal frequency and liquidity of faecal discharges. [EU]

**Dietary Fiber:** The remnants of plant cell walls that are resistant to digestion by the alimentary enzymes of man. It comprises various polysaccharides and lignins. [NIH]

**Digestion:** The process of breakdown of food for metabolism and use by the body. [NIH]

**Digestive system:** The organs that take in food and turn it into products that the body can use to stay healthy. Waste products the body cannot use leave the body through bowel movements. The digestive system includes the salivary glands, mouth, esophagus, stomach, liver, pancreas, gallbladder, small and large intestines, and rectum. [NIH]

**Digestive tract:** The organs through which food passes when food is eaten. These organs are the mouth, esophagus, stomach, small and large intestines, and rectum. [NIH]

**Direct:** 1. Straight; in a straight line. 2. Performed immediately and without the intervention of subsidiary means. [EU]

**Distal:** Remote; farther from any point of reference; opposed to proximal. In dentistry, used to designate a position on the dental arch farther from the median line of the jaw. [EU]

**Diuresis:** Increased excretion of urine. [EU]

**Diverticula:** Plural form of diverticulum. [NIH]

**Diverticulitis:** Inflammation of a diverticulum or diverticula. [NIH]

**Diverticulosis:** A condition marked by small sacs or pouches (diverticula) in the walls of an organ such as the stomach or colon. These sacs can become inflamed and cause a condition called diverticulitis, which may be a risk factor for certain types of cancer. [NIH]

**Diverticulum:** A pathological condition manifested as a pouch or sac opening from a tubular or sacular organ. [NIH]

**Dopamine:** An endogenous catecholamine and prominent neurotransmitter in several systems of the brain. In the synthesis of catecholamines from tyrosine, it is the immediate precursor to norepinephrine and epinephrine. Dopamine is a major transmitter in the extrapyramidal system of the brain, and important in regulating movement. A family of dopaminergic receptor subtypes mediate its action. Dopamine is used pharmacologically for its direct (beta adrenergic agonist) and indirect (adrenergic releasing) sympathomimetic effects including its actions as an inotropic agent and as a renal vasodilator. [NIH]

**Double-blind:** Pertaining to a clinical trial or other experiment in which neither the subject nor the person administering treatment knows which treatment any particular subject is receiving. [EU]

**Drug Interactions:** The action of a drug that may affect the activity, metabolism, or toxicity of another drug. [NIH]

**Duodenum:** The first part of the small intestine. [NIH]

**Dyspepsia:** Impaired digestion, especially after eating. [NIH]

**Dysphagia:** Difficulty in swallowing. [EU]

**Efficacy:** The extent to which a specific intervention, procedure, regimen, or service produces a beneficial result under ideal conditions. Ideally, the determination of efficacy is based on the results of a randomized control trial. [NIH]

**Elastin:** The protein that gives flexibility to tissues. [NIH]

**Elective:** Subject to the choice or decision of the patient or physician; applied to procedures that are advantageous to the patient but not urgent. [EU]

**Electrolytes:** Substances that break up into ions (electrically charged particles) when they are dissolved in body fluids or water. Some examples are sodium, potassium, chloride, and calcium. Electrolytes are primarily responsible for the movement of nutrients into cells, and the movement of wastes out of cells. [NIH]

**Emaciation:** Clinical manifestation of excessive leanness usually caused by disease or a lack of nutrition. [NIH]

**Embryology:** The study of the development of an organism during the embryonic and fetal stages of life. [NIH]

**Endorphins:** One of the three major groups of endogenous opioid peptides. They are large peptides derived from the pro-opiomelanocortin precursor. The known members of this group are alpha-, beta-, and gamma-endorphin. The term endorphin is also sometimes used to refer to all opioid peptides, but the narrower sense is used here; opioid peptides is used for the broader group. [NIH]

**Endoscope:** A thin, lighted tube used to look at tissues inside the body. [NIH]

**Endoscopic:** A technique where a lateral-view endoscope is passed orally to the duodenum for visualization of the ampulla of Vater. [NIH]

**Endoscopy:** Endoscopic examination, therapy or surgery performed on interior parts of the body. [NIH]

**Endothelium:** A layer of epithelium that lines the heart, blood vessels (endothelium, vascular), lymph vessels (endothelium, lymphatic), and the serous cavities of the body. [NIH]

**Endothelium-derived:** Small molecule that diffuses to the adjacent muscle layer and relaxes it. [NIH]

**Enema:** The injection of a liquid through the anus into the large bowel. [NIH]

**Enkephalins:** One of the three major families of endogenous opioid peptides. The enkephalins are pentapeptides that are widespread in the central and peripheral nervous systems and in the adrenal medulla. [NIH]

**Enterostomal Therapy:** A nurse who cares for patients with an ostomy. [NIH]

**Environmental Health:** The science of controlling or modifying those conditions, influences, or forces surrounding man which relate to promoting, establishing, and maintaining health. [NIH]

**Enzymatic:** Phase where enzyme cuts the precursor protein. [NIH]

**Enzymes:** Biological molecules that possess catalytic activity. They may occur naturally or be synthetically created. Enzymes are usually proteins, however catalytic RNA and catalytic DNA molecules have also been identified. [NIH]

**Epigastric:** Having to do with the upper middle area of the abdomen. [NIH]

**Epinephrine:** The active sympathomimetic hormone from the adrenal medulla in most species. It stimulates both the alpha- and beta- adrenergic systems, causes systemic vasoconstriction and gastrointestinal relaxation, stimulates the heart, and dilates bronchi and cerebral vessels. It is used in asthma and cardiac failure and to delay absorption of local anesthetics. [NIH]

**Epithelial:** Refers to the cells that line the internal and external surfaces of the body. [NIH]

**Esophageal:** Having to do with the esophagus, the muscular tube through which food passes from the throat to the stomach. [NIH]

**Esophageal Motility Disorders:** Disorders affecting the motor function of the upper or lower esophageal sphincters, the esophageal body, or a combination of these parts. The failure of the sphincters to maintain a tonic pressure may result in the impeding of the passage of food, regurgitation of food, or reflux of gastric acid into the esophagus. [NIH]

**Esophagitis:** Inflammation, acute or chronic, of the esophagus caused by bacteria, chemicals, or trauma. [NIH]

**Esophagus:** The muscular tube through which food passes from the throat to the stomach. [NIH]

**Evacuation:** An emptying, as of the bowels. [EU]

**Excitation:** An act of irritation or stimulation or of responding to a stimulus; the addition of energy, as the excitation of a molecule by absorption of photons. [EU]

**Exocrine:** Secreting outwardly, via a duct. [EU]

**Extracellular:** Outside a cell or cells. [EU]

**Extracellular Matrix:** A meshwork-like substance found within the extracellular space and in association with the basement membrane of the cell surface. It promotes cellular proliferation and provides a supporting structure to which cells or cell lysates in culture dishes adhere. [NIH]

