

# Adventist Health Studies: An Overview

**A**dventist Health Studies are long-term health studies exploring the links between lifestyle, diet and disease among members of the Seventh-day Adventist church, a Christian denomination that encourages a vegetarian diet and calls for abstinence from alcohol and tobacco. Adventists are ideal for epidemiological studies in that their similarity in lifestyle behaviors (such as not smoking) reduces the likelihood of confounding that is often present in other study groups. To date there have been five Adventist Health Studies, based out of Loma Linda University. Key results are highlighted below.

## **Adventist Mortality Study: 1958-1966**

*23,000 California Adventists ages 25+*

Conducted at the same time as the American Cancer Society study of non-Adventists. Comparisons were made for many causes of death between the two populations.

### **Key Results:**

- The risk of coronary heart disease (CHD) was significantly lower in vegetarian compared to non-vegetarian Adventists.
- All-cause mortality showed a significant positive association with egg intake and a negative association with consumption of green salads.
- Compared to other Californians, Adventists experienced lower rates of death for: all cancers (60% [of non-Adventist rates] for Adventist men, 75% for Adventist women); lung cancer (21%); colorectal cancer (62%); breast cancer (85%); CHD (66% for Adventist men, 98% for Adventist women).

## **Adventist Health Study-1: 1974-1988**

*34,192 California Adventists ages 25+*

Investigated factors relating to the incidence of disease and mainly compared the different health habits, especially differences in diet, of Adventists.

### **Key Results:**

- Vegetarians had a lower risk of obesity, hypertension, diabetes and death from all causes.
- In men, the risk of fatal heart disease was significantly related to beef intake.
- Regular nut and whole grain consumption were associated with a lower risk of CHD.
- The risk of colon cancer was increased by 88% in non-vegetarian compared to vegetarian Adventists. Consumption of legumes (beans) had a protective effect against colon cancer.
- On average, Adventist men live 7.3 years longer and Adventist women live 4.4 years longer than other Californians.
- Men with a high consumption of tomatoes had a 40% lower risk of prostate cancer.

## **Adventist Health Air Pollution Study: 1976-Present**

*6,328 California Adventists ages 25+*

A sub-study of Adventist Health Study-1, funded by the Environmental Protection Agency. Its goal is to link the effects of various indoor and outdoor pollutants with respiratory diseases and lung cancer.

## **Adventist Health Study-2: 2002-Present**

*96,000 U.S. and Canadian Adventists ages 30+*

One of the largest and most comprehensive studies of diet and cancer in the world. Also one of the largest studies of Black/African Americans, with 26,000 Black participants.

### **Preliminary Key Results:**

- Data show a progressive weight increase from a total vegetarian diet toward a non-vegetarian diet. For instance, 55-year-old male and female vegans weigh about 30 pounds less than non-vegetarians of similar height.
- Levels of cholesterol, diabetes, high blood pressure, and the metabolic syndrome all had the same trend – the closer to being a vegetarian, the lower the risk in these areas. True for Black as well as non-Black participants.
- High consumption of cooked green vegetables, brown rice, legumes and dried fruit was linked to a decreased risk of colon polyps, a precursor to colon cancer.
- A vegetarian diet was not associated with lower levels of vitamin D. Other factors, such as amount and intensity of sun exposure, had a greater influence on vitamin D levels in blood than diet.

## **Adventist Religion and Health Study: 2006-Present**

*11,000 U.S. and Canadian Adventists ages 30+*

A sub-study of Adventist Health Study-2 examining which aspects of religion account for better or worse health, as well as tracing some of the biopsychosocial pathways to health.

### **Preliminary Key Results:**

- Black and non-Black Adventists reported better physical and mental quality of life than the U.S. norm. The advantage for mental quality of life is greater in older age groups.
- Individuals who experienced childhood poverty are more religious. However, childhood poverty also relates to more abusive and conflicted families in childhood, particularly in non-black participants. Those who experienced an abusive home as a child are less likely to be religious.
- Not surprisingly, divorced individuals had more depressive symptoms than non-divorced individuals, but divorced individuals who used positive religious coping had fewer depressive symptoms than those who did not use positive religious coping.