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The Key to Weight Loss Is Diet Quality, Not Quantity, a New Study Finds

Anyone who has ever been on a diet knows that the standard prescription for weight loss is to reduce the amount of calories you consume.

But a new study, published Tuesday in JAMA, may turn that advice on its head. It found that people who cut back on added sugar, refined grains and highly processed foods while concentrating on eating plenty of vegetables and whole foods — without worrying about counting calories or limiting portion sizes — lost significant amounts of weight over the course of a year.

The strategy worked for people whether they followed diets that were mostly low in fat or mostly low in carbohydrates. And their success did not appear to be influenced by their genetics or their insulin-response to carbohydrates, a finding that casts doubt on the increasingly popular idea that different diets should be recommended to people based on their DNA makeup or on their tolerance for carbs or fat.

The research lends strong support to the notion that diet quality, not quantity, is what helps people lose and manage their weight most easily in the long run. It also suggests that health authorities should shift away from telling the public to obsess over calories and instead encourage Americans to avoid processed foods that are made with refined starches and added sugar, like bagels, white bread, refined flour and sugary snacks and beverages, said Dr. Dariush Mozaffarian, a cardiologist and dean of the Friedman School of Nutrition Science and Policy at Tufts University.

“This is the road map to reducing the obesity epidemic in the United States,” said Dr. Mozaffarian, who was not involved in the new study. “It’s time for U.S. and other national policies to stop focusing on calories and calorie counting.”

The new research was published in JAMA and led by Christopher D. Gardner, the

director of nutrition studies at the Stanford Prevention Research Center. It was a large and expensive trial, carried out on more than 600 people with $8 million in funding from the National Institutes of Health, the Nutrition Science Initiative and other groups.

Dr. Gardner and his colleagues designed the study to compare how overweight and obese people would fare on low-carbohydrate and low-fat diets. But they also wanted to test the hypothesis — suggested by previous studies — that some people are predisposed to do better on one diet over the other depending on their genetics and their ability to metabolize carbs and fat. A growing number of services have capitalized on this idea by offering people personalized nutrition advice tailored to their genotypes.

The researchers recruited adults from the Bay Area and split them into two diet groups, which were called “healthy” low carb and “healthy” low fat. Members of both groups attended classes with dietitians where they were trained to eat nutrient-dense, minimally processed whole foods, cooked at home whenever possible.

Soft drinks, fruit juice, muffins, white rice and white bread are technically low in fat, for example, but the low-fat group was told to avoid those things and eat foods like brown rice, barley, steel-cut oats, lentils, lean meats, low-fat dairy products, quinoa, fresh fruit and legumes. The low-carb group was trained to choose nutritious foods like olive oil, salmon, avocados, hard cheeses, vegetables, nut butters, nuts and seeds, and grass-fed and pasture-raised animal foods.

The participants were encouraged to meet the federal guidelines for physical activity but did not generally increase their exercise levels, Dr. Gardner said. In classes with the dietitians, most of the time was spent discussing food and behavioral strategies to support their dietary changes.

The new study stands apart from many previous weight-loss trials because it did not set extremely restrictive carbohydrate, fat or caloric limits on people and emphasized that they focus on eating whole or “real” foods — as much as they needed to avoid feeling hungry.

“The unique thing is that we didn’t ever set a number for them to follow,” Dr. Gardner said.

Of course, many dieters regain what they lose, and this study cannot establish whether participants will be able to sustain their new habits. While people on average lost a significant amount of weight in the study, there was also wide variability in both groups. Some people gained weight, and some lost as much as 50 to 60 pounds. Dr. Gardner said that the people who lost the most weight reported that the study had “changed their relationship with food.” They no longer ate in their cars or in front of their television screens, and they were cooking more at home and sitting down to eat dinner with their families, for example.

“We really stressed to both groups again and again that we wanted them to eat high-quality foods,” Dr. Gardner said. “We told them all that we wanted them to minimize added sugar and refined grains and eat more vegetables and whole foods. We said, ‘Don’t go out and buy a low-fat brownie just because it says low fat. And those low-carb chips — don’t buy them, because they’re still chips and that’s gaming the system.’”

Dr. Gardner said many of the people in the study were surprised — and relieved — that they did not have to restrict or even think about calories.

“A couple weeks into the study people were asking when we were going to tell them how many calories to cut back on,” he said. “And months into the study they said, ‘Thank you! We’ve had to do that so many times in the past.’”