**Extracellular Matrix Proteins:** Macromolecular organic compounds that contain carbon, hydrogen, oxygen, nitrogen, and usually, sulfur. These macromolecules (proteins) form an intricate meshwork in which cells are embedded to construct tissues. Variations in the relative types of macromolecules and their organization determine the type of extracellular matrix, each adapted to the functional requirements of the tissue. The two main classes of macromolecules that form the extracellular matrix are: glycosaminoglycans, usually linked

to proteins (proteoglycans), and fibrous proteins (e.g., collagen, elastin, fibronectins and laminin). [NIH]

**Faecal:** Pertaining to or of the nature of feces. [EU]

**Family Planning:** Programs or services designed to assist the family in controlling reproduction by either improving or diminishing fertility. [NIH]

**Fat:** Total lipids including phospholipids. [NIH]

**Fecal Incontinence:** Failure of voluntary control of the anal sphincters, with involuntary passage of feces and flatus. [NIH]

**Feces:** The excrement discharged from the intestines, consisting of bacteria, cells exfoliated from the intestines, secretions, chiefly of the liver, and a small amount of food residue. [EU]

**Femoral:** Pertaining to the femur, or to the thigh. [EU]

**Femur:** The longest and largest bone of the skeleton, it is situated between the hip and the knee. [NIH]

**Fibrin:** A protein derived from fibrinogen in the presence of thrombin, which forms part of the blood clot. [NIH]

**Fibula:** The bone of the lower leg lateral to and smaller than the tibia. In proportion to its length, it is the most slender of the long bones. [NIH]

**Fistula:** Abnormal communication most commonly seen between two internal organs, or between an internal organ and the surface of the body. [NIH]

**Flatulence:** Production or presence of gas in the gastrointestinal tract which may be expelled through the anus. [NIH]

**Flatus:** Gas passed through the rectum. [NIH]

**Fold:** A plication or doubling of various parts of the body. [NIH]

**Fossa:** A cavity, depression, or pit. [NIH]

**Functional Disorders:** Disorders such as irritable bowel syndrome. These conditions result from poor nerve and muscle function. Symptoms such as gas, pain, constipation, and diarrhea come back again and again, but there are no signs of disease or damage. Emotional stress can trigger symptoms. Also called motility disorders. [NIH]

**Gallbladder:** The pear-shaped organ that sits below the liver. Bile is concentrated and stored in the gallbladder. [NIH]

**Gas:** Air that comes from normal breakdown of food. The gases are passed out of the body through the rectum (flatus) or the mouth (burp). [NIH]

**Gastric:** Having to do with the stomach. [NIH]

**Gastric Acid:** Hydrochloric acid present in gastric juice. [NIH]

**Gastric Juices:** Liquids produced in the stomach to help break down food and kill bacteria. [NIH]

**Gastrin:** A hormone released after eating. Gastrin causes the stomach to produce more acid. [NIH]

**Gastritis:** Inflammation of the stomach. [EU]

**Gastroenteritis:** An acute inflammation of the lining of the stomach and intestines, characterized by anorexia, nausea, diarrhoea, abdominal pain, and weakness, which has various causes, including food poisoning due to infection with such organisms as *Escherichia coli*, *Staphylococcus aureus*, and *Salmonella* species; consumption of irritating food or drink; or psychological factors such as anger, stress, and fear. Called also enterogastritis. [EU]

**Gastroenterologist:** A doctor who specializes in diagnosing and treating disorders of the digestive system. [NIH]

**Gastroenterology:** A subspecialty of internal medicine concerned with the study of the physiology and diseases of the digestive system and related structures (esophagus, liver, gallbladder, and pancreas). [NIH]

**Gastroesophageal Reflux:** Reflux of gastric juice and/or duodenal contents (bile acids, pancreatic juice) into the distal esophagus, commonly due to incompetence of the lower esophageal sphincter. Gastric regurgitation is an extension of this process with entry of fluid into the pharynx or mouth. [NIH]

**Gastroesophageal Reflux Disease:** Flow of the stomach's contents back up into the esophagus. Happens when the muscle between the esophagus and the stomach (the lower esophageal sphincter) is weak or relaxes when it shouldn't. May cause esophagitis. Also called esophageal reflux or reflux esophagitis. [NIH]

**Gastrointestinal:** Refers to the stomach and intestines. [NIH]

**Gastrointestinal Hemorrhage:** Bleeding in the gastrointestinal tract. [NIH]

**Gastrointestinal tract:** The stomach and intestines. [NIH]

**Gene:** The functional and physical unit of heredity passed from parent to offspring. Genes are pieces of DNA, and most genes contain the information for making a specific protein. [NIH]

**Gland:** An organ that produces and releases one or more substances for use in the body. Some glands produce fluids that affect tissues or organs. Others produce hormones or participate in blood production. [NIH]

**Glucose:** D-Glucose. A primary source of energy for living organisms. It is naturally occurring and is found in fruits and other parts of plants in its free state. It is used therapeutically in fluid and nutrient replacement. [NIH]

**Glucose Intolerance:** A pathological state in which the fasting plasma glucose level is less than 140 mg per deciliter and the 30-, 60-, or 90-minute plasma glucose concentration following a glucose tolerance test exceeds 200 mg per deciliter. This condition is seen frequently in diabetes mellitus but also occurs with other diseases. [NIH]

**Glutamic Acid:** A non-essential amino acid naturally occurring in the L-form. Glutamic acid (glutamate) is the most common excitatory neurotransmitter in the central nervous system. [NIH]

**Gluten:** The protein of wheat and other grains which gives to the dough its tough elastic character. [EU]

**Glycine:** A non-essential amino acid. It is found primarily in gelatin and silk fibroin and used therapeutically as a nutrient. It is also a fast inhibitory neurotransmitter. [NIH]

**Governing Board:** The group in which legal authority is vested for the control of health-related institutions and organizations. [NIH]

**Granulocytes:** Leukocytes with abundant granules in the cytoplasm. They are divided into three groups: neutrophils, eosinophils, and basophils. [NIH]

**Groin:** The external junctural region between the lower part of the abdomen and the thigh. [NIH]

**Guanylate Cyclase:** An enzyme that catalyzes the conversion of GTP to 3',5'-cyclic GMP and pyrophosphate. It also acts on ITP and dGTP. (From Enzyme Nomenclature, 1992) EC 4.6.1.2. [NIH]

**Haematoma:** A localized collection of blood, usually clotted, in an organ, space, or tissue,

due to a break in the wall of a blood vessel. [EU]

**Haemorrhage:** The escape of blood from the vessels; bleeding. Small haemorrhages are classified according to size as petechiae (very small), purpura (up to 1 cm), and ecchymoses (larger). The massive accumulation of blood within a tissue is called a haematoma. [EU]

**Headache:** Pain in the cranial region that may occur as an isolated and benign symptom or as a manifestation of a wide variety of conditions including subarachnoid hemorrhage; craniocerebral trauma; central nervous system infections; intracranial hypertension; and other disorders. In general, recurrent headaches that are not associated with a primary disease process are referred to as headache disorders (e.g., migraine). [NIH]

**Health Promotion:** Encouraging consumer behaviors most likely to optimize health potentials (physical and psychosocial) through health information, preventive programs, and access to medical care. [NIH]

