

NUTRITION ACTION

HEALTH LETTER™

BIG FAT LIES



The Truth About the Atkins Diet

By Bonnie Liebman

“What If It’s All Been a Big Fat Lie?” asked the cover story of the July 7th *New York Times Magazine*. The article, by freelance writer Gary Taubes, argues that loading our plates with fatty meats, cheeses, cream, and butter is the key not just to weight loss, but to a long, healthy life.

“Influential researchers are beginning to embrace the medical heresy that maybe Dr. Atkins was right,” writes Taubes.

Taubes claims that it’s not fatty foods that make us fat and raise our risk of disease. It’s carbohydrates. And to most readers his arguments sound perfectly plausible.

Here are the facts—and the fictions—in Taubes’s article, which has led to a book contract with a reported \$700,000 advance. And here’s what the scientists he quoted—or neglected to quote—have to say about his reporting.

(Continued on page 3)

BIG FAT LIES

Perhaps the most telling statement in Gary Taubes's *New York Times Magazine* article comes as he explains how difficult it is to study diet and health. "This then leads to a research literature so vast that it's possible to find at least some published research to support virtually any theory."

He got *that* right. It helps explain why Taubes's article sounds so credible.

"He knows how to spin a yarn," says Barbara Rolls, an obesity expert at Pennsylvania State University. "What frightens me is that he picks and chooses his facts."

She ought to know. Taubes interviewed her for some six hours, and she sent him "a huge bundle of papers," but he didn't quote a word of it. "If the facts don't fit in with his yarn, he ignores them," she says.

Instead, Taubes put together what sounds like convincing evidence that carbohydrates cause obesity.

"He took this weird little idea and blew it up, and people believed him," says John Farquhar, a professor emeritus of medicine at Stanford University's Center for Research in Disease Prevention. Taubes quoted Farquhar, but misrepresented his views. "What a disaster," says Farquhar.

Others agree. "It's silly to say that carbohydrates cause obesity," says George Blackburn of Harvard Medical School and the Beth Israel Deaconess Medical Center in Boston. "We're overweight because we overeat calories."

It's not clear how Taubes thought he could ignore—or distort—what researchers told him. "The article was written in bad faith," says F. Xavier Pi-Sunyer, director of the Obesity Research Center at St. Luke's-Roosevelt Hospital Center in New York. "It was irresponsible."

Here's a point-by-point response to Taubes's major claims.

The Truth About the Atkins Diet



CLAIM #1: The experts recommend an Atkins diet.

TRUTH: They don't.

An Atkins diet is loaded with meat, butter, and other foods high in saturated fat. Taubes implies that many of the experts he quotes recommend it. Here's what they say:

■ "The article was incredibly misleading," says Gerald Reaven, the pioneering Stanford University researcher, now emeritus, who coined the term "Syndrome X." "My quote was correct, but the context suggested that I support eating saturated fat. I was horrified."

“Gary Taubes tricked us all into coming across as supporters of the Atkins diet.”

— John Farquhar
Stanford University



■ According to Taubes, Harvard University's Walter Willett is one of the "small but growing minority of establishment researchers [who] have come to take seriously what the low-carb-diet doctors have been saying all along."

True, Willett is concerned about the harm that may be caused by high-carbohydrate diets (see "What to Eat," page 7). But the Atkins diet? "I certainly don't recommend it," he says.

His reasons: heart disease and cancer. "There's a clear benefit for reducing cardiovascular risk from replacing unhealthy fats—saturated and trans—with healthy fats," explains Willett, who chairs Harvard's nutrition department. "And I told Taubes several times that red meat is associated with a higher risk of colon and possibly prostate cancer, but he left that out."

■ "I was greatly offended at how Gary Taubes tricked us all into coming across as supporters of the Atkins diet," says Stanford's John Farquhar.

Taubes's article ends with a quote from Farquhar, asking: "Can we get the low-fat proponents to apologize?" But that quote was taken out of context.

