Newsweek

The Never-Ending Diet Wars

A new study reports that the Atkins diet can be just as healthy as a lowfat diet. But don't start buying bacon yet. This research has some serious flaws.

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A <u>new study</u> comparing the Atkins diet, a Mediterranean diet and a low-fat diet published on July 17 inThe New England Journal of Medicine (NEJM), is likely to inspire <u>headlines saying that the Atkins diet</u> is better for your waistline and your health than a low-fat diet.

However, as a lead investigator on numerous peer-reviewed studies of low-fat diets, and the author of several books about the benefits of healthy low-fat lifestyles, I believe this study is extremely flawed. Here's why:

The NEJM study, which was funded in part by the Atkins Foundation, reported that participants who ate a low-carb (Atkins) or Mediterranean diet (restricted calorie, moderate fat intake) for two years lost more weight, and saw more of an improvement in their glucose and cholesterol levels, than those who were on a low-fat, restricted calorie diet. However, participants in the study who were on the "low-fat" diet decreased their total fat intake from 31.4 percent to 30.0 percent, hardly at all.

I'm also very skeptical of the quality of data in this study. For example, the investigators reported that those on the "low-fat" diet consumed 200 fewer calories per day—or 10,000 fewer calories per year—than those on the Mediterranean diet, yet people lost more weight on the Mediterranean diet. That's physiologically impossible.

In addition, in the "Atkins diet" that was tested, "the participants were counseled to choose vegetarian sources of fat and protein and to avoid trans fat." *A vegetarian Atkins diet?* Most people associate an Atkins diet with bacon, butter and brie, not a plant-based diet like the one I recommend.

Then there's the question of what constitutes a "low-fat" diet. The one used in the NEJM study was not very low in fat. It was based on the American Heart Association (AHA) guidelines, which I have long criticized as not being enough of a change in diet to show much benefit. In earlier studies, as in this one, the AHA diet did not cause much of a reduction in either blood cholesterol levels, weight or blood

sugar, so it's not surprising that the new NEJM study reported that the Atkins and Mediterranean diets were more successful at reducing these levels. In the <u>Womens Health Initiative</u> study, the AHA diet didn't do much to prevent heart disease, colon cancer or breast cancer, either.

My colleagues and I at the nonprofit Preventive Medicine Research Institute and the University of California, San Francisco, have studied for more than three decades the effects of diets much lower in fat (10 percent) than the one used in NEJM study as well as lower in refined carbohydrates and higher in fruits, vegetables, whole grains, legumes and soy products.

We reported in a randomized, controlled clinical trial published in the <u>Journal of the American Medical Association</u> a 24-pound weight loss after one year and 13-pound average weight loss after five years in a group of men and women, much more than the 9.7 to 10.3 pounds lost in the new NEJM study. These findings were replicated in <u>larger demonstration</u> projects as well.

Using state-of-the-art measures, in a series of randomized controlled trials, we found that this low-fat diet (plus moderate exercise and stress management techniques) caused reversal of coronary heart disease after only one month, even more reversal after one year, and still more improvement after five years. We also found that it could stop or even reverse the progression of early prostate cancer. Our latest study, published in the Proceedings of the National Academy of Sciences, showed that these diet and lifestyle changes caused beneficial changes in gene expression in over 500 genes in just three months-"turning on" disease-preventing genes and "turning off" genes that promote heart disease, cancer, and other illnesses. This is why Medicare is now covering intensive lifestyle programs such as the one I recommend.

However, studies of people who go on an Atkins diet showed that their heart disease actually <u>worsens</u> when heart disease was actually <u>measured</u> rather than just risk factors.

In other words, improved health, not just weight, is important.

The current NEJM study statement that the low-carbohydrate Atkins diet has more favorable effects on HDL-cholesterol levels is based on the observation that HDL-cholesterol levels are higher on an Atkins diet than on a low-fat diet. Remember, HDL is just a risk factor for heart disease. We measured the effects of a healthy low-fat diet on actual disease states, not just on risk factors.

As I have <u>written about before</u>, there is tremendous confusion about what HDL does among both health professionals, as well as in the general public. There is often a simplistic view that HDL is good, so that anything that raises HDL is good for you, and anything that lowers it is bad for you. Nothing could be farther from the truth.