**Heartburn:** Substernal pain or burning sensation, usually associated with regurgitation of gastric juice into the esophagus. [NIH]

**Hemorrhage:** Bleeding or escape of blood from a vessel. [NIH]

**Hemorrhoids:** Varicosities of the hemorrhoidal venous plexuses. [NIH]

**Hepatic:** Refers to the liver. [NIH]

**Hepatitis:** Inflammation of the liver and liver disease involving degenerative or necrotic alterations of hepatocytes. [NIH]

**Hepatocellular:** Pertaining to or affecting liver cells. [EU]

**Hepatocellular carcinoma:** A type of adenocarcinoma, the most common type of liver tumor. [NIH]

**Hepatocytes:** The main structural component of the liver. They are specialized epithelial cells that are organized into interconnected plates called lobules. [NIH]

**Hernia:** Protrusion of a loop or knuckle of an organ or tissue through an abnormal opening. [NIH]

**Hiatal Hernia:** A small opening in the diaphragm that allows the upper part of the stomach to move up into the chest. Causes heartburn from stomach acid flowing back up through the opening. [NIH]

**Hormone:** A substance in the body that regulates certain organs. Hormones such as gastrin help in breaking down food. Some hormones come from cells in the stomach and small intestine. [NIH]

**Hydration:** Combining with water. [NIH]

**Hydrogen:** The first chemical element in the periodic table. It has the atomic symbol H, atomic number 1, and atomic weight 1. It exists, under normal conditions, as a colorless, odorless, tasteless, diatomic gas. Hydrogen ions are protons. Besides the common H1 isotope, hydrogen exists as the stable isotope deuterium and the unstable, radioactive isotope tritium. [NIH]

**Hydrogen Breath Test:** A test for lactose intolerance. It measures breath samples for too much hydrogen. The body makes too much hydrogen when lactose is not broken down properly in the small intestine. [NIH]

**Hydrolysis:** The process of cleaving a chemical compound by the addition of a molecule of water. [NIH]

**Hydroxylysine:** A hydroxylated derivative of the amino acid lysine that is present in certain collagens. [NIH]

**Hydroxyproline:** A hydroxylated form of the imino acid proline. A deficiency in ascorbic acid can result in impaired hydroxyproline formation. [NIH]

**Hypersensitivity:** Altered reactivity to an antigen, which can result in pathologic reactions upon subsequent exposure to that particular antigen. [NIH]

**Hypertension:** Persistently high arterial blood pressure. Currently accepted threshold levels are 140 mm Hg systolic and 90 mm Hg diastolic pressure. [NIH]

**Idiopathic:** Describes a disease of unknown cause. [NIH]

**Ileal:** Related to the ileum, the lowest end of the small intestine. [NIH]

**Ileum:** The lower end of the small intestine. [NIH]

**Immune system:** The organs, cells, and molecules responsible for the recognition and disposal of foreign ("non-self") material which enters the body. [NIH]

**Immunity:** Nonsusceptibility to the invasive or pathogenic effects of foreign microorganisms or to the toxic effect of antigenic substances. [NIH]

**Immunocompromised:** Having a weakened immune system caused by certain diseases or treatments. [NIH]

**Immunodeficiency:** The decreased ability of the body to fight infection and disease. [NIH]

**Incision:** A cut made in the body during surgery. [NIH]

**Incisional:** The removal of a sample of tissue for examination under a microscope. [NIH]

**Incisive:** 1. Having the power or quality of cutting. 2. Pertaining to the incisor teeth. [EU]

**Incisor:** Anything adapted for cutting; any one of the four front teeth in each jaw. [NIH]

**Incompetence:** Physical or mental inadequacy or insufficiency. [EU]

**Incontinence:** Inability to control the flow of urine from the bladder (urinary incontinence) or the escape of stool from the rectum (fecal incontinence). [NIH]

**Indigestion:** Poor digestion. Symptoms include heartburn, nausea, bloating, and gas. Also called dyspepsia. [NIH]

**Infection:** 1. Invasion and multiplication of microorganisms in body tissues, which may be clinically unapparent or result in local cellular injury due to competitive metabolism, toxins, intracellular replication, or antigen-antibody response. The infection may remain localized, subclinical, and temporary if the body's defensive mechanisms are effective. A local infection may persist and spread by extension to become an acute, subacute, or chronic clinical infection or disease state. A local infection may also become systemic when the microorganisms gain access to the lymphatic or vascular system. 2. An infectious disease. [EU]

**Inflammation:** A pathological process characterized by injury or destruction of tissues caused by a variety of cytologic and chemical reactions. It is usually manifested by typical signs of pain, heat, redness, swelling, and loss of function. [NIH]

**Inflammatory bowel disease:** A general term that refers to the inflammation of the colon and rectum. Inflammatory bowel disease includes ulcerative colitis and Crohn's disease. [NIH]

**Ingestion:** Taking into the body by mouth [NIH]

**Inguinal:** Pertaining to the inguen, or groin. [EU]

**Inguinal Hernia:** A small part of the large or small intestine or bladder that pushes into the groin. May cause pain and feelings of pressure or burning in the groin. Often requires surgery. [NIH]

**Inhalation:** The drawing of air or other substances into the lungs. [EU]



**Inorganic:** Pertaining to substances not of organic origin. [EU]

**Insulin:** A protein hormone secreted by beta cells of the pancreas. Insulin plays a major role in the regulation of glucose metabolism, generally promoting the cellular utilization of glucose. It is also an important regulator of protein and lipid metabolism. Insulin is used as a drug to control insulin-dependent diabetes mellitus. [NIH]

**Intermittent:** Occurring at separated intervals; having periods of cessation of activity. [EU]

**Internal Medicine:** A medical specialty concerned with the diagnosis and treatment of diseases of the internal organ systems of adults. [NIH]

**Intestinal:** Having to do with the intestines. [NIH]

**Intestinal Mucosa:** The surface lining of the intestines where the cells absorb nutrients. [NIH]

**Intestine:** A long, tube-shaped organ in the abdomen that completes the process of digestion. There is both a large intestine and a small intestine. Also called the bowel. [NIH]

**Intracellular:** Inside a cell. [NIH]

**Intrahepatic:** Within the liver. [NIH]

**Intravenous:** IV. Into a vein. [NIH]

**Intussusception:** A rare disorder. A part of the intestines folds into another part of the intestines, causing blockage. Most common in infants. Can be treated with an operation. [NIH]

**Involuntary:** Reaction occurring without intention or volition. [NIH]

**Ions:** An atom or group of atoms that have a positive or negative electric charge due to a gain (negative charge) or loss (positive charge) of one or more electrons. Atoms with a positive charge are known as cations; those with a negative charge are anions. [NIH]

**Irrigation:** The washing of a body cavity or surface by flowing solution which is inserted and then removed. Any drug in the irrigation solution may be absorbed. [NIH]

**Irritable Bowel Syndrome:** A disorder that comes and goes. Nerves that control the muscles in the GI tract are too active. The GI tract becomes sensitive to food, stool, gas, and stress. Causes abdominal pain, bloating, and constipation or diarrhea. Also called spastic colon or mucous colitis. [NIH]