"What I was referring to wasn't that low-fat diets would make a person gain



weight and become obese,” explains Farquhar. Like Willett and Reaven, he’s worried that too much carbohydrate can raise the risk of heart disease.

“I meant that in susceptible individuals, a very-low-fat [high-carb] diet can raise triglycerides, lower HDL [‘good’] cholesterol, and make harmful, small, dense LDL,” says Farquhar.

Carbohydrates are not what has made us a nation of butterballs, however. “We’re overfed, over-advertised, and under-exercised,” he says. “It’s the enormous portion sizes and sitting in front of the TV and computer all day” that are to blame. “It’s so gol’darn obvious—how can anyone ignore it?”

“The *Times* editor called and tried to get me to say that low-fat diets were the cause of obesity, but I wouldn’t,” adds Farquhar.

CLAIM #2: Saturated fat doesn’t promote heart disease.

TRUTH: It does.

If there’s any advice that experts agree on, it’s that people should cut back on saturated fat. They’ve looked not just at its effect on cholesterol levels, but on its tendency to promote blood clots, raise insulin levels, and damage blood vessels. They’ve issued that advice after examining animal studies, population studies, and clinical studies.¹⁻³ Taubes dismisses them with one narrow argument.

Saturated fats, he writes, “will elevate your bad cholesterol, but they will also elevate your good cholesterol. In other words, it’s a virtual wash.”

Experts disagree. “Fifty years of research shows that saturated fat and cholesterol raise LDL [‘bad’] cholesterol, and the higher your LDL, the higher your risk of coronary heart disease,” says Farquhar. Yet Taubes has no qualms about encouraging people to eat foods that raise their LDL.

He’s willing to bet that higher HDL (“good”) cholesterol will protect them. No experts—at the American Heart Association; National Heart, Lung, and Blood Institute; or elsewhere—would take that risk.

“The evidence that raising HDL is protective is less solid than the evidence that raising LDL is bad,” says David Gordon, a researcher at the National Heart, Lung, and Blood Institute.

“My quote was correct, but the context suggested that I support eating saturated fat. I was horrified.”

— Gerald Reaven
Stanford University



CLAIM #3: Health authorities recommended a low-fat diet as the key to weight loss.

TRUTH: They didn’t.

“We’ve been told with almost religious certainty by everyone from the Surgeon General on down, and we have come to believe with almost religious certainty, that obesity is caused by the excessive consumption of fat, and that if we eat less fat we will lose weight and live longer,” writes Taubes.

It’s true that some diet books, notably Dean Ornish’s *Eat More, Weigh Less*, have encouraged people to eat as much fat-free food as they want. (Of course, Ornish is talking about fruits, vegetables, and whole grains, not fat-free cakes, cookies, and ice cream.) But “everyone from the Surgeon General on down” is baloney.

“The Surgeon General’s report doesn’t say that fat causes obesity,” says Marion Nestle, who was managing editor of the report and is now chair of the nutrition and food studies department at New York University. “Fat has twice the calories of either protein or carbohydrate. That’s why fat is fattening unless people limit calories from everything else.”

And health authorities like the American Heart Association; National Heart, Lung, and Blood Institute; and U.S. Department of Agriculture never urged people to cut way back on fat. Their advice: “Get no more than 30 percent of calories from fat.” At the time that advice was issued, the average person was eating 35 percent fat.

CLAIM #4: We’re fat because we ate a low-fat diet.

TRUTH: We never ate a low-fat diet.

“At the very moment that the government started telling Americans to eat less fat, we got fatter,” says Taubes.

“We ate more fat-free carbohydrates, which, in turn, made us hungrier and then heavier.”

It’s hard to believe this claim passed the laugh test at *The Times*. If you believe Taubes, it’s not the 670-calorie Cinnabons, the 900-calorie slices of Sbarro’s sausage-and-pepperoni-stuffed pizza, the 1,000-calorie shakes or Double Whoppers with Cheese, the 1,600-calorie buckets of movie theater popcorn, or the 3,000-calorie orders of cheese fries that have padded our backsides. It’s only the low-fat Snackwells, pasta (with fat-free sauce), and bagels (with no cream cheese).