Calorie counting has long been ingrained in the prevailing nutrition and weight loss advice. The Centers for Disease Control and Prevention, for example, tells people who are trying to lose weight to “write down the foods you eat and the beverages you drink, plus the calories they have, each day,” while making an effort to restrict the amount of calories they eat and increasing the amount of calories they burn through physical activity.

“Weight management is all about balancing the number of calories you take in with the number your body uses or burns off,” the agency says.

Yet the new study found that after one year of focusing on food quality, not calories, the two groups lost substantial amounts of weight. On average, the members of the low-carb group lost just over 13 pounds, while those in the low-fat group lost about 11.7 pounds. Both groups also saw improvements in other health markers, like reductions in their waist

sizes, body fat, and blood sugar and blood pressure levels.

The researchers took DNA samples from each subject and analyzed a group of genetic variants that influence fat and carbohydrate metabolism. Ultimately the subjects' genotypes did not appear to influence their responses to the diets.

The researchers also looked at whether people who secreted higher levels of insulin in response to carbohydrate intake — a barometer of insulin resistance — did better on the low-carb diet. Surprisingly, they did not, Dr. Gardner said, which was somewhat disappointing.

Default Question Block

If you had to pick only one, which of the following statements about losing weight do you think is more true?

- ○ Losing weight depends MOSTLY on the quality of the food you eat, REGARDLESS of the difference between the number of calories you consume (take in) and the number you burn (use), which is the overall net quantity of calories you consume.
- ○ Losing weight depends MOSTLY on the difference between the number of calories you consume (take in) and the number you burn (use), which is the overall net quantity of calories you consume, REGARDLESS of the quality of food you eat.

How sure are you of your previous answer?

- ○ Extremely sure
- ○ Mostly sure
- ○ Somewhat sure
- ○ A little sure
- ○ Not very sure
- ○ Not sure at all (No confidence in the answer)

Before you read the article, which of the following statements about losing weight did you think was more true?

- ○ No prior knowledge.
- ○ Losing weight depends MOSTLY on the difference between the number of calories you consume (take in) and the number you burn (use), which is the overall net quantity of calories you consume, REGARDLESS of the quality of food you eat.
- ○ Losing weight depends MOSTLY on the quality of the food you eat, REGARDLESS of the difference between the number of calories you consume (take in) and the number you burn (use), which is the overall net quantity of calories you consume.

Did reading the article change your mind?

- ○ Yes
- ○ No

Do you think the US Food and Drug Administration (FDA) should prevent the promotion of diets based on calorie counting?

- ○ Yes
- ○ No

The article you read before appeared (https://www.nytimes.com/2018/02/20/well/eat/counting-calories-weight-loss-diet-dieting-low-carb-low-fat.html) in the New York Times (NYT), a prominent print and online publication.

The study on which the article is based -- published in the Journal of the American Medical Association (JAMA) and available here (https://jamanetwork.com/journals/jama/article-abstract/2673150), though paywalled -- does not test calorie counting against non-calorie counting based approaches, and makes no claims as to whether calorie counting is ineffective. It also does not claim that weight loss is based mostly on the quality of food consumed rather than the difference between calories consumed (taken in) and calories burned (used). In fact, it is a

between calories consumed (taken in) and calories burned (used). In fact, it is a comparison of a so called 'healthy low carb' diet and a 'healthy low fat' diet. Neither of the two experimental groups, each following one of the diet plans, was asked to count calories, but both groups ended up consuming less calories than they did previously, thus losing weight. In the NYT article, the author of the study speculates that given that both groups lost weight, weight loss strategies that don't use calorie counting may also be effective, though much more research is needed.

There is strong scientific consensus that weight loss is MOSTLY dependent on the difference between calories taken in and and calories burned (i.e. net caloric intake) -- much of the evidence for this is detailed in this (https://www.physiology.org/doi/abs/10.1152/ajpendo.00156.2017) Howell & Kones

(2017) paper published in the American Journal of Physiology (AJP) Endocrinology and Metabolism.

Given this information, what is your opinion of the accuracy of journalism IN GENERAL?

- ○ Extremely accurate
- ○ Mostly accurate
- ○ Somewhat accurate
- ○ A little accurate
- ○ Mostly inaccurate
- ○ Extremely inaccurate

What is your gender?

- ○ Male
- ○ Female
- ○ Other

What U.S. political party do you identify with?

- ○ Green Party

- ◯ Other
- ◯ Democratic Party
- ◯ Republican Party
- ◯ Libertarian Party
- ◯ None, Independent