A "Stickto-It" Diet Is

More Important Than a Popular One

ith over 1,000 diet books available on bookstore shelves, popular diets clearly have become increasingly prevalent. At

the same time, they have also become increasingly controversial, because some depart substantially from mainstream medical advice or have been criticized by various medical authorities.

A comparison of several popular diets by ARS-funded researchers showed that at the end of the day, or in this case at the end of the year, sticking with a diet—more than the type of a diet—is the key to losing weight.

The study was conducted by Michael L. Dansinger, Ernst J. Schaefer, and Joi A. Gleason of the Lipid Metabolism Laboratory at

the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University and Tufts-New England Medical Center in Boston.

Published last year in the *Journal of the American Medical Association*, the study compared the relative merits of four of the most popular weight-loss diets. These included the Atkins (carbohydrate restriction), Ornish (fat restriction), Weight Watchers (calorie and portion size restriction), and Zone (high-glycemicload carbohydrate restriction and increased protein) diets.

The researchers randomly assigned 160 overweight or obese volunteers to use 1 of the 4 diets. All participants were provided with the diet book and four 1-hour instructional classes to help them assimilate the rules of their assigned diets. The 40 participants in each of the 4 diet groups were representative—in terms of age, race, sex, body mass index, and metabolic characteristics—of the overweight population in the United States.

The results in terms of both weight loss and reduction in heart disease risk factors were compared among "completers," or those who stayed with the study for an entire year.

Only about half the volunteers completed the program while on what the authors considered to be more extreme diet plans: Atkins and Ornish diets. In contrast, 65 percent were able to complete the more moderate diet plans: Weight Watchers and Zone. Still, those that stayed in the program tended to loosen their resolve by about 6 months, as determined by their self-reported food records.

"The bottom line was that it wasn't so much the type of diet followed that led to successful weight loss, but the ability of participants to stick with the program for the entire year's time," says Schaefer.

"The study showed that whether volunteers restricted carbohydrate calories or fat calories—whether they lowered intake overall, or balanced intake overall—everybody lost weight," says Schaefer. "Ultimately, it comes down to calorie restriction. The strongest predictor of weight loss was not the type of diet, but compliance with the diet plan that subjects were given."

The finding lends credence to the importance of adopting a caloric-restriction diet that doesn't conflict with one's natural affinities for specific allowable foods.

"Implementing a dietary regimen that can transition an individual into a healthful eating pattern after the diet ends is also very important," says ARS Human Nutrition National Program Leader Molly Kretsch. "Lifestyle practices that help people maintain a healthy body weight, incorporate the right balance of foods and appropriate portion sizes, and increase their physical activity are the keys to long-term weight management."

Among those who stayed in the program for the entire 12-month period, all four diet plans promoted a 10-percent improvement in the balance of "good" (HDL) and "bad" (LDL) cholesterol levels. "The particular diet plan the long-term dieter followed did not seem to matter that much," says Dansinger. "The long-term dieters reduced their ratio of good to bad cholesterol according to how much weight they lost."

Those who improved their cholesterol ratios by 10 percent improved their heart disease risk factors by 20 percent. "For every 1 percent of weight loss a dieter achieves, there will be a 2-percent, or twice as much, reduction in heart disease risk factors," says Dansinger.

In addition, all four diet plans promoted lower blood insulin levels as well as lower levels of C reactive protein (CRP). High levels of CRP in the blood have been linked to heart disease.

Future studies will focus on identifying practical techniques to increase dietary adherence—including ways to match individuals with the diets best suited to their food preferences and lifestyles. "We also plan to test different versions of the new USDA diet and look specifically at the results from a diet with higher and lower glycemic index values," says Schaefer.—By Rosalie Marion Bliss, ARS.

This research is part of Human Nutrition, an ARS National Program (#107) described on the World Wide Web at www.nps. ars.usda.gov.

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