

# GOOD MEDICINE

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## Exploding the Mediterranean Diet Myth



# Thinking Beyond Mediterranean Diets

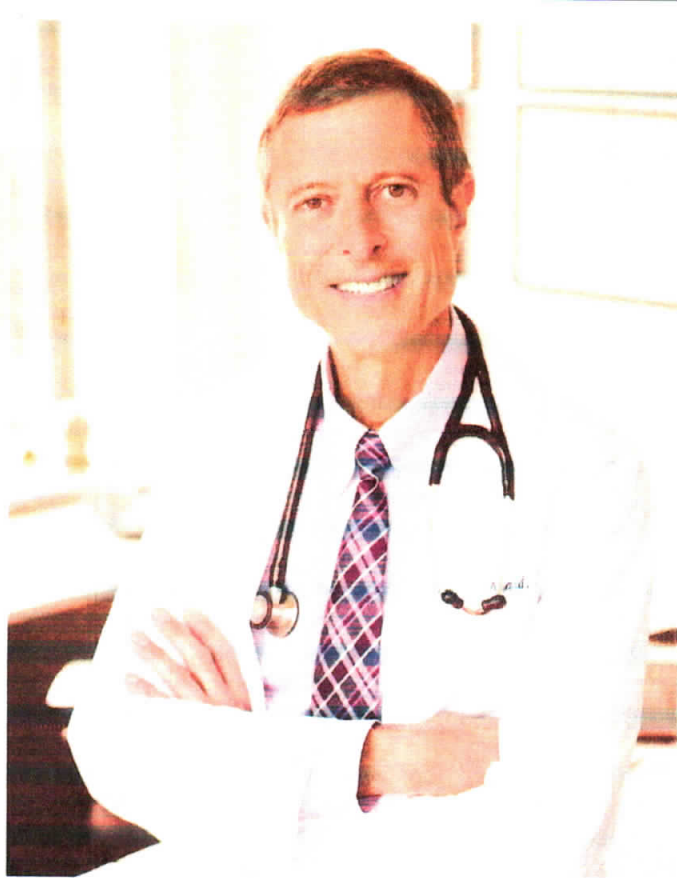
A man told me about his health struggles. He was about 50, was overweight, and had diabetes, elevated cholesterol, and severe artery disease necessitating vascular surgery. He had asked his personal physician about a vegan diet, but his doctor talked him out of it, saying that a Mediterranean diet was “just as effective and a lot easier to follow.” A year later, I saw him again. The Mediterranean diet had done nothing for his weight, and he was still struggling with diabetes and elevated cholesterol.

This story is being repeated far and wide. Many clinicians have bought into the notion that a Mediterranean diet is an easy and attractive way to health. In contrast, they imagine a vegan diet as a challenge patients may not be ready for. “We can’t push our patients too far” is the idea. “We need to meet them where they are.”



The dire prediction that a healthy plant-based diet is “too strict” melts away as people see the delicious choices available.

In this issue, we explore the Mediterranean diet—where it succeeds and where it fails, and how it measures up against a low-fat vegan diet.



Yes, we do need to meet patients where they are. They are in the waiting room. They are waiting for a plan that will actually help them reach their health goals—whether that means eliminating unwanted weight, reducing medications, or reversing diabetes.

At Barnard Medical Center, our team helps patients succeed. Our doctors and nurse practitioner explain how diet changes can improve cholesterol levels, blood pressure, and blood sugar. Our registered dietitians help patients draw up a menu that works for them. Our classes provide the support people need. And the combination works. The dire prediction that a healthy plant-based diet is “too strict” melts away as people see the delicious choices available to them and experience the life-changing benefits.

Neal Barnard, MD, FACC  
President of the Physicians Committee



# Exploding the Mediterranean Diet Myth

New Physicians Committee Study Reveals the Facts



Jenine had extra weight she wanted to lose. She was on medications to lower her cholesterol and blood pressure, she had inflammation in her knees, and she was tired and sluggish much of the time.

That's when she heard about a Physicians Committee clinical research study comparing a Mediterranean diet with a low-fat vegan diet to see which was more effective for weight loss and heart health.



Half the participants were to be assigned to a Mediterranean diet, while the others were to start a vegan diet. After 16 weeks, they would switch to the opposite diet—giving all participants a chance to test both diets and allowing the research to compare them head-to-head.

The Mediterranean diet proved a failure. It did little to improve her health. But after switching to the vegan regimen, Jenine began quickly losing weight and experiencing other health improvements.

“The vegan diet was way better for me. I lost more weight—about a pound a week—and felt better,” says Jenine. “I think it was getting rid of all of the animal products and the dairy especially. And then eating low-fat, because on the Mediterranean diet you eat a lot of fat.”

She was able to stop taking medicines for cholesterol, blood pressure, and heartburn.

Other participants reported similar results.

