

# The Truth about High-Protein Diets

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Maintaining an ideal body weight is important for good health, and the right diet can facilitate this goal. Unfortunately, promises of fast, easy weight loss draw many people to fad diets. High-protein, carbohydrate-restricted diets are no exception. Popular in the 1970s and again today (as U.S. obesity rates reach an all-time high), the Atkins Diet and similar programs fail to address critical health implications of diets that emphasize animal products.

## What the Weight-Loss Research Shows

Studies from Duke University,<sup>1</sup> the University of Pennsylvania,<sup>2</sup> and Philadelphia Medical Center<sup>3</sup> suggest that average weight loss with high-protein diets during the first six months of use is approximately 20 pounds—not demonstrably greater than results from other weight-loss regimens. Additionally, a review of 107 research studies on carbohydrate-restricted diets found that the amount of carbohydrate consumed had no effect on the degree of weight loss.

## High-Protein Health Risks

### Ketosis

High-protein diets are designed to induce ketosis, a condition that occurs in uncontrolled diabetes mellitus and starvation. When there are not enough carbohydrates in the diet to provide glucose to the cells that rely on it as an energy source, ketone bodies are formed from fatty acids. An increase in circulating ketones can disturb the body's acid-base balance, causing metabolic acidosis, which can lead to hypophosphatemia, resorption of calcium from bone, osteoporosis, and kidney stones.<sup>6</sup>

### Colorectal cancer

Regular meat consumption increases colon cancer risk by about 300 percent, according to research from Harvard University. High-protein diets emphasize animal products and therefore are typically low in dietary fiber, which facilitates the movement of wastes, including carcinogens, out of the digestive tract, and promotes a biochemical environment within the colon that appears to be protective against cancer.<sup>8</sup>

### Heart Disease

Typical high-protein diets are extremely high in dietary

cholesterol and saturated fat. The effect of such diets on serum cholesterol concentrations is a matter of ongoing research. However, evidence indicates that meals high in saturated fat impair arterial compliance. A recent study showed that the consumption of a high-fat meal (ham-and-cheese sandwich, whole milk, and ice cream) reduced systemic arterial compliance by 25 percent at three hours and 27 percent at six hours.<sup>9</sup>

### Kidney Disease

High-protein diets are associated with reduced kidney function, which, over time, can lead to permanent loss of kidney function. These diets are associated with a significant decline in kidney function, according to research from Harvard University monitoring 1,624 women participating in the Nurses' Health Study. While kidney damage was found only in those who already had reduced kidney function, this condition is far from rare and currently affects as many as one in four U.S. adults. Plant protein, on the other hand, had no harmful effect.<sup>10</sup>

### Osteoporosis

Very high protein intake is known to encourage urinary calcium losses and has been shown to increase risk of bone fractures in research studies.<sup>12,13</sup>

### Diabetes Complications

With diabetes, kidney and heart problems are particularly common. The use of diets that further tax the kidneys and may reduce arterial compliance is not recommended.

### Nutritional Deficiencies

The American Heart Association states, "High-protein diets are not recommended because they restrict healthful foods that provide essential nutrients and do not provide the variety of foods needed to adequately meet nutritional needs. Individuals who follow these diets are therefore at risk for compromised vitamin and mineral intake, as well as potential cardiac, renal, bone, and liver abnormalities overall."<sup>7</sup>

## A Healthier Way to Lose Weight

Of the many ways to lose weight, one stands out as by far the most healthful. When meals are built from a generous array of vegetables, fruits, whole grains, and beans—that

is, healthy vegetarian choices—weight loss is remarkably easy. And along with it come major improvements in cholesterol, blood pressure, blood sugar, and many other aspects of health. The answer is simple: Cut out foods that are high in fat and devoid of fiber and increase foods that are low in fat, rich in fiber, and most nutritious.

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