Recent magazine and television reports have pushed the meat-heavy Atkins Diet and other high-protein diets back into public consciousness. Starting with a *New York Times Magazine* article in July and reverberating through innumerable talk shows, some reporters have tried to topple the mountain of evidence linking meat-heavy diets to health risks, suggesting that meaty diets are a good way to trim your waistline. If you have wondered what’s going on, here’s the skinny.

High-protein diets are aimed at eliminating carbohydrate—that is, starchy foods, such as bread, pasta, potatoes, and beans, and sugary foods, such as fruit or table sugar. Carbohydrate is the body’s natural fuel. If it is removed from the diet, your body has no choice but to live off its fat, a metabolic state called ketosis.

The diet is not rocket science. If you are starving for the nutrients your body needs, you will have to burn some fat. But it only works if the overall calorie intake is lower than that with which you started. And here is the price you pay: High-protein diets are loaded with cholesterol, fat, saturated fat, and animal protein, and they are dangerously low in fiber and other protective nutrients. Here is an analysis of a sample weight-loss menu from *Dr. Atkins’ New Diet Revolution*, compared to diets based on the Food Guide Pyramid and a low-fat, vegan diet:

### A High-Protein Diet vs. Healthier Diets

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Atkins Weight Loss</th>
<th>Food Guide Pyramid</th>
<th>Low-Fat Vegan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy, kcal</td>
<td>1472</td>
<td>2175</td>
<td>1794</td>
</tr>
<tr>
<td>Protein, g (percentage of calories)</td>
<td>112 (30%)</td>
<td>93 (17%)</td>
<td>66 (15%)</td>
</tr>
<tr>
<td>Carbohydrate, g (percentage of calories)</td>
<td>36 (10%)</td>
<td>291 (54%)</td>
<td>315 (70%)</td>
</tr>
<tr>
<td>Fat, g (percentage of calories)</td>
<td>98 (60%)</td>
<td>71 (29%)</td>
<td>30 (15%)</td>
</tr>
<tr>
<td>Saturated fat, g</td>
<td>46</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td>Cholesterol, mg</td>
<td>859</td>
<td>235</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Fiber, g</td>
<td>7</td>
<td>24</td>
<td>50</td>
</tr>
<tr>
<td>Calcium, mg</td>
<td>890 (89%)</td>
<td>1305 (131%)</td>
<td>1261 (126%)</td>
</tr>
<tr>
<td>Iron, mg (percent daily value)</td>
<td>9 (51%)</td>
<td>15 (82%)</td>
<td>22 (123%)</td>
</tr>
<tr>
<td>Folate, µg (percent daily value)</td>
<td>240 (60%)</td>
<td>488 (122%)</td>
<td>524 (131%)</td>
</tr>
</tbody>
</table>
As these figures show, the Atkins diet is very high in protein, saturated fat, and cholesterol, and it is very low in fiber. And, despite its meat content, it is also low in iron due to the lack of vegetables and beans.

And Now for the Bad News

Despite occasional press accounts of dramatic weight loss, the weight-reducing effect of high-protein diets is actually not much different from any other weight-loss diets. Two recent studies (one at Duke University and a second at the University of Pennsylvania, whose results are as yet unpublished) suggest that the average weight loss with high-protein diets during the first six months of use is about 20 pounds, which is about the same as what occurs with low-calorie diets or low-fat, vegetarian diets.

But unlike healthy vegetarian diets, which reduce the risk of cancer, heart disease, and other problems, high-protein, high-fat dietary patterns are associated with increased risk of the following conditions:

1. **Colorectal cancer.** Colorectal cancer is one of the most common forms of the disease. Long-term high intake of meat, particularly red meat, is associated with significantly increased risk of colorectal cancer. The 1997 report of the World Cancer Research Fund and American Institute for Cancer Research, *Food, Nutrition, and the Prevention of Cancer*, reported that, based on available evidence, diets high in red meat had to be considered probable contributors to colorectal cancer risk. High-protein diets are also low in dietary fiber, which helps protect against cancer.

2. **Heart disease.** High-protein diets are loaded with cholesterol and saturated fat. In addition to their effect on blood cholesterol levels, which is currently under study, fatty foods reduce the compliance of arteries, increasing the risk of heart attacks immediately after meals.

3. **Impaired kidney function.** Over time, people who consume large amounts of animal protein risk significant kidney damage. The American Academy of Family Physicians notes that high animal protein intake is responsible in large measure for the high prevalence of kidney stones in the United States and in other developed countries.

---

**Patient Registry Established**

Doctors who prescribe high-protein diets, hoping for quick weight loss, may find themselves liable if patients suffer adverse effects over the long run. In order to assist doctors and patients understand these risks, PCRM has established an on-line registry for individuals who have begun high-protein diets. By signing on at www.AtkinsDietAlert.org, individuals can report their experiences with high-protein diets and will find information on research and legal issues that relate to liability.
and recommends protein restriction for the prevention of recurrent kidney stones. 4

4. Osteoporosis. Very high protein intake is known to encourage urinary calcium losses and has been linked to increased fracture risk in research studies. 5, 6

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

Misunderstandings and Deceptive Statements

So why do people buy into high-protein diets? Partly because some myths just don’t die. For example:

1. “Fatty foods must not be fattening, because fat intake fell during the 1980s, just as America’s obesity epidemic began.”

This was the key argument in the New York Times Magazine story, but it is simply untrue. Food surveys from the National Center for Health Statistics from 1980 to 1991 show that daily per capita fat intake did not drop one iota during that period. For adults, average fat intake was 81 grams in 1980, rising to 86 grams in 1991. While the American public added sodas and other non-fat foods to the diet, forcing the percentage of calories from fat to decline slightly, the actual amount of fat in the American diet steadily climbed.

A notable contributor to the increased fat intake during that period was a dramatic increase in cheese consumption. Per capita cheese consumption rose from 15 pounds in 1975 to more than 30 pounds in 1999. Typical cheeses derive approximately 70% of energy from fat and are a significant source of dietary cholesterol.

2. “Fat and cholesterol have nothing to do with heart problems.”

When diet-book author Robert Atkins suffered his recent heart attack, news accounts suggested that his meaty diet had nothing to do with it. Some went so far as to dispute the role of diet in heart disease. However, the evidence showing that meat-heavy diets increase heart disease risk is overwhelming.

3. “Meat doesn’t boost insulin; only carbohydrates do that, and that’s why they make people fat.”

Popular books and news stories have encouraged individuals to avoid carbohydrate-rich foods, suggesting that high-protein foods will not stimulate insulin release (insulin slows down fat burning). However, contrary to this popular myth, proteins stimulate insulin release, just as carbohydrates do. In fact, clinical studies indicate that beef and cheese cause a bigger insulin release than pasta, and fish produces a bigger insulin release than popcorn. 7

4. “People who eat the most carbohydrates tend to gain the most weight.”

In epidemiologic studies and clinical trials, the reverse has been shown to be true. People throughout Asia consume large amounts of carbohydrate in the form of rice, noodles, and vegetables and generally have lower body weights than Americans—including Asian Americans—who dine on meat, dairy products, and fried foods. Similarly, vegetarians, whose diets are generally rich in carbohydrates, typically weigh less than omnivores.

The bottom line is that, no matter how you slice it, meaty diets are bad news for your health.