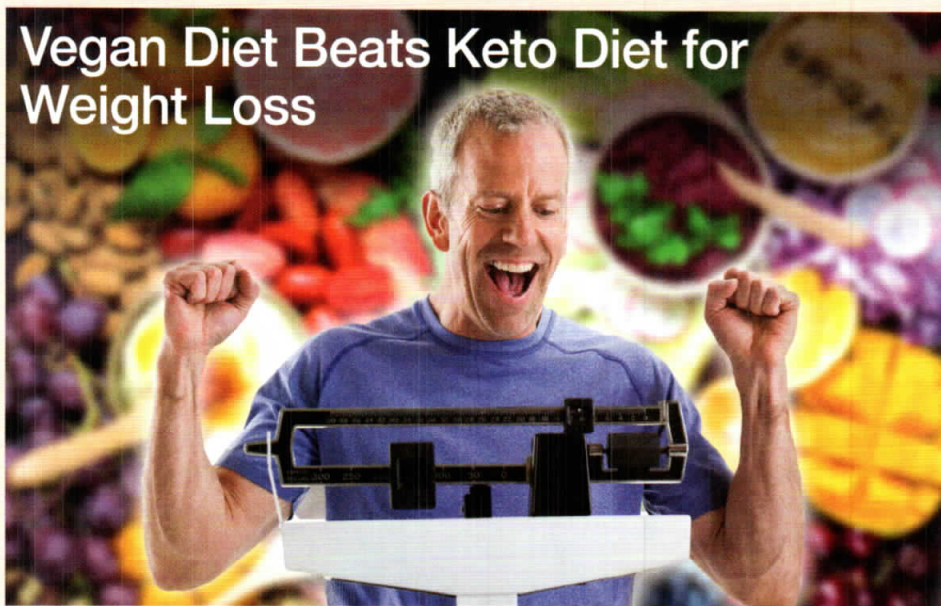
### Vegan Beats Mediterranean

The vegan diet used in the study eliminated animal products and focused on fruits, vegetables, whole grains, and legumes, while minimizing the use of added oils. The

Participants lost an average of 13 pounds on the vegan diet, compared with no significant weight loss on the Mediterranean diet. The vegan diet also decreased total cholesterol by nearly 19 points, compared with only 3 points on the Mediterranean diet.

Mediterranean diet followed the protocol used in the classic Mediterranean diet study, *Prevención con Dieta Mediterránea (PREDIMED)*, which focuses on fruits, vegetables, legumes, fish, dairy products, and extra-virgin olive oil, and includes limited amounts of red meat and eggs.

Neither group had a calorie limit, and participants did not change exercise or medication routines, unless directed by their personal doctors. Participants followed each diet for separate 16-week periods.




**A** vegan diet is also better than a ketogenic diet for weight loss, according to a recent study in *Nature Medicine*. Kevin Hall, PhD, the lead author of the study, first presented the research at last year's International Conference on Nutrition in Medicine.

Dr. Hall led a team of researchers at the National Institutes of Health

Clinical Center's Metabolic Clinical Research Unit who randomly assigned 20 participants to either a low-fat vegan diet or a low-carbohydrate diet for a two-week period, carefully tracking their calorie intake, body weight, blood sugar, and other biomarkers. Participants then switched to the other diet for an additional two

weeks for comparison.

Results showed that participants consumed up to 700 fewer daily calories during the low-fat, plant-based diet, when compared with the low-carbohydrate diet. But there were no differences in satiety, meaning the vegan diet allowed people to eat less food without hunger. While both groups lost weight, only the low-fat diet resulted in significant reductions in body fat.

Health care professionals can earn free continuing medical education by watching “Differences in Ad Libitum Calorie Intake Between a Low-Fat, Plant-Based Diet Versus an Animal-Based, Ketogenic Diet,” Dr. Hall's 2020 International Conference on Nutrition in Medicine presentation on his research at NutritionCME.org. “Keto Controversy: What You Need to Know” and “Deconstructing Keto and Paleo Diets” are also available on the site. 

Hall KD, Guo J, Courville AB, et al. Effect of a plant-based, low-fat diet versus an animal-based, ketogenic diet on ad libitum energy intake. *Nat Med*. 2021;27(2):344-353. doi: 10.1038/s41591-020-01209-1





"I've decided to stay vegan even though the program is done. It's doing too many good things for my body."

—Jenine Jones

The results were dramatic. Participants lost an average of 13 pounds on the vegan diet, compared with no significant weight loss on the Mediterranean diet. The vegan diet also decreased total cholesterol by nearly 19 points, compared with only 3 points on the Mediterranean diet. The findings were published in the *Journal of the American College of Nutrition*.

"The vegan diet helped me take it to a new level," says study participant Helen. "I lost a lot of weight."

Betty also lost more weight on the vegan diet and saw improvements in her cholesterol levels after just three weeks: "My cholesterol dropped 40 points, and I don't have high cholesterol anymore."

