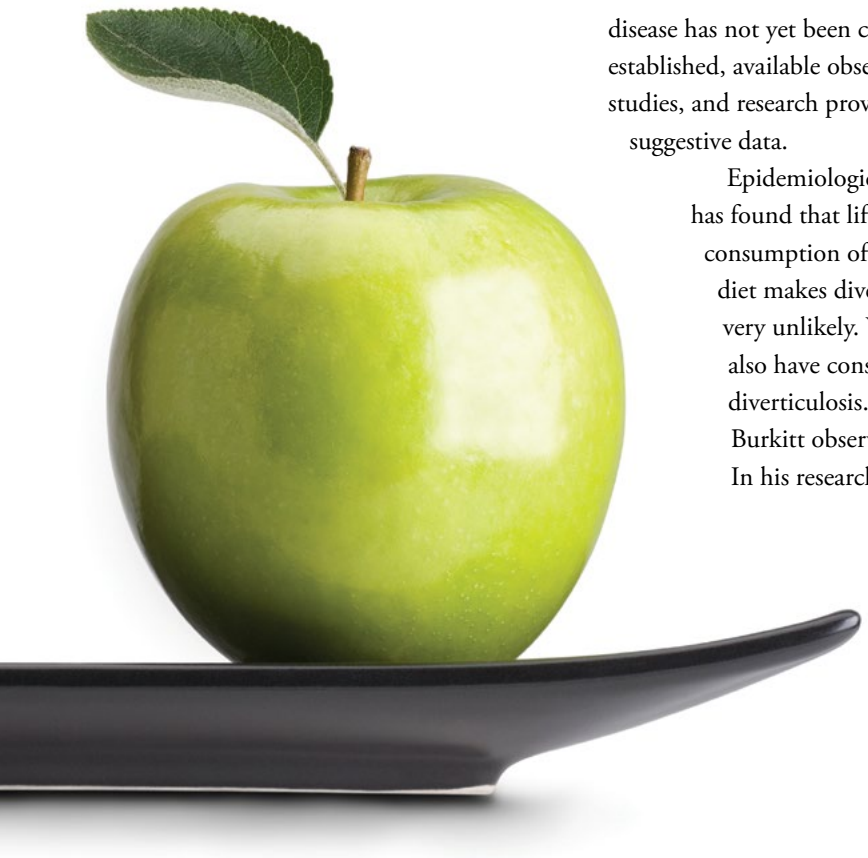
# diverticulosis



Dr. Denis Burkitt, a well-known Irish missionary surgeon made an interesting observation of America. His comment was this: "America is a constipated nation. . . . If you pass small stools, you have to have large hospitals."[1] Burkitt's fascination with man's evacuation habits began when he traveled to Uganda in the 1960s. The diet and fecal matter of the population intrigued him. As a result of his observations he hypothesized that a diet high in fiber was largely responsible for the absence of diverticulosis in Uganda.

Diverticulosis is a condition in which outpouching sacs form in the weak areas of the colon's muscular wall. It is thought that weakened areas of muscle, combined with pressure, allow these sacs, or diverticula, to outwardly protrude. When diverticula become inflamed, irritated, swollen, and infected, it is diagnosed as diverticulitis. Diverticulitis can occur with pain, fever, abscesses, constipation, and in the worst-case scenario, rupture of the intestinal wall. Diverticular bleeding can also occur when small blood vessels within the wall of diverticula burst. This can manifest as blood in the stool.



Diverticulosis has been referred to as a Western disease simply because it is common here and rare in underdeveloped countries. Approximately 40-60 percent of Americans over the age of 60 have diverticulosis. The majority unknowingly have diverticulosis until they undergo a colonoscopy or x-ray, or they develop diverticulitis with corresponding intense abdominal pain. While the cause of colonic diverticular disease has not yet been conclusively established, available observations, studies, and research provide suggestive data.

Epidemiologic research has found that lifelong consumption of a high-fiber diet makes diverticulosis very unlikely. Vegetarians also have considerably less diverticulosis. This is what Burkitt observed as well. In his research, colonic transit times and stool weights were studied "in over 1,000 individuals in the United Kingdom and sub-Saharan Africa. Longer transit times and lower stool weights were seen in the UK population than in the Ugandan population. A high-fiber diet was thought to be the major contributing factor in faster colonic transit times, larger stool volumes, and more frequent bowel movements. They reasoned that the rising incidence of diverticular disease in the Western world could potentially be due to a gradual decrease in consumption of dietary fiber over the course of the last century."[2]

