

# COUNCILS ON DIET AND HEALTH

## The Adventist Advantage

*A Closer Look* | BY BENJAMIN LAU

The November 2005 issue of *National Geographic* reports that Seventh-day Adventists are among the longest-lived people in the world. Citing studies by Gary Fraser and his associates at Loma Linda University, the article shows that Adventists in California live four to ten years longer than the average Californian. Adventists' habits of consuming whole grains, fruits, vegetables, and nuts while avoiding red meats, tobacco, and alcohol lower their risk of developing cancer and heart disease. Studies also note that Adventists increase their chances for living long by associating closely with those who practice a similar lifestyle.

Three important papers from the Adventist Health Study led to the favorable report in *National Geographic*. First is a paper titled "Ten Years of Life: Is It a Matter of Choice?" by Gary E. Fraser and David J. Shavlik, from Loma Linda University's School of Public Health.<sup>1</sup> In this paper, the expected lifespan of California Adventists (78.5 years for men, 80.2 years for vegetarian men; 82.3 years for women, 84.8 years for vegetarian women) is compared with the populations in ten countries, including Australia (73.9 years for men, 80.0 years for women), Canada (73.0 years for men, 79.7 years for women), Japan (75.9 years for men, 81.8 years for women), and the United States in general (73 years for men, 79.7 years for women). Japanese have often been described as the longest-lived population, but, as shown in Table 1, California Adventists outlive the Japanese on average. Another highlight of this paper shows that, among California Adventists, vegetarian men and women (mostly lactoovovegetarians, only 3 percent of California SDAs are vegan or pure vegetarians) outlived their nonvegetarian counterparts.

**Table 1**

*Expected Length of Life in Years: California Adventists Compared with International Populations*

Country	Men	Women
Australia	73.9	80.0
Canada	73.0	79.7
Denmark	72.0	77.7
Finland	70.9	78.9
Iceland	75.7	80.3
Japan	75.9	81.8
New Zealand	71.6	77.6
Norway	73.4	79.8
United Kingdom	71.9	77.6
United States	73.0	79.7
California Adventists	78.5	82.3
Calif. Adventists-Vegetarians	80.2	84.8

**Source:** Gary E. Fraser and David J. Shavlik, "Ten Years of Life: Is It a Matter of Choice?" *Archives of Internal Medicine* 161 (July 2001):1645-52.

The second study is titled "Cancer Incidence among California Seventh-day Adventists, 1976-1982," by Fraser's group.<sup>2</sup> This study compares cancer incidence among California SDAs with incidence rates in the state of Connecticut. The comparison was made by calculating the so-called standardized morbidity ratios (SMRs). Table 2 has some interesting findings taken from this study. There were a total of 598 cases of cancer observed in California Adventist males during this period (1976-82), whereas the expected incidence rate for the reference population was 814 cases, resulting in an SMR of 0.73 for cancers of all sites for SDA men (596 divided by 814 = 0.73). This is a statistically significant difference.



**Table 2**

*Observed and Expected Cancer Incidence in Adventist Males, 1976–1982*

Site or type cancer	Observed (O)	Expected (E)	SMR of (O/E)
All cancers	598	814	0.73*
Esophagus	0	14	0.00*
Stomach	15	30	0.50*
Colon	62	98	0.64*
Rectum	25	49	0.51*
Bronchus and lung	41	162	0.25*
Melanoma of skin	23	13	1.77
Prostate	186	149	1.25*
Bladder	37	62	0.59*
Kidney	8	21	0.37*
Brain	15	10	1.49

**Source:** P. K. Mills, W. L. Beeson, R. L. Phillips, and G. E. Fraser, "Cancer Incidence among California Seventh-day Adventists, 1976–1982," *American Journal of Clinical Nutrition* 59 (May 1994):1136S–1142S.

\* Asterisk denotes statistically significant difference.

A third study published by Gary Fraser, "Association between Diet and Cancer, Ischemic Heart Disease, and All-Cause Mortality in Non-Hispanic White California Seventh-day Adventists," compares three groups of California SDAs: vegetarians who ate no meat, fish, or poultry; semivegetarians who ate meat, fish, or poultry less than one time per week; and nonvegetarians, who ate these foods more than once a week.<sup>3</sup> The average body weights for vegetarian, semi-vegetarian, and nonvegetarian men were 77 kilograms (kg) (169.4 lbs), 80 kg (176 lbs), and 83 kg (182.6 lbs), respectively. For women, the numbers were 63 kg (138.6 lbs), 66 kg (145.2 lbs), and 69 kg (151.8 lbs), respectively. Among both men and women, vegetarians were thinner than nonvegetarians.

