Fiber May Lower Protein Linked To Heart Disease

March 31, 2006 NEW YORK (Reuters Health) - A fiber-rich diet may help control levels of a blood protein linked to an increased risk of heart disease, new research suggests.

In a study of 524 healthy adults, investigators found that those with the highest fiber intake had lower blood levels of C-reactive protein (CRP) than those who ate the least fiber. CRP is a marker of ongoing inflammation in the body, and consistently high levels of this protein have been identified in previous studies as a risk factor for future heart disease.

The new findings support the general recommendation that adults get 20 to 35 grams of fiber per day, in the form of fruits, vegetables, beans and whole grains.

Unfortunately, they note in their report in the American Journal of Clinical Nutrition, the average American consumes only half that amount, lead investigator Dr. Yunsheng Ma of the University of Massachusetts Medical School in Worcester and colleagues point out.

For their study, the researchers measured the participants' CRP levels five times over the course of a year and collected information on diet, exercise habits and other health factors.

About 18 percent of men and women had elevated CRP levels, above 3 milligrams per liter of blood. But CRP levels generally dipped as fiber intake increased. Compared with subjects who ate the least fiber, those who ate the most were 63 percent less likely to have an elevated CRP number.

It did not take a ton of roughage to reap the benefit, the researchers found. Study participants with the highest fiber intake typically got about 22 grams per day, or just within the recommended range.

Ongoing, low-level inflammation in the body is thought to contribute to a range of ills, including clogged arteries and heart disease.

It's not clear why fiber may reduce inflammation, according to Ma's team, but it may lower cholesterol and blood sugar, both of which can contribute to inflammation.

"This study," the researchers write, "suggests that a diet high in fiber may play a role in reducing inflammation and, thus, the risk of cardiovascular disease and diabetes."

In addition, both of the main forms of fiber, soluble and insoluble, were related to lower CRP levels. Soluble fiber is found in foods like oatmeal, beans, berries and apples, while whole grains and many vegetables are good sources of insoluble fiber.

All of these foods, the study authors write, should become the "foundation of America's diet to combat heart disease and diabetes." SOURCE: American Journal of Clinical Nutrition, April 2006.