**Ischemia:** Deficiency of blood in a part, due to functional constriction or actual obstruction of a blood vessel. [EU]

**Ischemic Colitis:** Decreased blood flow to the colon. Causes fever, pain, and bloody diarrhea. [NIH]

**Jejunum:** That portion of the small intestine which extends from the duodenum to the ileum; called also intestinum jejunum. [EU]

**Kb:** A measure of the length of DNA fragments, 1 Kb = 1000 base pairs. The largest DNA fragments are up to 50 kilobases long. [NIH]

**Lactulose:** A mild laxative. [NIH]

**Laparoscopic-assisted colectomy:** Surgery done with the aid of a laparoscope (a thin, lighted tube) to remove part or all of the colon through small incisions made in the wall of the abdomen. [NIH]

**Laparoscopy:** Examination, therapy or surgery of the abdomen's interior by means of a laparoscope. [NIH]

**Laparotomy:** A surgical incision made in the wall of the abdomen. [NIH]

**Large Intestine:** The part of the intestine that goes from the cecum to the rectum. The large

intestine absorbs water from stool and changes it from a liquid to a solid form. The large intestine is 5 feet long and includes the appendix, cecum, colon, and rectum. Also called colon. [NIH]

**Laxative:** An agent that acts to promote evacuation of the bowel; a cathartic or purgative. [EU]

**Liver:** A large, glandular organ located in the upper abdomen. The liver cleanses the blood and aids in digestion by secreting bile. [NIH]

**Liver Transplantation:** The transference of a part of or an entire liver from one human or animal to another. [NIH]

**Localized:** Cancer which has not metastasized yet. [NIH]

**Loop:** A wire usually of platinum bent at one end into a small loop (usually 4 mm inside diameter) and used in transferring microorganisms. [NIH]

**Lower Esophageal Sphincter:** The muscle between the esophagus and stomach. When a person swallows, this muscle relaxes to let food pass from the esophagus to the stomach. It stays closed at other times to keep stomach contents from flowing back into the esophagus. [NIH]

**Lymphatic:** The tissues and organs, including the bone marrow, spleen, thymus, and lymph nodes, that produce and store cells that fight infection and disease. [NIH]

**Lymphocyte Count:** A count of the number of lymphocytes in the blood. [NIH]

**Lymphocytes:** White blood cells formed in the body's lymphoid tissue. The nucleus is round or ovoid with coarse, irregularly clumped chromatin while the cytoplasm is typically pale blue with azurophilic (if any) granules. Most lymphocytes can be classified as either T or B (with subpopulations of each); those with characteristics of neither major class are called null cells. [NIH]

**Lymphoid:** Referring to lymphocytes, a type of white blood cell. Also refers to tissue in which lymphocytes develop. [NIH]

**Lymphoma:** A general term for various neoplastic diseases of the lymphoid tissue. [NIH]

**Malabsorption:** Impaired intestinal absorption of nutrients. [EU]

**Malignancy:** A cancerous tumor that can invade and destroy nearby tissue and spread to other parts of the body. [NIH]

**Malignant:** Cancerous; a growth with a tendency to invade and destroy nearby tissue and spread to other parts of the body. [NIH]

**Malignant tumor:** A tumor capable of metastasizing. [NIH]

**Manifest:** Being the part or aspect of a phenomenon that is directly observable : concretely expressed in behaviour. [EU]

**Matrix metalloproteinase:** A member of a group of enzymes that can break down proteins, such as collagen, that are normally found in the spaces between cells in tissues (i.e., extracellular matrix proteins). Because these enzymes need zinc or calcium atoms to work properly, they are called metalloproteinases. Matrix metalloproteinases are involved in wound healing, angiogenesis, and tumor cell metastasis. [NIH]

**Meat:** The edible portions of any animal used for food including domestic mammals (the major ones being cattle, swine, and sheep) along with poultry, fish, shellfish, and game. [NIH]

**Medical Records:** Recording of pertinent information concerning patient's illness or illnesses. [NIH]

**MEDLINE:** An online database of MEDLARS, the computerized bibliographic Medical

Literature Analysis and Retrieval System of the National Library of Medicine. [NIH]

**Membrane:** A very thin layer of tissue that covers a surface. [NIH]

**Mesenteric:** Pertaining to the mesentery : a membranous fold attaching various organs to the body wall. [EU]

**Mesentery:** A layer of the peritoneum which attaches the abdominal viscera to the abdominal wall and conveys their blood vessels and nerves. [NIH]

**Metastasis:** The spread of cancer from one part of the body to another. Tumors formed from cells that have spread are called "secondary tumors" and contain cells that are like those in the original (primary) tumor. The plural is metastases. [NIH]

**Modification:** A change in an organism, or in a process in an organism, that is acquired from its own activity or environment. [NIH]

**Molecular:** Of, pertaining to, or composed of molecules : a very small mass of matter. [EU]

**Morphological:** Relating to the configuration or the structure of live organs. [NIH]

**Motility:** The ability to move spontaneously. [EU]

**Motor nerve:** An efferent nerve conveying an impulse that excites muscular contraction. [NIH]

**Mucosa:** A mucous membrane, or tunica mucosa. [EU]

**Mucus:** The viscous secretion of mucous membranes. It contains mucin, white blood cells, water, inorganic salts, and exfoliated cells. [NIH]

**Multicenter study:** A clinical trial that is carried out at more than one medical institution. [NIH]

**Muscle relaxant:** An agent that specifically aids in reducing muscle tension, as those acting at the polysynaptic neurons of motor nerves (e.g. meprobamate) or at the myoneural junction (curare and related compounds). [EU]

**Muscle tension:** A force in a material tending to produce extension; the state of being stretched. [NIH]

**Myenteric:** On stimulation of an intestinal segment, the segment above contracts and that below relaxes. [NIH]

**Nausea:** An unpleasant sensation in the stomach usually accompanied by the urge to vomit. Common causes are early pregnancy, sea and motion sickness, emotional stress, intense pain, food poisoning, and various enteroviruses. [NIH]

**Neoplasia:** Abnormal and uncontrolled cell growth. [NIH]

**Neoplasms:** New abnormal growth of tissue. Malignant neoplasms show a greater degree of anaplasia and have the properties of invasion and metastasis, compared to benign neoplasms. [NIH]

**Neurons:** The basic cellular units of nervous tissue. Each neuron consists of a body, an axon, and dendrites. Their purpose is to receive, conduct, and transmit impulses in the nervous system. [NIH]

**Neurotransmitter:** Any of a group of substances that are released on excitation from the axon terminal of a presynaptic neuron of the central or peripheral nervous system and travel across the synaptic cleft to either excite or inhibit the target cell. Among the many substances that have the properties of a neurotransmitter are acetylcholine, norepinephrine, epinephrine, dopamine, glycine,  $\gamma$ -aminobutyrate, glutamic acid, substance P, enkephalins, endorphins, and serotonin. [EU]