So the news is very good for Adventists, and national and international news media have touted the *National Geographic* report. However, a closer look at some of the statistics contains alarming news, and many Adventists who have witnessed friends and family die young from heart attacks, strokes, and cancer take little solace in the reports. Is it possible that, although Adventists are healthier than most, we can actually do better? My answer is a resounding YES!

CL was a dynamic pastor. He was a vegetarian and exercised regularly. A three-hundred-member SDA congregation flourished under his leadership, with 50 percent of the membership made up of young families. One day, the head elder called to inform me that CL had died of a massive heart attack while jogging. He was forty-two and left a wife and two small children. Church members asked: "How did such a healthy person die at such a young age?"

A forty-six-year-old physician suffered a heart attack five months ago. He had been a lactoovovegetarian all his life. He was in a coronary intensive care unit for two weeks while friends and loved ones in four churches prayed earnestly day and night for his recovery. In spite of modern medical technology, he died in the hospital. Friends and loved ones asked in agony: "Why didn't his healthy lifestyle spare his life?"

JL, a minister's wife and a lactoovovegetarian all her life, recently died of ovarian cancer after undergoing surgery and chemotherapy. During a health seminar I conducted at an SDA church, members queried me as to why her lifestyle did not spare her from ovarian cancer while her non-SDA relatives and friends had not been inflicted.

One possible answer to the questions that church members ask regarding heart attacks and cancers among SDA men and women is this: the lactoovovegetarian diet may be the culprit. Numerous studies have now shown that cow's milk and dairy products contribute to cancers, heart disease, diabetes, osteoporosis, and many other diseases of the affluent societies. For a quick reference, please read Colin Campbell and Thomas M. Campbell's *The China Study*, with more than 750 documented scientific references.<sup>4</sup> Incidentally, Colin Campbell, of Cornell University, and his family adopted the vegan lifestyle after he completed *The China Study*. Researchers involved with the study over a period of two decades included scientists at Oxford University, the Chinese Academy of Medical Sciences, and the Chinese Academy of Preventive Medicine, as well as thousands of other researchers.

Let us look at some specific cancers. As Table 2 shows, the SMRs for cancers of the esophagus, stomach, colon, rectum, lung, bladder, and kidney in SDA men are 0.00, 0.50, 0.64, 0.51, 0.25, 0.59, and 0.37, respectively. All these numbers are significant statistically and very



good news. However, the SMRs for melanoma (skin cancer), prostate cancer, and brain cancer in SDA men are 1.77, 1.25, and 1.49, respectively, which means that SDA men actually have higher incidence of skin, prostate, and brain cancer than non-SDAs. The higher incidence of prostate cancer is indeed disconcerting.

The culprit here could very well be the lactoovovegetarian diet. Numerous studies have shown that consumption of dairy products is the primary factor that contributes to prostate cancer. One article that came out of Harvard and was published by June M. Chan and Edward Giovannucci, "Diet: Dairy Products, Calcium, and Vitamin D and Risk of Prostate Cancer," could not be more convincing.<sup>5</sup> Twelve out of fourteen case control studies and seven of nine cohort studies have observed a positive association between dairy products and prostate cancer; this is one of the most consistent dietary predictors for prostate cancer in the published literature.

**Table 3**

*Observed and Expected Cancer Incidents in Adventist Females, 1976–1982*

Site or type cancer	Observed (O)	Expected (E)	SMR of (O/E)
All cancers	862	937	0.92
Stomach	4	24	0.16*
Colon	95	126	0.76*
Rectum	37	52	0.71
Bronchus and lung	27	76	0.36*
Melanoma of skin	24	14	1.71*
Breast	231	254	0.91
Cervix of uterus	32	20	1.60*
Uterus	129	68	1.91*
Ovary	47	36	1.29
Genital	208	135	1.54*

**Source:** P. K. Mills, W. L. Beeson, R. L. Phillips, and G. E. Fraser, "Cancer Incidence among California Seventh-day Adventists, 1976–1982," *American Journal of Clinical Nutrition* 59 (1994):11365–425.

\*Asterisk denotes statistically significant difference.

