Study Finds Health Benefit in Low-Glycemic Diet

By Kathleen Doheny

TUESDAY, Nov. 23 (HealthDayNews) -- A diet rich in the type of carbohydrates that maintain a more stable blood sugar beats out a conventional low-fat diet in reducing the risk factors for heart disease and diabetes, according to a new study.

Researchers compared a diet rich in carbohydrates with a low glycemic index -- the type that stabilizes blood sugar -- with a conventional low-fat diet that included carbohydrates with a high glycemic index.

"Carbohydrates with a low glycemic index are absorbed through the small intestine and converted to blood sugar at a much slower rate than high glycemic, resulting in a more stable blood sugar and much less insulin being produced," said Mark A. Pereira, a University of Minnesota epidemiologist. "So that would help prevent or control diabetes."

The work by Pereira and his team appears in the Nov. 24 issue of the *Journal of the American Medical Association*.

In the study, those on the low-glycemic diets also achieved better improvement in blood pressure and blood fats, and their resting metabolic rate -- the rate at which the body burns energy or calories at rest -- didn't drop as much as it did for those on the low-fat diet.

Pereira and his colleagues assigned 39 overweight or obese young adults, ages 18 to 40, to either the low-glycemic diet or the low-fat one. The low-glycemic diet got 43 percent of calories from carbohydrates, 27 percent from protein, and 30 percent from fat, Pereira said.

(For the sake of comparison, the popular Zone diet consists of 40 percent of calories from protein, 30 percent from carbohydrates, and 30 percent from fat. Low-glycemic carbohydrates are recommended.)

Those on the low-fat diet got 65 percent of their calories from carbohydrates, 17 percent from protein, and 18 percent from fat. Both diets were restricted in calories to achieve a 10 percent weight loss.

Food was provided for the subjects. The low-glycemic menus featured such foods as steel-cut oatmeal, barley and whole-grain breads. The menus for the low-fat diet included carbohydrate foods with a higher glycemic index, such as instant oatmeal, white bread and white rice.

Pereira's team measured blood pressure, insulin resistance (a predictor of diabetes), blood fats and other risk factors for diabetes and heart disease, before and after the weight loss. "Generally, what we found across the board for blood fats and blood pressure and insulin resistance is, the decrease with weight loss was twice as great for the low-glycemic group compared to the low-fat group."

Both groups averaged the same amount of weight loss, the 10 percent goal, but the dieters on the low-glycemic diet reported less hunger. And their resting metabolic rate, which typically drops during weight loss, dropped less in the low-glycemic eaters.

"For the conventional low-fat dieters, the metabolic rate slowed down by 175 calories a day," Pereira said. "For the low-glycemic group, there was a 95-calorie drop."

The new study echoes those of previous studies, Pereira added.

Meanwhile, another expert said it's difficult to credit the low-glycemic diet for the results.

"I think it's a very interesting study," said Alice Lichtenstein, a spokeswoman for the American Heart Association and professor of nutrition, science, and policy at Tufts University. "However, whether the effect is due to glycemic load or to a higher low-fat diet can't really be distinguished." She's referring to the fact that the low-glycemic menus allowed more fat -- about 30 percent -- than the low-fat, which allowed 18 percent fat.

"Certainly, a number of studies have shown that low-fat diets are not optimal for promoting weight loss or decreasing cardiovascular risk," she added. The low-glycemic diet studies may be better because it is moderate fat, she said.

Lichtenstein cautioned that people trying to lose weight and reduce disease risk should not become too obsessed with total fat or glycemic load at the expense of calories. The most important aspect is watching "total calories and increasing activity," she said.

More information

To learn more about nutrition, visit the American Dietetic Association.