**Nitric Oxide:** A free radical gas produced endogenously by a variety of mammalian cells. It

is synthesized from arginine by a complex reaction, catalyzed by nitric oxide synthase. Nitric oxide is endothelium-derived relaxing factor. It is released by the vascular endothelium and mediates the relaxation induced by some vasodilators such as acetylcholine and bradykinin. It also inhibits platelet aggregation, induces disaggregation of aggregated platelets, and inhibits platelet adhesion to the vascular endothelium. Nitric oxide activates cytosolic guanylate cyclase and thus elevates intracellular levels of cyclic GMP. [NIH]

**Norepinephrine:** Precursor of epinephrine that is secreted by the adrenal medulla and is a widespread central and autonomic neurotransmitter. Norepinephrine is the principal transmitter of most postganglionic sympathetic fibers and of the diffuse projection system in the brain arising from the locus ceruleus. It is also found in plants and is used pharmacologically as a sympathomimetic. [NIH]

**Nursing Care:** Care given to patients by nursing service personnel. [NIH]

**Nutritional Status:** State of the body in relation to the consumption and utilization of nutrients. [NIH]

**Office Management:** Planning, organizing, and administering activities in an office. [NIH]

**Opportunistic Infections:** An infection caused by an organism which becomes pathogenic under certain conditions, e.g., during immunosuppression. [NIH]

**Ostomy:** Surgical construction of an artificial opening (stoma) for external fistulization of a duct or vessel by insertion of a tube with or without a supportive stent. [NIH]

**Palliative:** 1. Affording relief, but not cure. 2. An alleviating medicine. [EU]

**Pancreas:** A mixed exocrine and endocrine gland situated transversely across the posterior abdominal wall in the epigastric and hypochondriac regions. The endocrine portion is comprised of the Islets of Langerhans, while the exocrine portion is a compound acinar gland that secretes digestive enzymes. [NIH]

**Pancreas Transplant:** A surgical procedure that involves replacing the pancreas of a person who has diabetes with a healthy pancreas that can make insulin. The healthy pancreas comes from a donor who has just died or from a living relative. A person can donate half a pancreas and still live normally. [NIH]

**Pancreas Transplantation:** The transference of a pancreas from one human or animal to another. [NIH]

**Pancreatic:** Having to do with the pancreas. [NIH]

**Pancreatic Juice:** The fluid containing digestive enzymes secreted by the pancreas in response to food in the duodenum. [NIH]

**Pancreatitis:** Acute or chronic inflammation of the pancreas, which may be asymptomatic or symptomatic, and which is due to autodigestion of a pancreatic tissue by its own enzymes. It is caused most often by alcoholism or biliary tract disease; less commonly it may be associated with hyperlipaemia, hyperparathyroidism, abdominal trauma (accidental or operative injury), vasculitis, or uraemia. [EU]

**Panniculitis:** General term for inflammation of adipose tissue, usually of the skin, characterized by reddened subcutaneous nodules. [NIH]

**Partial remission:** The shrinking, but not complete disappearance, of a tumor in response to therapy. Also called partial response. [NIH]

**Pathologic:** 1. Indicative of or caused by a morbid condition. 2. Pertaining to pathology (= branch of medicine that treats the essential nature of the disease, especially the structural and functional changes in tissues and organs of the body caused by the disease). [EU]

**Pathophysiology:** Altered functions in an individual or an organ due to disease. [NIH]

**Patient Care Management:** Generating, planning, organizing, and administering medical and nursing care and services for patients. [NIH]

**Patient Education:** The teaching or training of patients concerning their own health needs. [NIH]

**Pelvic:** Pertaining to the pelvis. [EU]

**Pelvis:** The lower part of the abdomen, located between the hip bones. [NIH]

**Pepsin:** An enzyme made in the stomach that breaks down proteins. [NIH]

**Peptic:** Pertaining to pepsin or to digestion; related to the action of gastric juices. [EU]

**Peptic Ulcer:** An ulceration of the mucous membrane of the esophagus, stomach or duodenum, caused by the action of the acid gastric juice. [NIH]

**Peptide:** Any compound consisting of two or more amino acids, the building blocks of proteins. Peptides are combined to make proteins. [NIH]

**Perception:** The ability quickly and accurately to recognize similarities and differences among presented objects, whether these be pairs of words, pairs of number series, or multiple sets of these or other symbols such as geometric figures. [NIH]

**Perforation:** 1. The act of boring or piercing through a part. 2. A hole made through a part or substance. [EU]

**Perianal:** Located around the anus. [EU]

**Perineum:** The area between the anus and the sex organs. [NIH]

**Peripheral Nervous System:** The nervous system outside of the brain and spinal cord. The peripheral nervous system has autonomic and somatic divisions. The autonomic nervous system includes the enteric, parasympathetic, and sympathetic subdivisions. The somatic nervous system includes the cranial and spinal nerves and their ganglia and the peripheral sensory receptors. [NIH]

**Peritoneal:** Having to do with the peritoneum (the tissue that lines the abdominal wall and covers most of the organs in the abdomen). [NIH]

**Peritoneal Cavity:** The space enclosed by the peritoneum. It is divided into two portions, the greater sac and the lesser sac or omental bursa, which lies behind the stomach. The two sacs are connected by the foramen of Winslow, or epiploic foramen. [NIH]

**Peritoneal Dialysis:** Dialysis fluid being introduced into and removed from the peritoneal cavity as either a continuous or an intermittent procedure. [NIH]

**Peritoneum:** Endothelial lining of the abdominal cavity, the parietal peritoneum covering the inside of the abdominal wall and the visceral peritoneum covering the bowel, the mesentery, and certain of the organs. The portion that covers the bowel becomes the serosal layer of the bowel wall. [NIH]

**Peritonitis:** Inflammation of the peritoneum; a condition marked by exudations in the peritoneum of serum, fibrin, cells, and pus. It is attended by abdominal pain and tenderness, constipation, vomiting, and moderate fever. [EU]

**Petechiae:** Pinpoint, unraised, round red spots under the skin caused by bleeding. [NIH]

**Phantom:** Used to absorb and/or scatter radiation equivalently to a patient, and hence to estimate radiation doses and test imaging systems without actually exposing a patient. It may be an anthropomorphic or a physical test object. [NIH]

**Pharmacologic:** Pertaining to pharmacology or to the properties and reactions of drugs. [EU]

**Pharynx:** The hollow tube about 5 inches long that starts behind the nose and ends at the top

of the trachea (windpipe) and esophagus (the tube that goes to the stomach). [NIH]

**Phospholipids:** Lipids containing one or more phosphate groups, particularly those derived from either glycerol (phosphoglycerides; glycerophospholipids) or sphingosine (sphingolipids). They are polar lipids that are of great importance for the structure and function of cell membranes and are the most abundant of membrane lipids, although not stored in large amounts in the system. [NIH]

**Phosphorus:** A non-metallic element that is found in the blood, muscles, nevers, bones, and teeth, and is a component of adenosine triphosphate (ATP; the primary energy source for the body's cells.) [NIH]

**Physical Examination:** Systematic and thorough inspection of the patient for physical signs of disease or abnormality. [NIH]

