

## **Walnuts and Fish Prevent Against Heart Disease in Different Ways, According to Newly Published Loma Linda University Research**

**Loma Linda, Calif. (April 13, 2009)** - Loma Linda University research just published in the *American Journal of Clinical Nutrition* compares the effects of walnuts and fatty fish in the fight against heart disease, demonstrating that in healthy individuals, walnuts lower cholesterol more than fish, while fatty fish lower triglycerides. Both can reduce the overall risk of coronary heart disease.

“The practical significance of the study is that eating an easy-to-incorporate amount of walnuts and fatty fish can cause meaningful decreases in blood cholesterol and triglycerides even in healthy individuals,” says lead author Sujatha Rajaram, PhD, associate professor in the department of nutrition at Loma Linda University School of Public Health.

Following the qualified health claim issued by the Food and Drug Administration, researchers found that incorporating approximately 1.5 ounces of walnuts (42 grams, a handful of whole nuts or about three tablespoons of chopped nuts) into the daily diet lowered serum total cholesterol by 5.4 percent and LDL (bad) cholesterol by 9.3 percent compared to a control diet based on USDA recommendations.

Using American Heart Association guidelines, the researchers also found that a diet including two servings of fatty fish per week (roughly four ounces each as recommended by the AHA for individuals without heart disease) decreased triglyceride levels by 11.4 percent. Additionally, it increased HDL (good) cholesterol by 4 percent, but also slightly increased LDL (bad) cholesterol compared to the control diet. The fish used in this study was salmon.

“Both plant- and marine-derived omega-3 fats are cardioprotective, and since they seem to be effective for lowering different risk factors, it would be prudent to include both in the diet,” says Dr. Joan Sabaté, MD, DrPH, one of the authors of the study and chair of the department of nutrition.

Dr. Rajaram adds, “Individuals should strive to include a plant source of omega-3 fat in their diet, like walnuts, and also a marine source of omega-3 fat. If fatty fish is not a preferred option for marine-derived omega-3 fat, other options include microalgae oil or DHA-enriched eggs.”

The department of nutrition has significant experience conducting tightly controlled feeding studies among varying populations. This one, conducted with a healthy population, is the fifth study testing the health and nutrition properties of walnuts. This study differs from the previous studies in that it compared a plant source of the omega-3 fatty acid with a marine source, the first study to make this comparison. Subjects were randomly assigned to each of the three diets for eight weeks over a 24-week feeding schedule. This gave the researchers a chance to compare the effect of each diet on each participant.

Loma Linda University is a health-science university in Southern California known for its nutrition and lifestyle research in relation to chronic diseases. For more information about the University please visit the website <[www.llu.edu](http://www.llu.edu)>. To access the *American Journal of Clinical Nutrition* manuscript reference doi: 10.3945/ajcn.2009.26736S on the Internet.