



Embracing Fat for a Healthy Heart Is a Notion Based on Flawed Science

By Dean Ornish, MD
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I have been asked by several people to comment on the recent study from Tulane that was featured prominently in the *New York Times* purporting to show that a low-carb diet was not only more effective at losing weight than a “low-fat” diet but also was better for your heart.

Here are my thoughts:

1. It's not low carb vs. low fat. It's both: an optimal diet is low in unhealthful carbs (both sugar and other refined carbohydrates) and low in fat (especially saturated fats and trans fats), as well as in red meat and processed foods.

Reduce your intake of "bad carbs" (sugar, white flour, refined carbs) and increase your intake of good carbs (fruits, vegetables, whole grains, legumes, soy products in their natural forms) — as well as reduce your intake of "bad fats" (including trans fats and saturated fats) and increase your intake of "good fats" (e.g., omega-3 fatty acids).

2. This study did not distinguish between the types of carbs and fats. Patients in the “low-fat” group of the study increased their consumption of “bad carbs” (sugar and refined carbohydrates) during the study.

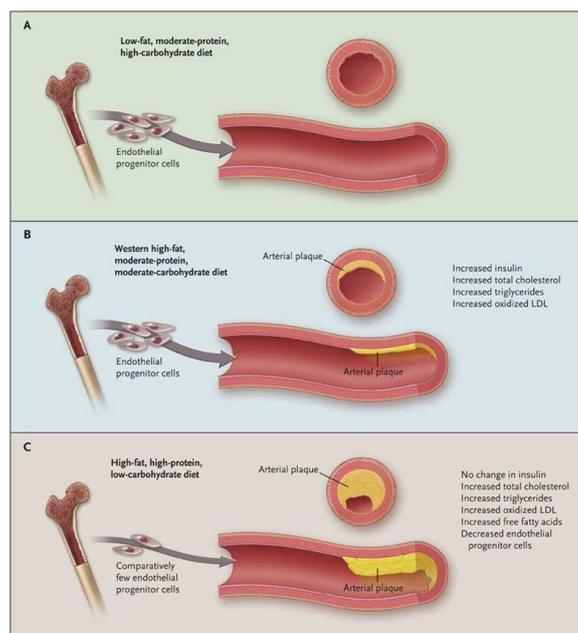
3. The "low-fat diet" in this study was not very low in fat. Participants in the "low-fat" group decreased from 35% fat to 30% fat over the course of the study, hardly any change at all. In our studies, patients with heart disease who consume a diet like this become worse and worse over time. However, we found that patients who made bigger changes in diet and lifestyle (e.g., a 10% fat whole-foods plant-based diet) could reverse their heart disease. They also showed a 40% average reduction in LDL cholesterol (without drugs), which was not seen in the Tulane study, and they lost an average of 24 pounds in the first year.¹

4. Perhaps most important, risk factors are not diseases; they are important only to the degree that they affect the underlying disease process. An article published in *The New England Journal of Medicine* showed what happens inside your arteries on different diets.²

Even though the changes in cholesterol and blood pressure were not that different between the low-fat and low-carb groups in the Tulane study, when you look at what's happening inside their arteries, there is all the difference in the world.

On a low-carb diet, the arteries are significantly clogged (please see image C in the graphic below); on a typical American diet, the arteries are partially clogged (please see image B below); whereas on a low-fat diet high in “good carbs,” the arteries are not clogged—even though the traditional coronary heart disease risk factors such as LDL were not that different between groups (please see image A below). Unfortunately, the Tulane study did not measure what was happening in the arteries; it measured only changes in risk factors such as LDL.

The *NEJM* article goes on to say that these changes in coronary atherosclerosis were mediated primarily through what they term non-traditional risk factors, such as endothelial progenitor cells.



I am not aware of a single study published in a peer-reviewed journal showing that a low-carb diet such as

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the one described in the Tulane study has stopped or reversed the progression of coronary heart disease. Indeed, as this *NEJM* study shows, the arteries worsen on a low-carb diet.

However, our research, as well as that of others, has proven that a whole-foods, plant-based diet naturally low in fat and in refined carbs (plus walking, meditating, and social support) can reverse the progression of even severe heart disease.

Last March, an article was published in *Cell Metabolism* showing that it's not just fat vs. carbs; those consuming the most animal protein had a 75% increase in overall premature mortality, a 400% increased risk of cancer deaths, and a 500% increased risk of diabetes.³

Also, studies from more than 37,000 men in the Harvard Health Professionals Follow-Up Study and more than 83,000 women from the Harvard Nurses' Health Study showed that red meat consumption (part of most low-carb diets) increased premature mortality from all causes, from cancer, and from type 2 diabetes.⁴

So, it concerns me greatly that many people are getting the erroneous message that a low-carb diet is better for your heart than a low-fat diet, when nothing could be further from the truth.

In more than 37 years of randomized trials and demonstration projects, my colleagues and I at the nonprofit Preventive Medicine Research Institute and the University of California, San Francisco School of Medicine have shown that when people with even severe coronary heart disease change to a whole-foods, plant-based diet low in fat and low in refined carbs, their heart disease begins to reverse.

In other words, blood flow to the heart improved by 300% (as measured by PET scans), and 99% of these patients stopped or reversed their heart disease. Coronary arteries became progressively less clogged, and there were 2.5 times fewer cardiac events when compared to the randomized control group (which was following a 30% fat AHA-type diet). These patients also showed a 40% reduction in LDL cholesterol without any cholesterol-lowering drugs. And they lost an average of 24 pounds in the first year and kept half that weight off five years later.⁵

We also conducted a randomized, controlled clinical trial

in collaboration with the chairs of urology at both Memorial Sloan-Kettering Cancer Center and UCSF, showing that this diet (plus walking, meditating, and social support) could slow, stop, or reverse the progression of early-stage prostate cancer.⁶ I'm not aware of any study showing that a low-carb diet that includes red meat can do this.

We also found that this diet and lifestyle changed gene expression in 501 genes in just three months, turning on protective genes and turning off genes that promote heart disease, prostate cancer, breast cancer, colon cancer, and other diseases.⁷

Last summer, we published the first study showing that these diet and lifestyle changes may even lengthen telomeres, the ends of our chromosomes that control aging (in collaboration with Dr. Elizabeth Blackburn, who won the Nobel Prize in Medicine five years ago for discovering telomerase, the enzyme that repairs and lengthens telomeres).⁸

In all of these studies, the more closely people adhered to our dietary recommendations, the more improvement we measured—at any age.

It saddens me that these studies confuse people and may motivate many of them to start eating a diet high in red meat and “bad fats” that may be harmful to them.