**Physiology:** The science that deals with the life processes and functions of organismus, their cells, tissues, and organs. [NIH]

**Pilonidal Sinus:** A hair-containing cyst or sinus, occurring chiefly in the coccygeal region. [NIH]

**Plants:** Multicellular, eukaryotic life forms of the kingdom Plantae. They are characterized by a mainly photosynthetic mode of nutrition; essentially unlimited growth at localized regions of cell divisions (meristems); cellulose within cells providing rigidity; the absence of organs of locomotion; absense of nervous and sensory systems; and an alteration of haploid and diploid generations. [NIH]

**Platelet Aggregation:** The attachment of platelets to one another. This clumping together can be induced by a number of agents (e.g., thrombin, collagen) and is part of the mechanism leading to the formation of a thrombus. [NIH]

**Platelets:** A type of blood cell that helps prevent bleeding by causing blood clots to form. Also called thrombocytes. [NIH]

**Plexus:** A network or tangle; a general term for a network of lymphatic vessels, nerves, or veins. [EU]

**Pneumonia:** Inflammation of the lungs. [NIH]

**Poisoning:** A condition or physical state produced by the ingestion, injection or inhalation of, or exposure to a deleterious agent. [NIH]

**Polypeptide:** A peptide which on hydrolysis yields more than two amino acids; called tripeptides, tetrapeptides, etc. according to the number of amino acids contained. [EU]

**Polyposis:** The development of numerous polyps (growths that protrude from a mucous membrane). [NIH]

**Popliteal:** Compression of the nerve at the neck of the fibula. [NIH]

**Portal Hypertension:** High blood pressure in the portal vein. This vein carries blood into the liver. Portal hypertension is caused by a blood clot. This is a common complication of cirrhosis. [NIH]

**Portal Vein:** A short thick vein formed by union of the superior mesenteric vein and the splenic vein. [NIH]

**Posterior:** Situated in back of, or in the back part of, or affecting the back or dorsal surface of the body. In lower animals, it refers to the caudal end of the body. [EU]

**Postoperative:** After surgery. [NIH]

**Practicability:** A non-standard characteristic of an analytical procedure. It is dependent on the scope of the method and is determined by requirements such as sample throughout and costs. [NIH]

**Practice Guidelines:** Directions or principles presenting current or future rules of policy for the health care practitioner to assist him in patient care decisions regarding diagnosis, therapy, or related clinical circumstances. The guidelines may be developed by government agencies at any level, institutions, professional societies, governing boards, or by the convening of expert panels. The guidelines form a basis for the evaluation of all aspects of health care and delivery. [NIH]

**Precancerous:** A term used to describe a condition that may (or is likely to) become cancer. Also called premalignant. [NIH]

**Premalignant:** A term used to describe a condition that may (or is likely to) become cancer. Also called precancerous. [NIH]

**Preoperative:** Preceding an operation. [EU]

**Presynaptic:** Situated proximal to a synapse, or occurring before the synapse is crossed. [EU]

**Prevalence:** The total number of cases of a given disease in a specified population at a designated time. It is differentiated from incidence, which refers to the number of new cases in the population at a given time. [NIH]

**Proctitis:** Inflammation of the rectum. [EU]

**Progression:** Increase in the size of a tumor or spread of cancer in the body. [NIH]

**Progressive:** Advancing; going forward; going from bad to worse; increasing in scope or severity. [EU]

**Prolapse:** The protrusion of an organ or part of an organ into a natural or artificial orifice. [NIH]

**Proline:** A non-essential amino acid that is synthesized from glutamic acid. It is an essential component of collagen and is important for proper functioning of joints and tendons. [NIH]

**Propulsive:** Tending or having power to propel; driving onward or forward; impelling to action or motion. [EU]

**Prospective study:** An epidemiologic study in which a group of individuals (a cohort), all free of a particular disease and varying in their exposure to a possible risk factor, is followed over a specific amount of time to determine the incidence rates of the disease in the exposed and unexposed groups. [NIH]

**Protective Agents:** Synthetic or natural substances which are given to prevent a disease or disorder or are used in the process of treating a disease or injury due to a poisonous agent. [NIH]

**Protein S:** The vitamin K-dependent cofactor of activated protein C. Together with protein C, it inhibits the action of factors VIIIa and Va. A deficiency in protein S can lead to recurrent venous and arterial thrombosis. [NIH]

**Proteins:** Polymers of amino acids linked by peptide bonds. The specific sequence of amino acids determines the shape and function of the protein. [NIH]

**Protons:** Stable elementary particles having the smallest known positive charge, found in the nuclei of all elements. The proton mass is less than that of a neutron. A proton is the nucleus of the light hydrogen atom, i.e., the hydrogen ion. [NIH]

**Pseudomembranous Colitis:** Severe irritation of the colon. Caused by *Clostridium difficile* bacteria. Occurs after taking oral antibiotics, which kill bacteria that normally live in the colon. [NIH]

**Psyllium:** Dried, ripe seeds of *Plantago psyllium*, *P. indica*, and *P. ovata* (Plantaginaceae). Plantain seeds swell in water and are used as demulcents and bulk laxatives. [NIH]

**Public Policy:** A course or method of action selected, usually by a government, from among

alternatives to guide and determine present and future decisions. [NIH]

**Pulmonary:** Relating to the lungs. [NIH]

**Pulmonary Artery:** The short wide vessel arising from the conus arteriosus of the right ventricle and conveying unaerated blood to the lungs. [NIH]

**Purpura:** Purplish or brownish red discoloration, easily visible through the epidermis, caused by hemorrhage into the tissues. [NIH]

**Pyloric Stenosis:** Obstruction of the pyloric canal. [NIH]

**Quality of Life:** A generic concept reflecting concern with the modification and enhancement of life attributes, e.g., physical, political, moral and social environment. [NIH]

**Radiation:** Emission or propagation of electromagnetic energy (waves/rays), or the waves/rays themselves; a stream of electromagnetic particles (electrons, neutrons, protons, alpha particles) or a mixture of these. The most common source is the sun. [NIH]

**Radioactive:** Giving off radiation. [NIH]

**Radiography:** Examination of any part of the body for diagnostic purposes by means of roentgen rays, recording the image on a sensitized surface (such as photographic film). [NIH]

**Radiology:** A specialty concerned with the use of x-ray and other forms of radiant energy in the diagnosis and treatment of disease. [NIH]

**Rectal:** By or having to do with the rectum. The rectum is the last 8 to 10 inches of the large intestine and ends at the anus. [NIH]

**Rectal Prolapse:** Protrusion of the rectal mucous membrane through the anus. There are various degrees: incomplete with no displacement of the anal sphincter muscle; complete with displacement of the anal sphincter muscle; complete with no displacement of the anal sphincter muscle but with herniation of the bowel; and internal complete with rectosigmoid or upper rectum intussusception into the lower rectum. [NIH]

**Rectum:** The last 8 to 10 inches of the large intestine. [NIH]

**Refer:** To send or direct for treatment, aid, information, de decision. [NIH]

**Reflux:** The term used when liquid backs up into the esophagus from the stomach. [NIH]

**Refraction:** A test to determine the best eyeglasses or contact lenses to correct a refractive error (myopia, hyperopia, or astigmatism). [NIH]

