Followers of the paleo diet argue that our metabolic needs were established in the time of the Paleolithic hunter-gatherer, and our food environment has evolved at a faster rate than our genes. The diet emphasizes fruits, vegetables, and lean meats and excludes whole grains, dairy, and refined sugar. Many people who follow the diet hope to optimize their health, decrease risk of chronic disease, and lose weight. In recognizing the broad spectrum of eating styles that may fall under the paleo category, the overarching theme of emphasizing meat while eliminating grains is concerning.

Meat

There is clear evidence that links meat consumption to health risks in the modern age. Research links meat to some of our nation’s most common diseases, such as diabetes, heart disease, and cancer. According to an article published in the journal *Diabetes*, meat eaters were 22 percent more likely to develop diabetes compared to those who ate less meat. Another study that followed more than 4,000 participants showed similar results. Women and men who avoided all meat products reduced their risk for diabetes by 70 and 45 percent, respectively. In this study, omnivorous participants consumed a predominantly plant-based diet with little meat and fish, suggesting that even modest animal consumption can increase the risk for diabetes.

Concerns over cardiovascular disease arise when including meat in the diet. Processed meats, such as bacon, common in the paleo diet, can double a person’s risk of dying of heart failure. A 2014 study in the *International Journal of Exercise Science* specifically examined the effects of a standard paleo-style diet on blood lipid profile on 24 males and 20 females for 10 weeks. Results showed unfavorable changes in LDL, HDL, total cholesterol, and triglycerides, pointing toward an increased risk for heart disease. These risks exist beyond red meat to include fish, as seen in increased risk for heart disease in Eskimo populations.

Red and processed meat products may increase risk for various cancers, including pancreatic, stomach, bladder, and most significantly, colorectal cancer. In Harvard’s Nurses’ Health Study, women who consumed the most red meat were 22 percent more likely to develop breast cancer, compared with those who consumed the least. Each additional serving of red meat per day was associated with a 13 percent increased risk in breast cancer.

The paleo diet includes meat on the basis that opportunistic consumption of animal products was common in the pre-agricultural era. However, for the majority of our existence, our species subsided on a diet that was 95 percent plants. With the recent inclusion of meat in the diet, this may explain why we are so susceptible to modern chronic diseases, as even our hunter-gatherer ancestors were found to suffer from atherosclerosis. Evidence clearly supports that we, as humans, are better adapted to a plant-based diet.

Grains

Research confirms that eating grains is an essential part of a balanced diet for optimal health and disease prevention. Carbohydrates, found in grains, are the preferred energy source for muscle and brain cells. Following a low-carb diet, such as paleo, has been linked to increased risk of death among 4,000 men and women who had previously suffered heart attacks. Participants in this study were 33 percent more likely to die from any cause and 51 percent more likely to die from heart disease if following a low-carbohydrate diet high in animal sources of protein and fat, compared with those whose dietary patterns included carbohydrate-rich plant foods. Whole grains provide protective nutrients such as fiber, B vitamins, and phytochemicals. People eating three servings of whole grains each day have been found to decrease their risk of colorectal cancer by 17 percent, according to a study published...
in *Nutrition Journal*. Fiber from whole grains moves intestinal contents along more quickly, dilutes carcinogens, and fosters good bacteria that help balance the digestive tract.\(^{14}\)

Whole grains not only improve digestion, help regulate cholesterol, control weight, and decrease risk for cancer, diabetes, and heart disease, but may also extend your lifespan. A 2015 study published in *JAMA* showed that higher whole grain consumption is associated with a lower risk of mortality. This study included data from two large prospective studies and involved more than 118,000 people.\(^{15}\)

Hunter-gatherers did, indeed, meet the majority of their energy demands from carbohydrate sources, such as fruits, starchy root vegetables, legumes, and grains.\(^{16}\) Furthermore, scientists recently uncovered evidence of grain residues on grinding tools used during the Paleolithic era and traces of starches and grains on the teeth of inhabitants of northern Peru from as far back as 11,200 years ago.\(^{17,18}\) This implies that ancient diets included whole, minimally processed grains. Their protective nutrients have been a part of our dietary pattern for thousands of years and continue to be vital to our health today.

**Optimal Diet**

Rather than looking at the past, a more practical approach focuses on 21st century cultures, such as those in rural Africa and China, where individuals enjoy long lives free of chronic disease.\(^{20}\) These societies maintain eating patterns consistent with their ancestry—a diet high in plant foods and low in animal products—and have low rates of heart disease, stroke, diabetes, obesity, hypertension, common cancers, and osteoporosis. Here in the United States, a study of Seventh-day Adventists showed significant reductions in cancer risk among those who avoided meat.\(^{21}\) With the help of a high-fiber, low-fat, plant-based diet, both cholesterol and blood pressure can improve dramatically, decreasing risk for heart disease.\(^{22,23}\)

The same diet, with the addition of exercise, has been proven to help control and sometimes eliminate type 2 diabetes, allowing insulin to work more effectively.\(^{24}\)

With evidence confirming that a plant-based diet, excluding meat and including grains, can reverse heart disease and atherosclerosis, facilitate weight loss, increase energy levels, protect against cancer, balance blood sugar levels, reverse diabetes, and improve digestion and general vitality, the argument supporting the paleo diet flounders. The optimal diet for health and disease prevention—a diet rich in whole grains, legumes, fruits, and vegetables—is rooted in the present rather than the past.

**Resources**