“It’s preposterous,” says Samuel Klein, director of the Center for Human Nutrition at the Washington University School of Medicine in St. Louis. “There’s no real evidence that low-fat diets have caused the obesity epidemic.”

Taubes argues that in the late 1970s, health authorities started telling Americans to cut back on fat, and that we did. Wrong.

According to the U.S. Department of Agriculture, *added* fats (oils, shortening, lard, and beef tallow) have gone up steadily since the late 1970s (see “Hardly a Low-Fat Diet”). Total fats (which include the fat in meats, cheese, and other foods) have also gone up, though not as steadily.

So how can Taubes write that “the major trends in American diets, according to USDA agricultural economist Judith Putnam, have been a decrease in the percentage of fat calories and a ‘greatly increased consumption of carbohydrates’?”

The key is the word “percentage.” The percentage of fat calories in our diets declined because, while we ate more fat calories, we ate even more carbohydrate calories.

“We’re eating roughly 500 calories a day more than we did in 1980,” Putnam told us. “More than a third of the increase comes from refined grains, a fifth comes from added sugars, and a third comes from added fats.”

Government surveys show no change—or a slight decrease—in fat consumption since the late 1970s. But they don't look at how much fat is produced, how much is sold, and how much is wasted. The surveys simply ask consumers what they eat. And it's possible that once people were told to eat less fat, they (consciously or unconsciously) started under-reporting how much they ate.

Says Putnam: "People don't adequately report added fats, added sugars, and refined grains."

The bottom line: Taubes blames the obesity epidemic on a low-fat diet that the nation never ate.

CLAIM #5: Carbs, not fats, cause obesity.

TRUTH: The evidence blaming obesity on carbs is flimsy.

The evidence that carbohydrates make you fat can be called "Endocrinology 101," says Taubes, implying that it's well-established fact. In a nutshell, Endocrinology 101 says that "we're hungrier than we were in the '70s" because we're eating more carbohydrates.

"Sugar and starches like potatoes and rice, or anything made from flour, like a slice of white bread," are "known in the jargon as high-glycemic-index carbohydrates, which means they are absorbed quickly into the blood," explains Taubes.

"As a result they cause a spike of blood sugar and a surge of insulin within minutes. The resulting rush of insulin stores the blood sugar away and a few hours later, your blood sugar is lower than it was before you ate....

It's preposterous.

There's no real evidence that low-fat diets have caused the obesity epidemic.

—Samuel Klein
Washington University
School of Medicine



The result is hunger and a craving for more carbohydrates."

It sounds convincing, but there's a problem: "It's not proven at all," says Penn State's Barbara Rolls. "We have no firm data that glycemic index affects body weight or how full people feel after eating."

Harvard's David Ludwig has done a few studies on glycemic index and weight. In the largest, he found that 64 overweight adolescents who were told to eat lower-glycemic-index foods lost an average of four pounds, while 43 overweight adolescents who were told to make modest cuts in calories and fat gained three pounds.⁴

"It's hard to tease apart what led to the weight loss in that study," explains Rolls, "because calorie density, fiber, and glycemic index all go hand in hand."

In other words, foods with a low glycemic index—most vegetables, fruits, and whole grains—are also high in fiber and low in calorie density.

What's more, Ludwig's study didn't randomly assign children to one diet or another, so the two groups weren't comparable. "The low-glycemic-index group had fewer minorities," says Columbia's Pi-Sunyer. Whites in both groups were more likely to lose weight.