**Regurgitation:** A backward flowing, as the casting up of undigested food, or the backward flowing of blood into the heart, or between the chambers of the heart when a valve is incompetent. [EU]

**Relaxant:** 1. Lessening or reducing tension. 2. An agent that lessens tension. [EU]

**Relaxation Techniques:** The use of muscular relaxation techniques in treatment. [NIH]

**Remission:** A decrease in or disappearance of signs and symptoms of cancer. In partial remission, some, but not all, signs and symptoms of cancer have disappeared. In complete remission, all signs and symptoms of cancer have disappeared, although there still may be cancer in the body. [NIH]

**Resection:** Removal of tissue or part or all of an organ by surgery. [NIH]

**Retroperitoneal:** Having to do with the area outside or behind the peritoneum (the tissue that lines the abdominal wall and covers most of the organs in the abdomen). [NIH]

**Retrospective:** Looking back at events that have already taken place. [NIH]

**Retrospective study:** A study that looks backward in time, usually using medical records and interviews with patients who already have or had a disease. [NIH]



**Risk factor:** A habit, trait, condition, or genetic alteration that increases a person's chance of developing a disease. [NIH]

**Salivary:** The duct that convey saliva to the mouth. [NIH]

**Salivary glands:** Glands in the mouth that produce saliva. [NIH]

**Scatter:** The extent to which relative success and failure are divergently manifested in qualitatively different tests. [NIH]

**Screening:** Checking for disease when there are no symptoms. [NIH]

**Secretion:** 1. The process of elaborating a specific product as a result of the activity of a gland; this activity may range from separating a specific substance of the blood to the elaboration of a new chemical substance. 2. Any substance produced by secretion. [EU]

**Segmental:** Describing or pertaining to a structure which is repeated in similar form in successive segments of an organism, or which is undergoing segmentation. [NIH]

**Segmentation:** The process by which muscles in the intestines move food and wastes through the body. [NIH]

**Sepsis:** The presence of bacteria in the bloodstream. [NIH]

**Septic:** Produced by or due to decomposition by microorganisms; putrefactive. [EU]

**Septicemia:** Systemic disease associated with the presence and persistence of pathogenic microorganisms or their toxins in the blood. Called also blood poisoning. [EU]

**Serotonin:** A biochemical messenger and regulator, synthesized from the essential amino acid L-tryptophan. In humans it is found primarily in the central nervous system, gastrointestinal tract, and blood platelets. Serotonin mediates several important physiological functions including neurotransmission, gastrointestinal motility, hemostasis, and cardiovascular integrity. Multiple receptor families (receptors, serotonin) explain the broad physiological actions and distribution of this biochemical mediator. [NIH]

**Serum:** The clear liquid part of the blood that remains after blood cells and clotting proteins have been removed. [NIH]

**Sex Characteristics:** Those characteristics that distinguish one sex from the other. The primary sex characteristics are the ovaries and testes and their related hormones. Secondary sex characteristics are those which are masculine or feminine but not directly related to reproduction. [NIH]

**Sexually Transmitted Diseases:** Diseases due to or propagated by sexual contact. [NIH]

**Shock:** The general bodily disturbance following a severe injury; an emotional or moral upset occasioned by some disturbing or unexpected experience; disruption of the circulation, which can upset all body functions: sometimes referred to as circulatory shock. [NIH]

**Side effect:** A consequence other than the one(s) for which an agent or measure is used, as the adverse effects produced by a drug, especially on a tissue or organ system other than the one sought to be benefited by its administration. [EU]

**Sigmoid:** 1. Shaped like the letter S or the letter C. 2. The sigmoid colon. [EU]

**Sigmoid Colon:** The lower part of the colon that empties into the rectum. [NIH]

**Sigmoidoscopy:** Endoscopic examination, therapy or surgery of the sigmoid flexure. [NIH]

**Signs and Symptoms:** Clinical manifestations that can be either objective when observed by a physician, or subjective when perceived by the patient. [NIH]

**Small intestine:** The part of the digestive tract that is located between the stomach and the large intestine. [NIH]

**Smooth muscle:** Muscle that performs automatic tasks, such as constricting blood vessels. [NIH]

**Social Environment:** The aggregate of social and cultural institutions, forms, patterns, and processes that influence the life of an individual or community. [NIH]

**Social Support:** Support systems that provide assistance and encouragement to individuals with physical or emotional disabilities in order that they may better cope. Informal social support is usually provided by friends, relatives, or peers, while formal assistance is provided by churches, groups, etc. [NIH]

**Solitary Rectal Ulcer:** A rare type of ulcer in the rectum. May develop because of straining to have a bowel movement. [NIH]

**Somatic:** 1. Pertaining to or characteristic of the soma or body. 2. Pertaining to the body wall in contrast to the viscera. [EU]

**Spastic:** 1. Of the nature of or characterized by spasms. 2. Hypertonic, so that the muscles are stiff and the movements awkward. 3. A person exhibiting spasticity, such as occurs in spastic paralysis or in cerebral palsy. [EU]

**Specialist:** In medicine, one who concentrates on 1 special branch of medical science. [NIH]

**Species:** A taxonomic category subordinate to a genus (or subgenus) and superior to a subspecies or variety, composed of individuals possessing common characters distinguishing them from other categories of individuals of the same taxonomic level. In taxonomic nomenclature, species are designated by the genus name followed by a Latin or Latinized adjective or noun. [EU]

**Spectrum:** A charted band of wavelengths of electromagnetic vibrations obtained by refraction and diffraction. By extension, a measurable range of activity, such as the range of bacteria affected by an antibiotic (antibacterial s.) or the complete range of manifestations of a disease. [EU]

**Sphincter:** A ringlike band of muscle fibres that constricts a passage or closes a natural orifice; called also musculus sphincter. [EU]

**Stasis:** A word termination indicating the maintenance of (or maintaining) a constant level; preventing increase or multiplication. [EU]

**Stimulant:** 1. Producing stimulation; especially producing stimulation by causing tension on muscle fibre through the nervous tissue. 2. An agent or remedy that produces stimulation. [EU]

**Stomach:** An organ of digestion situated in the left upper quadrant of the abdomen between the termination of the esophagus and the beginning of the duodenum. [NIH]

**Stool:** The waste matter discharged in a bowel movement; feces. [NIH]

**Stress:** Forcibly exerted influence; pressure. Any condition or situation that causes strain or tension. Stress may be either physical or psychologic, or both. [NIH]

**Stress management:** A set of techniques used to help an individual cope more effectively with difficult situations in order to feel better emotionally, improve behavioral skills, and often to enhance feelings of control. Stress management may include relaxation exercises, assertiveness training, cognitive restructuring, time management, and social support. It can be delivered either on a one-to-one basis or in a group format. [NIH]