"Previous studies have suggested that both Mediterranean and vegan diets improve body weight and overall health, but until now, their relative efficacy had not been compared in a randomized trial," says study author Hana Kahleova, MD, PhD, director of clinical research for the Physicians Committee. "We decided to test the diets head-to-head and found that a vegan diet is more effective for both weight loss and cholesterol control."

### Mediterranean Diets Fail in Weight Loss Studies

The Physicians Committee's study confirms the findings of the Lyon Diet Heart Study and PREDIMED studies,

showing that a Mediterranean diet is not effective for weight loss.

The PREDIMED study tested a Mediterranean diet supplemented with either extra-virgin olive oil or nuts. Although 90% of participants had excess body weight at the start of the study, weight loss over the first three study months was barely half a pound. In the Lyon Diet Heart Study, a Mediterranean diet caused weight gain.

A 2016 review of five studies reported Mediterranean diets showed weight loss. However, all five studies also included either added exercise or calorie restriction. A later study reported weight loss with a Mediterranean diet, but the study also included a substantial calorie restriction and physical exercise.


### 'I Just Feel Better'

Betty, Helen, and Jenine all plan on continuing a vegan diet.

"Having done both, I want to be vegan," says Betty. "I'm enjoying the food and learning to cook creatively."

Helen says she's going to stay on the vegan diet because she feels healthier: "I feel stronger. My workouts are better. My energy is better. I just feel better."

Jenine agrees. "When I was eating the way I used to eat, I would hit a wall at 2 p.m.," she says. "Learning how to eat better has made a huge difference in my energy, and the inflammation in my knees has gone down, so when I come back from teaching Zumba I'm not crawling up the steps because my knees hurt so bad. I'm just walking up normally."

She adds, "I've decided to stay vegan even though the program is done. It's doing too many good things for my body." 

Barnard ND, Alwarith J, Rembert E, et al. A Mediterranean diet and low-fat vegan diet to improve body weight and cardiometabolic risk factors: A randomized, cross-over trial. *J Am Coll Nutr*. 2021;1-13. doi: 10.1080/07315724.2020.1869625. Online ahead of print.



### Complete Nutrition

A plant-based diet is a powerful way to achieve good health. In addition, it is important to include a reliable source of vitamin B12 in your diet. You can easily meet your B12 needs with a daily supplement. B12-fortified breakfast cereals, plant milks, and nutritional yeast also supply B12.



# NUTRITION

## NONALCOHOLIC FATTY LIVER DISEASE

### Vegan Diets Improve Liver Function



**V**egan diets improve liver function in patients with nonalcoholic fatty liver disease (NAFLD), according to research published in the *Journal of Gastrointestinal and Liver Diseases*. Researchers followed 26 participants with NAFLD on a vegan diet for six months and tracked body weight, calorie intake, and liver function. Dietitians supported participant dietary adherence via monthly phone calls or clinic visits. Results showed weight loss and improvements in liver enzymes toward normal levels. Increased consumption of plant-based foods improved antioxidant intake and gut microbiota beneficial to liver enzymes.

Chiarioni G, Popa SL, Dalbeni A, et al. Vegan diet advice might benefit liver enzymes in nonalcoholic fatty liver disease: An open observational pilot study. *J Gastrointest Liver Dis*. Published online February 4, 2021. doi: 10.15403/jgld-3064

## DIABETES

### People Share Diabetes Risk With Their Dogs



## EARLY DEATH

### Eggs Increase Early Death Risk

**C**holesterol from eggs may increase the risk of death from heart disease, according to a study published in *PLoS Medicine*. Researchers tracked dietary cholesterol and consumption of egg whites, whole eggs, and egg substitutes for more than 500,000 participants and monitored heart disease-related deaths. The addition of half an egg per day was associated with more deaths from heart disease, cancer, and all causes. For every 300 milligrams of dietary cholesterol consumed per day, mortality risk increased by up to 24%. The authors attribute the increased risk to higher cholesterol levels from egg consumption and recommend replacing eggs with other protein sources such as nuts or legumes to improve heart health.

Zhuang P, Wu F, Mao L, et al. Egg and cholesterol consumption and mortality from cardiovascular and different causes in the United States: A population-based cohort study. *PLoS Med*. 2021;18:e1003508-e1003531. doi: 10.1371/journal.pmed.1003508



**D**ogs who live with people with diabetes are more likely to develop diabetes themselves, compared with dogs whose human companions do not have the disease, according to a study published in the *BMJ*. The reverse is also true. People whose dogs have diabetes are more likely to get the disease themselves. The reason, apparently, is that people tend to pass their eating habits on to their companion animals, putting them at risk for the same diseases that unhealthy foods cause in humans.

Tove Fall, PhD, a study co-author, will present at the Physicians Committee's International Conference on Nutrition in Medicine this summer. Learn more and register at [PCRM.org/ICNM](http://PCRM.org/ICNM).

Delicano RA, Hammar U, Egenvall A, et al. The shared risk of diabetes between dog and cat owners and their pets: Register based cohort study. *BMJ*. 2020;371:m4337-m4348. doi: 10.1136/bmj.m4337