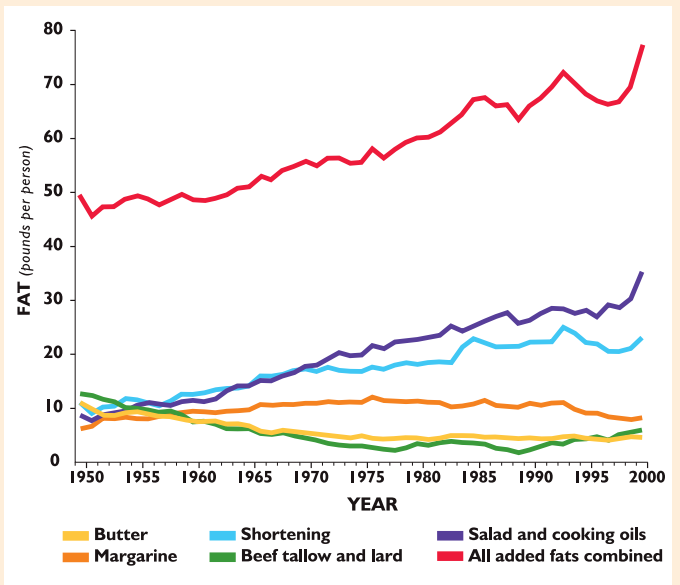
And he and others question the whole glycemic index theory.⁵ Among his criticisms: "People eat meals, where low-glycemic foods balance out high-glycemic foods."

For example, "people don't eat pasta alone," he explains. "They eat it with olive oil, clams, tomatoes, or other foods, and that dampens the differences in their effects on insulin."

And, contrary to Taubes's claims,

Hardly a Low-Fat Diet

Added Fats & Oils in the Food Supply



According to Taubes, a low-fat diet has made us fat. Yet our consumption of all added fats combined (red line) is higher than ever before. Estimates of *total* fat (not shown), which includes the fats in meats, dairy, etc., also show a rise since the late 1970s. The bottom line: Americans never went on a low-fat diet.

Source: USDA/Economic Research Service.

there is no good evidence that insulin triggers weight gain. "Insulin crosses the blood-brain barrier and turns off food intake," says Pi-Sunyer. "That makes sense. You've just eaten, so you don't need to eat for a while. If anything, insulin should lower food intake."

CLAIM #6: The Atkins diet is the best way to lose weight.

TRUTH: We don't know the best way to lose weight.

"Until we have more research, no one has the solution to the safest and most effective weight loss," says Washington University's Samuel Klein.

"Preliminary data from several studies suggest that, at least over the short-term, the Atkins diet is superior to a low-fat diet in a free-living environment," he says. "But it's too early to say that the Atkins diet is better."

Even if ongoing studies show that the Atkins diet promotes weight loss, we won't know if other diets—ones high in unsaturated fat or protein or vegetables and whole grains, for example—would work as well or better.



“We need lots more randomized controlled trials to evaluate the different permutations,” says Walter Willett. (He and Blackburn are embarking on a study testing a high-*unsaturated*-fat Mediterranean diet, not the high-*saturated*-fat Atkins diet, as Taubes implies.)

“What’s important is not theories, but evidence.”

CLAIM #7: The Atkins diet works because it cuts carbohydrates.

TRUTH: If the Atkins diet works, it’s not clear why.

If the Atkins diet *does* work, it may have nothing to do with the glycemic index or Atkins’s promises. “It’s unlikely to be related to the explanation in Atkins’s book,” says Klein, “because that doesn’t make physiological sense.”

Other possibilities: In one study, the people on a low-carb diet were told to follow *Dr. Atkins’ New Diet Revolution*, which could have been more persuasive than what the people on a lower-fat diet got—a manual designed by academics.

Or, says Klein, “it may simply be easier to cut carbs.” Everyone knows what they are: bread, pasta, rice, potatoes, sweets, etc.

Or, the monotony of a low-carb diet could have curbed the dieters’ appetites. “You lose a lot of foods when you cut out carbs,” says Klein. And with less variety, says Blackburn, “people eat less, so they lose more weight.”

“It’s also possible that a chemical is released by a high-fat diet that suppresses the appetite,” adds Klein. “We just don’t know.”

CLAIM #8: The Atkins diet is safe.

TRUTH: It isn’t.

Taubes not only neglects to mention that the meat in an Atkins diet may promote cancer. He ignores some researchers’ concerns about other adverse effects.