For SDA women, there were a total of 862 cases of various types of cancer (Table 3), whereas the expected number of cases was 937, which resulted in an SMR of 0.92 (see Table 3). In other words, the incidence of all cancers for SDA women is 92 percent of that of the reference popula-

tion, or 8 percent less, which is not statistically significant. The SMRs of stomach cancer, colon cancer, and lung cancer are 0.16, 0.76 and 0.36; all of these are statistically significant. For breast cancer, the SMR is 0.91. This means that when one hundred women in the general population have breast cancer, ninety-one SDA women also suffer breast cancer. The difference is not significant from the standpoint of statistics.

The SMRs of SDA women for skin cancer, cancer of the cervix of uterus, uterine cancer, ovarian cancer, and genital cancer are 1.71, 1.60, 1.91, 1.29, and 1.54, respectively. In other words, SDA women have higher incidence of these cancers than non-SDA women. Particularly disturbing in this case are cancers of the female reproductive system. One recent review of a meta-analysis of epidemiological studies, "Milk, Milk Products and Lactose Intake and Ovarian Cancer Risk: A Meta-Analysis of Epidemiological Studies," by S. C. Larsson, N. Orsini, and A. Wolk, concludes that high intakes of dairy foods and lactose (milk sugar) may increase the risk of ovarian cancer.<sup>6</sup>

One of my Ph.D. students conducts research that deals with ovarian cancer. She has provided me with scientific literature showing that milk sugar (lactose) contributes to the development of ovarian cancer. Most studies indicate that milk protein (casein) rather than milk sugar contributes to cancer development. Many people choose to use low-fat milk. Thinking that low-fat milk is preferable to whole milk, they do not realize that the removal of fat actually increases the concentration of milk protein and lactose. In other words, low-fat milk contains more protein and sugar than whole milk.

Back to the third study by Fraser's group. Looking at the relationship between beef consumption and fatal heart attack, the study compared three groups of SDA men: those who never consume beef, those who consume beef three times a week, and those who consume beef more than three times a week. The results showed that those who consumed beef three times a week had 1.93 times more fatal heart attacks than those who never consumed it, and those who consumed beef more than three times a week had 2.31 times greater incidence of fatal heart attack than those who never consumed it. In contrast, women who consumed beef had a slightly lower incidence of fatal heart attack compared to those who did not consume beef. Hormones in beef may account for this difference, since we have known for years that premenopausal women have lower incidence of heart attack because of protection from female hormones.

Another fascinating finding from this study reveals higher



incidence and relative risk of several common cancers in SDA nonvegetarians compared to SDA vegetarians. For example, the relative risk for colon cancer in nonvegetarians is 1.88 (almost two times) greater than the vegetarians. This difference is highly significant. The incidence of diabetes and high blood pressure in nonvegetarians is twice as high as in the vegetarians.

To summarize these published reports from the Adventist Health Study:

1. SDAs have longer average life spans than the general population. This is an Adventist advantage.
2. SDAs have lower incidence of several cancers compared to non-SDAs.
3. SDA men have greater incidence of prostate cancer than the general population.
4. SDA women have greater incidence of reproductive system cancers compared to the general population.
5. SDA females have just about as much breast cancer as the general population.
6. Beef consumption increases the chances of a fatal heart attack in SDA men.
7. SDA vegetarians are almost two times more likely to avoid colon cancer, diabetes, and high blood pressure than SDA nonvegetarians.

So shall we rejoice over the reports from the *National Geographic*? Yes, for those SDAs who have indeed benefited from the SDA lifestyle. No, for large numbers of SDA men and women who have died of heart attack and cancer. Is there something that can be done to reduce the number of premature deaths among the brothers and sisters in the Church? The answer is again a resounding YES.

The lactoovovegetarian diet served its intended purpose well for many decades when cow's milk and dairy products were produced by animals raised in farms free from contaminations of hormones, pesticides, carcinogens, and drugs. Today, milk and dairy products are "manufactured" in cattle factories rather than farms. Numerous studies have linked fats in cow's milk and dairy products to heart attacks and strokes.

A few years ago, I reviewed world literature on cow's milk implicated in human diseases.<sup>7</sup> First, I noted that there was a link between juvenile diabetes and consumption of cow's milk based on studies of children in forty countries. These studies have led the American Academy of Pediatrics to make a position statement that discourages use of cow's milk and dairy in newborn babies. We know today that milk protein has antigens very much like protein antigens in the pancreatic cells. Some

children turn antibodies into milk protein, which in turn destroys the cells that make insulin.