**Subcutaneous:** Beneath the skin. [NIH]

**Symptomatic:** Having to do with symptoms, which are signs of a condition or disease. [NIH]

**Synaptic:** Pertaining to or affecting a synapse (= site of functional apposition between neurons, at which an impulse is transmitted from one neuron to another by electrical or

chemical means); pertaining to synapsis (= pairing off in point-for-point association of homologous chromosomes from the male and female pronuclei during the early prophase of meiosis). [EU]

**Therapeutics:** The branch of medicine which is concerned with the treatment of diseases, palliative or curative. [NIH]

**Thigh:** A leg; in anatomy, any elongated process or part of a structure more or less comparable to a leg. [NIH]

**Thrombocytopenia:** A decrease in the number of blood platelets. [NIH]

**Tissue:** A group or layer of cells that are alike in type and work together to perform a specific function. [NIH]

**Tomography:** Imaging methods that result in sharp images of objects located on a chosen plane and blurred images located above or below the plane. [NIH]

**Tone:** 1. The normal degree of vigour and tension; in muscle, the resistance to passive elongation or stretch; tonus. 2. A particular quality of sound or of voice. 3. To make permanent, or to change, the colour of silver stain by chemical treatment, usually with a heavy metal. [EU]

**Tonic:** 1. Producing and restoring the normal tone. 2. Characterized by continuous tension. 3. A term formerly used for a class of medicinal preparations believed to have the power of restoring normal tone to tissue. [EU]

**Tonus:** A state of slight tension usually present in muscles even when they are not undergoing active contraction. [NIH]

**Toxic:** Having to do with poison or something harmful to the body. Toxic substances usually cause unwanted side effects. [NIH]

**Toxicity:** The quality of being poisonous, especially the degree of virulence of a toxic microbe or of a poison. [EU]

**Toxicology:** The science concerned with the detection, chemical composition, and pharmacologic action of toxic substances or poisons and the treatment and prevention of toxic manifestations. [NIH]

**Toxin:** A poison; frequently used to refer specifically to a protein produced by some higher plants, certain animals, and pathogenic bacteria, which is highly toxic for other living organisms. Such substances are differentiated from the simple chemical poisons and the vegetable alkaloids by their high molecular weight and antigenicity. [EU]

**Transfection:** The uptake of naked or purified DNA into cells, usually eukaryotic. It is analogous to bacterial transformation. [NIH]

**Trauma:** Any injury, wound, or shock, must frequently physical or structural shock, producing a disturbance. [NIH]

**Treatment Outcome:** Evaluation undertaken to assess the results or consequences of management and procedures used in combating disease in order to determine the efficacy, effectiveness, safety, practicability, etc., of these interventions in individual cases or series. [NIH]

**Tryptophan:** An essential amino acid that is necessary for normal growth in infants and for nitrogen balance in adults. It is a precursor serotonin and niacin. [NIH]

**Tunica:** A rather vague term to denote the lining coat of hollow organs, tubes, or cavities. [NIH]

**Ulcer:** A localized necrotic lesion of the skin or a mucous surface. [NIH]

**Ulceration:** 1. The formation or development of an ulcer. 2. An ulcer. [EU]

**Ulcerative colitis:** Chronic inflammation of the colon that produces ulcers in its lining. This condition is marked by abdominal pain, cramps, and loose discharges of pus, blood, and mucus from the bowel. [NIH]

**Ultrasonography:** The visualization of deep structures of the body by recording the reflections of echoes of pulses of ultrasonic waves directed into the tissues. Use of ultrasound for imaging or diagnostic purposes employs frequencies ranging from 1.6 to 10 megahertz. [NIH]

**Uraemia:** 1. An excess in the blood of urea, creatinine, and other nitrogenous end products of protein and amino acids metabolism; more correctly referred to as azotemia. 2. In current usage the entire constellation of signs and symptoms of chronic renal failure, including nausea, vomiting, anorexia, a metallic taste in the mouth, a uraemic odour of the breath, pruritus, uraemic frost on the skin, neuromuscular disorders, pain and twitching in the muscles, hypertension, edema, mental confusion, and acid-base and electrolyte imbalances. [EU]

**Urinary:** Having to do with urine or the organs of the body that produce and get rid of urine. [NIH]

**Urine:** Fluid containing water and waste products. Urine is made by the kidneys, stored in the bladder, and leaves the body through the urethra. [NIH]

**Vagal:** Pertaining to the vagus nerve. [EU]

**Vagus Nerve:** The 10th cranial nerve. The vagus is a mixed nerve which contains somatic afferents (from skin in back of the ear and the external auditory meatus), visceral afferents (from the pharynx, larynx, thorax, and abdomen), parasympathetic efferents (to the thorax and abdomen), and efferents to striated muscle (of the larynx and pharynx). [NIH]

**Vascular:** Pertaining to blood vessels or indicative of a copious blood supply. [EU]

**Vasculitis:** Inflammation of a blood vessel. [NIH]

**Vasoactive:** Exerting an effect upon the calibre of blood vessels. [EU]

**Vasodilators:** Any nerve or agent which induces dilatation of the blood vessels. [NIH]

**Vein:** Vessel-carrying blood from various parts of the body to the heart. [NIH]

**Venous:** Of or pertaining to the veins. [EU]

**Venous Thrombosis:** The formation or presence of a thrombus within a vein. [NIH]

**Venter:** Belly. [NIH]

**Ventral:** 1. Pertaining to the belly or to any venter. 2. Denoting a position more toward the belly surface than some other object of reference; same as anterior in human anatomy. [EU]

**Ventricle:** One of the two pumping chambers of the heart. The right ventricle receives oxygen-poor blood from the right atrium and pumps it to the lungs through the pulmonary artery. The left ventricle receives oxygen-rich blood from the left atrium and pumps it to the body through the aorta. [NIH]

**Veterinary Medicine:** The medical science concerned with the prevention, diagnosis, and treatment of diseases in animals. [NIH]

**Villi:** The tiny, fingerlike projections on the surface of the small intestine. Villi help absorb nutrients. [NIH]

**Villous:** Of a surface, covered with villi. [NIH]

**Viral:** Pertaining to, caused by, or of the nature of virus. [EU]

**Viral Hepatitis:** Hepatitis caused by a virus. Five different viruses (A, B, C, D, and E) most commonly cause this form of hepatitis. Other rare viruses may also cause hepatitis. [NIH]

**Virus:** Submicroscopic organism that causes infectious disease. In cancer therapy, some viruses may be made into vaccines that help the body build an immune response to, and kill, tumor cells. [NIH]

**Visceral:** , from viscus a viscus) pertaining to a viscus. [EU]

**Volvulus:** A twisting of the stomach or large intestine. May be caused by the stomach being in the wrong position, a foreign substance, or abnormal joining of one part of the stomach or intestine to another. Volvulus can lead to blockage, perforation, peritonitis, and poor blood flow. [NIH]

**White blood cell:** A type of cell in the immune system that helps the body fight infection and disease. White blood cells include lymphocytes, granulocytes, macrophages, and others. [NIH]

**Wound Healing:** Restoration of integrity to traumatized tissue. [NIH]

**X-ray:** High-energy radiation used in low doses to diagnose diseases and in high doses to treat cancer. [NIH]



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