“The Atkins diet may produce more weight loss in the first three weeks, but it’s not spectacular,” says Harvard’s George Blackburn. “Who cares if one group loses a few more pounds than

the other if it can hurt your bones?”

The problem: All the protein that Atkins recommends leads to acidic urine.⁶ “And there’s no dispute that an acid urine leaches calcium out of bones,” says Blackburn.

“You can buffer the diet by taking a couple of Tums a day, but now we’re into medical supervision of people on the diet,” he adds.

Blackburn and others also want to know whether an Atkins diet makes the blood vessels less elastic. “Studies suggest that a diet high in animal fats may cause blood vessels to constrict,” he says. “That’s a root cause of atherosclerosis.”

In preliminary studies, the LDL (“bad”) cholesterol of people on the Atkins diet didn’t go up. That’s comforting. (Of course, LDL didn’t go *down* either, as it usually does with weight loss.)

“The harm caused by saturated fat could be overcome by weight loss,” Klein explains. But what happens once people stop losing weight and start trying to maintain the loss? Will their LDL climb? “We don’t know.”

“It’s silly to say that carbohydrates cause obesity. We’re overweight because we overeat calories.”



—George Blackburn
Harvard University

CLAIM #9: Low-fat diets don’t help people lose weight.

TRUTH: Low-fat diets work if dieters cut calories.

“Low-fat weight-loss diets have proved in clinical trials and real life to be dismal failures,” writes Taubes.

It’s not clear which clinical trials he’s

referring to. In 1998, the National Heart, Lung, and Blood Institute issued guidelines to help doctors treat obesity.⁷

Its conclusion: People who are told to cut fat (but not calories) lose some weight because they inadvertently eat fewer calories. But people who cut fat *and* watch calories lose more.

“A low-fat diet helps people eat fewer calories,” says Rena Wing, a professor of psychiatry and human behavior at the Brown University Medical School in Providence, Rhode Island. “Maybe people *want* to hear that if they eat a lower-fat diet they don’t have to eat fewer calories, but that’s not true.”

What about Taubes’s claim that low-fat diets are a failure “in real life”?

Wing’s National Weight Loss Registry keeps track of people—so far, about 3,000—who report having lost at least 30 pounds and having kept the weight off for at least six years.⁸ The registry can’t “prove” *which* diet is best because it’s not a controlled experiment. But it does offer evidence of what works in the long run.

“People on low-carbohydrate diets like Atkins’s are very rare in the registry,” says Wing.

“The people in our registry consistently report eating around 24 percent of calories from fat,” she adds. They also expend roughly 2,800 calories a week—that’s like walking four miles a day.

Furthermore, a low-fat diet aided weight loss in a six-year study of 3,200 people called the Diabetes Prevention Program.⁹

“Patients were put on a low-fat diet with about 25 percent of calories from fat and they participated in 150 minutes of physical activity a week,” says Wing.

“They lost about seven percent of their body weight and kept most of it off for four years. And they reduced their risk of diabetes by 58 percent.”

Of course, it was both diet *and* exercise that led to their success. But if a low-fat diet *promotes* weight gain, as Taubes argues, the exercise—only about 20 minutes a day—would have had to not only counter the fattening effects of the low-fat diet, but actually lead to weight loss. Unlikely.

What to Eat

“I told Taubes several times that red meat is associated with a higher risk of colon and possibly prostate cancer, but he left that out.”



—Walter Willett
Harvard University

CLAIM #10: Taubes examined the evidence objectively.

TRUTH: He let his biases rule.

The New York Times Magazine isn't the *National Enquirer*. Readers expect *The Times* to run articles that are honestly reported and written. Yet in August, *The Washington Post* revealed that Taubes simply ignored research that didn't agree with his conclusions.

For example, *The Post* asked Taubes why he made no mention of a review of nearly 50 studies on weight loss in the National Heart, Lung, and Blood Institute's 1998 Clinical Guidelines on treating obesity. The panel of experts was chaired by Columbia University's Pi-Sunyer, who has served as president of both the American Society of Clinical Nutrition and the American Diabetes Association.

