Increasing Fiber Intake May Slow Atherosclerosis

New research supports the hypothesis that fiber retards the progression of cardiovascular disease through its effect on lipids. Published in the American Journal of Clinical Nutrition, the findings were obtained from the Los Angeles Atherosclerosis Study, a prospective study that is investigating fiber's ability to help combat atherosclerosis.*

In the study, 500 men and women between the ages of 40 and 60 with no history of cardiovascular events received baseline examinations and were followed for three years. Dietary information was obtained through oral and telephone interviews at the beginning of the study and at the first follow up at 18 months. Intima-media thickness of the common carotid arteries (a measure of atherosclerosis) was determined by ultrasound examination at the study's onset, at 18 months, and at three years. Blood samples taken at all three examinations provided data on serum lipids.

The median total fiber intake in the fifth of the study population with the highest fiber intake was found to be twice that of the fifth with the lowest fiber intake. Intima-media thickness progression declined with an increase in fiber intake. The trend was significant for viscous (soluble) fiber found particularly in fruits and vegetables, and in pectin. Controlling for the intake of fruit and vegetables, which have other anti-atherogenic constituents, did not alter the findings.

Increased high-density lipoprotein (HDL) levels were correlated with an increase in total fiber, viscous fiber, and pectin. Additionally, the ratio of total cholesterol to HDL improved with greater total fiber, viscous fiber, and pectin intake. The study authors concluded: "The present study suggests that increased dietary fiber intake has significant cardiovascular benefit and that the regulation of serum lipids by dietary fiber may be partially involved in the process of slowing the progression of atherosclerosis."

—Dayna Dye

Reference