

Is one diet as good as another? New study says no and tells you why

March 4 2009

Any diet will do? Not if you want to lose fat instead of muscle. Not if you want to lower your triglyceride levels so you'll be less likely to develop diabetes and heart disease. Not if you want to avoid cravings that tempt you to cheat on your diet. And not if you want to keep the weight off long-term.

"Our latest study shows you have a better chance of achieving all these goals if you follow a diet that is moderately high in protein," said Donald Layman, a University of Illinois professor emeritus of nutrition. The research was published in the March *Journal of Nutrition*.

Layman's new study followed the weight-loss efforts of 130 persons at two sites, the U of I and Penn State University, during 4 months of active weight loss and 8 months of maintenance.

Two previous studies had looked at short-term weight loss; this one was designed to look at long-term effects, he said.

Although both plans were equal in calories, half the group followed a moderate-protein diet (40% carbohydrates, 30% protein, 30% fat) while the other followed a diet based on USDA's food-guide pyramid (55% carbohydrates, 15% protein, 15% fat).

"Persons in the first group ate twice the amount of protein as the second group," said Layman.

And the difference in protein made all the difference in improved body composition and body lipids, he said.

Although the amount of weight lost in both groups was similar, at 4 months participants in the protein group had lost 22 percent more body fat than members of the food-pyramid group. At 12 months, the moderate-protein dieters had lost 38 percent more body fat.

"The additional protein helped dieters preserve muscle. That's important for long-term weight loss because muscle burns calories—if you lose muscle, and you used to be able to consume 2,000 calories without gaining weight, you'll find that now you can only eat, say, 1,800 calories without weight gain," he said.

What were the effects on lipids? Although at 4 months the food-guide pyramid appeared to be more effective in lowering LDL and total cholesterol levels, at 12 months LDL levels came back up until both diets were equally effective, Layman said.

"This is the first study to show that short-term changes in LDL cholesterol are not maintained with long-term weight loss. Most scientists believe that high cholesterol is more a factor of genetics than of diet," he said.

But the moderate-protein diet had by far the bigger effect on lowering triglycerides, and that lasted as long as individuals remained on the diet, he said.

"Of the two types of lipid problems, high triglycerides pose a greater risk for heart disease. Approximately twice as many people have high triglycerides, and people with this condition are approximately four times more likely to die from heart disease," the scientist said.

To ensure compliance, participants met every week for weigh-ins and nutrition instruction. "We taught participants how to follow their diet, how to grocery shop, and how to prepare the meals. They also measured everything they ate three days a week," he said.

"Studies that report there is no difference among diets also report that subjects were not carefully following the diets," said Layman. "It's very important to realize the difference between diet compliance and diet effectiveness."

The protein diet was easier to follow and maintain long-term, with 64 percent of the moderate-protein dieters completing the study compared to 45 percent of dieters using the high-carbohydrate diet, Layman said.

"Subjects on the moderate-protein diet reported that they weren't as interested in snacks or desserts, and they didn't have food cravings. When you eat protein, you feel full longer," he said.

Average weight loss for the protein group was 23 percent higher than the food-pyramid group, with 31 percent of "completers" in the protein group losing more of than 10 percent of their initial body weight versus 21 percent of the food-pyramid group.

Source: University of Illinois at Urbana-Champaign

Citation: Is one diet as good as another? New study says no and tells you why (2009, March 4) retrieved 3 May 2024 from <https://medicalxpress.com/news/2009-03-diet-good.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--