There may be a few reasons why a high fiber diet is potentially preventive and therapeutic. Fiber intake does result in larger stool volumes. Larger stool volume engages the muscular action of the colon, stimulating motility. The bulk distends the colon, lowering the pressure within. These are issues that science has noted as significant with diverticula development. "Increased intracolonic pressures have been recorded in patients with diverticulosis."[3] Diverticula development is associated with chronically increased intra colonic pressure, potentially abnormal contractions of the colon, and years of inefficient elimination. "Increased pressure in the intestine generated by stasis and straining can cause small ruptures and outpocketing."[4] "Low intake of dietary fiber results in less bulky stools that retain less water and

may alter gastrointestinal transit time; these factors can increase intracolonic pressure and make evacuation of the colonic contents more difficult."[5]

## FIBER FOUND IN FRUITS AND VEGETABLES CONFERRED THE MOST PROTECTIVE EFFECT

More recent studies have found similar associations between diet and diverticula development. From a large study of over 50,000 male health professionals who were observed for several years, it was found that diverticular disease was inversely related to dietary fiber intake. "Fiber found in fruits and vegetables conferred the most protective effect (compared with fiber from cereal) and a high intake of total fat and red meat increased the incidence of diverticular disease."[6]

Fiber not only affects colon health through the direct methods we have briefly looked at, but it also alters the bacterial composition of the colon. Scientists from King's College state, "We believe that diverticulitis may be associated with, or even caused by, alterations in the bacteria that live in the colon, known as the gut microbiome."[7] "In the colon, inflammation also may be caused by a decrease in healthy bacteria and an increase in disease-causing bacteria. This change in the bacteria may permit chronic inflammation to develop in the colon."[8]

Those with diverticular disease are often told to avoid sesame seeds, popcorn, nuts, and even strawberries as they are warned that these may become lodged in a diverticulum sac resulting in infection and inflammation. The association between eating nuts, seeds, and popcorn and diverticulitis and other complications was assessed in an ongoing Harvard School of Public Health study. Those who ate these food items were not found to have any greater incidence of diverticulitis or diverticular bleeding than those who rarely ate these foods.

Chronic use of nonsteroidal anti-inflammatory medications (NSAIDs) is twice as common in patients with diverticular disease as it is in healthy controls with no known colonic disease. Physical inactivity, obesity, constipation, and smoking have also been associated with increased risk of diverticular disease.

It is true that just because a diet or therapy works for another does not prove it will work the same for us. However, anecdotal evidence derived from the experience of others is worth our investigation. Dr. Burkitt also said, ". . . anyone who rejects evidence simply on the grounds that it is anecdotal would stand on the end of a jetty with a lifebelt in his hand and watch a man drown, not throwing the lifebelt because there was no scientific evidence that it would save the man's life." Many despised Heaven's Lifebelt because they demanded to be intellectually convinced of who He was. In contrast, Jesus' greatest missionaries shared that "which we have heard, which we have seen with our eyes, which we have looked upon, and our hands have handled " (1 John 1:1, 3). "As witnesses for Christ, we are to tell what we know, what we ourselves have seen and heard and felt . . . We can tell how we have tested His promise, and found the promise true . . . This is the witness . . . for want of which the world is perishing."[9]


1. *Today in Science History*, http://todayinsci.com/B/Burkitt_Denis/BurkittDenis-Quotations.htm.
2. Kristina G. Hobson, M.D., Patricia L. Roberts, "Etiology and Pathophysiology of Diverticular Disease," *NCBI*: *Clinics in Colon Rectal Surg*. 2004 Aug; 17(3): 147–153, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780060/.
3. Ibid.
4. Ronald Hoffman MD, CNS, "Diverticulosis and diverticulitis: integrative prevention and treatment," *Hoffman Center*, http://www.hoffmancenter.com/page.cfm/785.
5. Danny Jacobs MD, MPH, "Diverticulitis," *The New England Journal of Medicine*, 357;20, 11/15/07, p. 2057, http://www.nejm.org/doi/full/10.1056/NEJMcp073228?siteid=nejm&keytype=ref&ijkey=OHPYott%2Ft6Vwk.
6. Kristina G. Hobson, M.D., Patricia L. Roberts, "Etiology and Pathophysiology of Diverticular Disease," *Clinics in Colon Rectal Surg*. 2004 Aug; 17(3): 147–153, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780060/.
7. The Gut Microbiome in Diverticulitis and Diverticulosis," *Clinical Trials.gov*, 8/19/14, https://clinicaltrials.gov/show/NCT02221713.
8. "*Diverticular Disease*," The National Institute of Diabetes and Digestive and Kidney Diseases, http://www.niddk.nih.gov/health-information/health-topics/digestive-diseases/diverticular-disease/Pages/facts.aspx.
9. Ellen White, *Desire of Ages*, p. 340.

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