"Anything that Pi-Sunyer is involved with, I don't take seriously," said Taubes. "He just didn't strike me as a scientist."

If Taubes had written a news article for the front page of *The Times*, comments like those would have ended his career. But when it comes to reporting about diet, the bar is set lower. Surely, the public deserves better. 🍌

¹ *Circulation* 102: 2284, 2000.

² *Circulation* 103: 1034, 2001.

³ www.nhlbi.nih.gov/guidelines/cholesterol/index.htm.

⁴ *Arch. Pediatr. Adolesc. Med.* 154: 947, 2000.

⁵ *Am. J. Clin. Nutr.* 76(suppl): 2908, 2002.

⁶ *Am. J. Kidney Dis.* 40: 265, 2002.

⁷ www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm.

⁸ *Amer. J. Clin. Nutr.* 66: 239, 1997.

⁹ *New Eng. J. Med.* 346: 393, 2002.

Judging by *The New York Times Magazine* article, you'd think that experts were in a tug-of-war over whether to endorse low-fat or low-carbohydrate diets. Not so. Here's what they agree on...and where they differ:

Cut saturated (and trans) fat. Forget Atkins. Experts agree that people should cut back on saturated (and trans) fat. That includes burgers, french fries, pizza, ice cream, and sweets made with butter, shortening, or stick margarine. "There's a clear benefit from replacing unhealthy fats with healthy fats," says Harvard's Walter Willett. "The fat in poultry, fish, and nuts is much better than the fat in red meat and dairy." Healthy fats also include salad dressings, mayonnaise, cooking oils, and fish oils.

But the sky's not the limit, as Atkins would argue. "We're not working in the fields and burning calories all day, so we need to pay attention to all forms of calories," says Willett. "You can't eat unlimited quantities of fats or you'll gain weight."

Don't overdo carbohydrates. A high-carb diet can cause trouble for the estimated 25 percent of Americans who have the Metabolic Syndrome, also called Syndrome X or insulin resistance (see "Read My Lipids," October 2001).

"Too much carbohydrate will raise triglycerides, lower HDL cholesterol, and make LDL small and dense, all of which raises the risk of heart disease," says Stanford University's John Farquhar.

That doesn't happen to everyone. Syndrome X doesn't show up in people who are not genetically susceptible, or in people who get too few calories or too much exercise to be overweight. (In China, Japan, and other Asian nations, diets are high in carbohydrates, yet heart disease rates are rock-bottom low.) But many Americans are genetically susceptible, pudgy, couch potatoes.

"A high-carb diet is worse for overweight, underexercised people and for people from racial groups—Latino, Asian, Indian—in whom a higher proportion have a genetic disposition to Type 2 diabetes," Farquhar explains.

But will a high-carbohydrate diet make you *fat*? Most researchers say no. Even people who get higher insulin levels on a high-carb diet don't gain weight. "If anything, more studies show that insulin resistance protects against weight gain," says Stanford's Gerald Reaven.

Willett isn't sure. "It may be easier to control weight if you cut back on refined starches, sugars, and potatoes," he says. His new study is testing that theory.

In any case, it would be foolish to assume that the calories in fat-free carbohydrates will bounce off your body like Teflon. And it's clear that some carbs—like vegetables, fruits, and whole grains—are healthier than refined carbs like white bread, soft drinks, and sweets.

"The type of carbohydrate matters," says Willett, "just as the type of fat matters."

Look for a weight-loss strategy that works for you. Until more studies are done, it's too early to say *which* diet makes it easiest to lose weight.

Some people may find it easier to cut back on bread, pasta, rice, potatoes, and sweets, while others find it easier to cut back on fried foods, oils, salad dressings, mayonnaise, and margarine. Just make sure that you cut calories, and that the fats and carbs you do eat are healthy. "Most everyone agrees that we need to eat more fruits and vegetables, that our grains should be whole rather than refined, that our protein foods should be lean, and that our oils should come from plants or fish," says Penn State's Barbara Rolls.

"To say that experts don't know what people should eat is deliberately misleading."