More than two thousand published papers study the relationship between cow's milk and cancers, and a large number show a link to breast cancer, colon cancer, ovarian cancer, prostate cancer, leukemia, and lymphoma. Cow's milk is also linked to multiple sclerosis, Alzheimer's disease, and osteoporosis. As an immunologist, I am most concerned with one-thousand plus scientific papers that deal with the topic of milk allergy, which has been found to contribute to numerous health problems from head to toe: headache, sinusitis, otitis, asthma, bronchitis, colic, indigestion, and arthritis, to name only a few.

One young mother informed me that her breast-fed baby girl broke out with eczema (rash) on her mouth and face almost every week. Her husband took the baby to see the pediatrician, who prescribed cortisone. The young mother called me because she was hesitant to use cortisone. I told her to be a detective and find out what the baby was sensitive to, paying attention particularly to what she herself ate. She discovered that every time she ate cheese the baby would break out with rash the following day. However, avoidance of dairy products eliminated the rash.

Her neighbor had a baby boy about the same age who also had rash on his face despite cortisone cream treatment. In addition, he had been treated for ear infection and asthma. When the mother finally eliminated dairy from her diet, she discovered that not only did her son's face clear up, the ear infection and asthma also disappeared.

Now I would like to get back to the young pastor who died of a heart attack. CL was raised a vegetarian who loved cheese and ice cream. Because he was an avid athlete, he maintained his ideal body weight. However, his total serum cholesterol of more than 200 mg/dl was always a concern to me. I convinced his wife to clean dairy products out of her refrigerator, but the pastor delighted in devouring an abundance of dairy products at the church potluck every week.

JL, the pastor's wife who died of ovarian cancer, was a lactoovovegetarian all her life. She, too, loved cheese and desserts. She consumed large quantities of milk, cheese, and refined sugar as a student in her academy and college cafeterias. She worked in a large SDA hospital, where, again, she had her share of generous servings of dairy products.

I mentioned earlier *The China Study*, by Colin Campbell and Thomas M. Campbell. In their study of liver cancer in



animals, they exposed animals to aflatoxin, a liver carcinogen. Then they divided the animals into three groups. One group was fed a diet containing 5 percent milk protein (casein), and a second group 20 percent milk protein. The third group was fed 20 percent plant (soy) protein. None of the animals fed the 5 percent milk protein diet developed liver cancer, whereas 100 percent of the animals fed with 20 percent milk protein developed liver cancer. It was interesting that animals fed 20 percent soy protein also did not develop liver cancer.

In another experiment, the Campbells reported that they were able to turn cancer on and off. Let me explain: when they switched animals on 20 percent milk protein that had cancer to 5 percent milk protein, the cancer gradually disappeared. When they put cancer-free animals originally on 5 percent milk protein to 20 percent milk protein, sooner or later they developed cancer. The Campbells and their associates then went to the Philippines to study liver cancer in children. Many children had been infected with hepatitis B virus, and many possibly exposed to the liver carcinogen aflatoxin, as well. Yet only those whose diet was rich in animal protein suffered liver cancer.

The study that the Campbells conducted showing that cancer can be turned on and off is especially intriguing to me. I, personally, have known individuals with cancers of breast, colon, and prostate who became cancer free when they changed to a plant-based diet. I also know three friends whose colon cancer went into remission after switching to a plant-based diet, only to have the cancer return within six months to one year after they resumed an animal-based diet.

Several knowledgeable organizations in the United States and abroad are currently promoting a plant-based diet for prevention of heart attack, stroke, cancer, and a host of chronic degenerative diseases. For example, the Physicians Committee for Responsible Medicine <[www.pcrm.org](http://www.pcrm.org)>, with headquarters in Washington D.C., has recommended a switch to a plant-based diet for more than two decades.

**I**n conclusion, if you desire to live a long healthy life free from cancer and heart attack, I strongly suggest that you consider a plant-based diet given by our creator in Genesis 1:29. I often eat my meals in SDA university, academy, and hospital cafeterias, and I attend many SDA church potlucks. Although the constant in all these

locations is vegetarian food, I am concerned about huge amounts of dairy-based and refined sugared foods. It is indeed possible to eat very unhealthy food in Adventist cafeterias. Lactoovovegetarians may actually consume more animal products (cheese and milk) than meat eaters.

In 1902, Ellen G. White wrote the following passage on page 356 of *Counsels on Diet and Foods*: "Teach people to prepare food without the use of milk or butter. Tell them that the time will soon come when there will be no safety in using eggs, milk, cream, or butter, because disease in animals is increasing." She wrote more than one hundred years ago that the time will SOON come when eggs and milk will no longer be safe for human consumption. I think the time has NOW come. ■

## Notes and References

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