

Beware of Low-Carbohydrate Diets!

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Since low-carb diets have received a lot of media attention recently, many people have the mistaken impression that they provide the best path to fat loss. In fact, these diets don't work well in the long run, fail to meet many human nutritional needs, and may promote degenerative diseases and premature aging.

Studies comparing meat-based low-carbohydrate diets and plant-based reduced-fat diets indicate that the low-carbohydrate diets might produce greater weight loss in the first six months, but beyond that, the plant-based approach works better. Although low-carb diets have been used for more than 30 years, the National Weight Control Registry database indicates that less than 1 percent of 2,681 people successful in maintaining weight loss of greater than 30 pounds for more than a year have used reduced-carbohydrate diets. So far, the most successful people have used carbohydrate-rich diets in which fats provided, on average, only 24 percent of calories.¹

Compared to tubers, whole grains, fruits and vegetables, fat-rich foods provide eight to 45 times more calories per gram. Few if any people overate these low-fat plant foods, and the body rarely converts carbohydrates to fat.^{2,3,4} People can easily overconsume calories from fatty foods, and the body converts at least 95 percent of excess dietary fat to body fat.⁴ A 2002 research review found the scientific evidence strongly supports reducing dietary fat, not carbohydrates, as the best method for preventing obesity.⁵

Because they exclude many vegetables and fruits, low-carbohydrate plans undersupply several micronutrients (carotene, vitamin C, folate, magnesium) and fiber. They also lack the phytonutrients linked to the prevention of cancer, heart disease and other disorders.

The primitive Eskimos obtained about 90 percent of their calories from meat and fat from seals, whales, caribou and fish. They illustrate the long-term effects of low-carbohydrate diets. Despite many generations of low-carb eating, Eskimos did not completely adapt to it. Several scientists reported that primitive Eskimos suffered from diet-related liver enlargement. When Eskimos traded in some fat and protein for carbohydrates, their livers reduced to a healthy size.⁶

Although they had a remarkable resistance to dental decay and heart disease, Greenland Eskimos experienced a high incidence of hemorrhagic stroke, possibly caused by their high-fish diet.^{7,8} They also had a total cancer incidence similar to the Danes,⁹ among the highest in the world¹⁰ and linked to their high fat and protein intake. Eskimos also experienced the world's highest rate of osteoporosis, despite ingesting at least 2,000 milligrams of calcium daily from fish bones. Their extremely high protein intake caused bone calcium loss.¹¹

According to renowned anthropologist Vilhjalmur Stefansson, who lived with Eskimos for several years, they have an average lifespan at least 10 years shorter than Americans. Stefansson specifically noted that Eskimo women "usually seem as old at 60 as our women do at 80."¹²

Research has shown that the acid residue of high-protein diets lacking adequate alkaline vegetables and fruits increases the risk of kidney stones and may cause scarring damage to the kidneys.^{13,14} This effect of a high-meat intake might be reduced by eating at least twice as many fruits and vegetables as meat, but then the diet wouldn't be low in carbohydrates.

We produce enzymes for digesting starch and have taste buds designed to guide us to foods with a sweet taste. Our gut features haustrated small and large intestines and an appendix, characteristics of animals adapted to a plant-dominated diet. Our muscles and liver can store 400 to 600 grams of carbohydrates in the form of glycogen. For healthy function, our brain requires at least 50 to 150 grams of glucose daily. Starchy foods like sweet potatoes and whole grains (prohibited on low-carb diets) provide the most glucose.

According to the American Institute for Cancer Research (AICR), 78 percent of 247 studies investigating links between vegetables or fruits and cancer have shown that vegetables and fruits help to prevent cancer, while none have shown a negative effect.¹¹ When Harvard scientists renewed the links between diet and coronary heart disease, they concluded that diets with an abundance of vegetables, fruits and whole grains provide substantial protection against CHD.¹⁵

The healthiest populations in the modern world consume high-carbohydrate diets. People in Okinawa eat a high (55 percent) carbohydrate, low (25 percent) fat diet. They have rates of heart disease, cancer, senility and diabetes among the lowest in the world. They may also have the world's highest proportion of disability-free centenarians. The Japanese, Greeks and Kitavans eat similar diets and have rates of degenerative disease much lower than Americans.

From a Chinese medical perspective, low-carbohydrate, meat-and-fat-rich diets tend to burden the spleen *qi* and produce accumulation of damp-heat, stagnate liver and large intestine *qi*, deplete liver yin, consume kidney essence, and weaken the bones.

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