Your body makes HDL to remove excessive cholesterol from your blood and tissues, a process known as "reverse cholesterol transport." Think of HDL as the garbage trucks of your body. HDL transports cholesterol back to your liver where it is metabolized and removed from your body. Your body's ability to make more garbage trucks (i.e., raise your HDL) is, in part, genetically determined. Some people can make more garbage trucks than others.

Most Americans eat a diet that's relatively high in saturated fat and cholesterol—i.e., a lot of "garbage." Those people who have a lot of garbage trucks—in other words, who have high HDL levels—are more efficient at getting rid of extra fat and cholesterol in their diet. As a result, they have a lower risk of a heart attack or stroke than those who eat a high-fat, high-cholesterol diet who have lower HDL levels. However, the relationship of HDL to risk of heart disease and stroke assumes that people are not changing their diet.

Not everything that raises HDL is good for you. For example, if you increase the amount of fat and cholesterol in your diet (e.g., an Atkins diet), you may increase your HDL because your body is trying to get rid of the extra "garbage" (fat and cholesterol) by increasing the number of available garbage trucks (HDL) if you are genetically able to do so. Eating a stick of butter will raise HDL in those who are able to do so, but that does not mean that butter is good for your heart. It isn't.

Not everything that lowers HDL is bad for you. If you change from a high-fat, high-cholesterol diet to a healthy low-fat, low-cholesterol diet, your HDL levels may stay the same or even decrease because there is less need for it. When you have less garbage, you need fewer garbage trucks to remove it, so your body may make less HDL. Thus, a reduction in HDL on a low-fat diet is not harmful.

We know this is true because instead of just measuring risk factors like HDL, we measured what actually happens to the progression of coronary heart disease in people who went on diets that were very low in "garbage"—i.e., very low in cholesterol, saturated fat, total fat and refined carbohydrates and high in fruits, vegetables, whole grains, legumes and soy products.

Their HDL levels came down by 9 percent after one year, but their LDL ("bad") cholesterol levels came down even more, by an average of 40 percent. None of these patients was taking cholesterol-lowering drugs. As mentioned above, even though their HDL levels decreased, these patients showed reversal of their heart disease using state-of-the-art measures.

A low HDL in the context of a healthy low-fat diet has a very different prognostic significance than a low HDL in someone eating a high-fat, high-cholesterol diet. People living in countries such as Asia that consume a low-fat diet have low HDL levels yet among the lowest rates of heart disease in the world.

It's time to call a truce in the diet wars. Although many people feel more bewildered than ever when they hear seemingly contradictory advice about different diets, there is actually a convergence of recommendations that is evolving. While some significant differences remain, a greater consensus is emerging among nutrition experts than most people realize.

An optimal diet is one that is low in fat (because fat, whatever the type, has 9 calories per gram versus only 4 calories per gram for protein and carbohydrates). When you eat less fat, you consume fewer calories without having to eat less food, because the food is less dense in calories, as well as low in refined carbohydrates.

Also, an optimal diet is low in refined carbohydrates. When you remove fiber and bran, you turn an unrefined carbohydrate into a refined one. The fiber and bran fill you up before you consume too many calories—you can only eat so many apples without getting full—but you can consume virtually unlimited amounts of refined carbohydrates such as sugar without getting full. And because refined carbohydrates are absorbed quickly, they cause blood glucose levels to spike which, in turn, leads to repeated insulin surges and, over time, may lead to insulin resistance diabetes.

Whole grains are rich in fiber which slows the absorption of food, causing blood glucose levels to be more stable and actually reducing the incidence of diabetes. Unfortunately, many studies of "low-fat diets" are often very high in refined carbohydrates. It's low in trans fatty acids and saturated fats and with enough fish oil to provide the good fats of omega-3 fatty acids.

People have a spectrum of choices. To the degree that you eat a diet higher in fruits, vegetables, whole (unrefined) grains, legumes, soy products, some fatty fish like salmon, low in fat, low in refined carbohydrates and served with love, you're likely to look better, feel better, lose weight and gain health.

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Disclaimer: I lecture and write books on the benefits of healthy low-fat diets, including my newest book, "The Spectrum," (*Ballantine*) but I do not endorse or receive royalties from any products other than books.

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