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Cholesterol Levels Improve with Weight Loss and Healthy Fat-Rich Diet

Weight loss in overweight women reduces risk of disease

A University of California, San Diego School of Medicine study finds that weight loss programs that provide healthy fats, such as olive oil in the Mediterranean diet, or a low-fat, high-carbohydrate diet have similar impacts on pound-shedding. More specifically, the researchers report that a meal plan rich in walnuts, which are high in polyunsaturated fats, has a significant impact on lipid levels for women, especially those who are insulin-resistant.

In the United States, 28 percent of adults over 40 of age use lipid-lowering drugs. Lifestyle changes that promote weight loss and reducing consumption of saturated fat have been associated with reducing levels of “bad” cholesterol, but a question persisted: Should consumers reduce fat intake by replacing with carbohydrates or substitute unsaturated fats for saturated fats?

“Many diets have said it is okay to eat healthy fats and emphasize olive and canola oils,” said Cheryl Rock, PhD, principal investigator of the study, published this week in the *Journal of the American Heart Association*. “What we found is that a diet high in healthy oils did lower lipids, but it also lowered both good and bad cholesterol.”

Overweight and obese adult women were enrolled in a one-year behavioral weight loss program and randomly assigned to one of three diets consisting of either: low-fat and high-carbohydrate; low-carbohydrate and high-fat; or a walnut-rich, high-fat and low-carbohydrate diet.

The findings showed that all three dietary plans promoted similar weight loss. Insulin-sensitive women lost the most weight with a low-fat diet but that strategy did not result in the most benefit for lipid levels.

The walnut-rich diet had the most impact on cholesterol levels by decreasing low-density lipoprotein (LDL), or bad cholesterol, and increasing beneficial high-density lipoprotein (HDL). The high-fat, low-carb group, which consumed monounsaturated fats, did not experience the same beneficial effects as the walnut-rich diet, which featured polyunsaturated fatty acids.

At six months, the average weight loss was almost 8 percent among all groups.

“This weight loss may not put these women at their ideal weight, but it made a significant reduction in their risk of cardiovascular and other diseases,” said Rock. “This level of weight loss is achievable and can have a dramatic impact on their quality of life.”

Insulin sensitivity was assessed in the study because people who are overweight usually have some degree of insulin resistance. Higher amounts of insulin are more likely to cause cells to lose their ability to regulate growth, a precursor to cancer.

“Diet composition impacts lipid levels, but the critical factor to lose weight continues to be to burn more calories than you consume,” said Rock.

Additional study co-authors include Tran Le, Shirley W. Flatt, Loki Natarajan, Bilge Pakiz, Elizabeth L. Quintana, Dennis D. Heath, and Brinda K. Rana, UC San Diego.

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