

essentials of health

September 8th, 2010

High dietary fiber intake, especially from a variety of sources, is related to a reduction in many cardiovascular disease risk factors.

HIGH FIBER INTAKE REDUCES RISK OF HEART DISEASE

Increased dietary fiber intake is associated with reduced risk of cardiovascular disease. The results of a study published in the December 2005 issue of the American Journal of Clinical Nutrition added unique insight to the growing body of evidence linking higher dietary fiber intake with reduced risk of heart disease.

Data was collected from roughly 2,500 men and 3,500 women (5,961 total). These individuals were already participating in the SU.VI.MAX Study, a trial designed to evaluate the effect of antioxidants on cancer and heart disease incidence over an eight year period. Participants from this study were selected because the SU.VI.MAX Study already required detailed dietary information, making it easy to estimate fiber intakes for the participants.

Higher total and insoluble dietary fiber intakes were associated with reductions in the risks of elevated waist-to-hip ratio (a marker of obesity), hypertension (high blood pressure), plasma apolipoprotein B (LDL cholesterol), apolipoprotein B to apolipoprotein A-I ratio (LDL to HDL ratio), triacylglycerols, and homocysteine. Fiber from cereals was associated with a lower body mass index (BMI), blood pressure, and homocysteine concentration; fiber from vegetables with a lower blood pressure and homocysteine concentration; and fiber from fruit with a lower waist-to-hip ratio and blood pressure. Fiber from dried fruit or nuts and seeds was associated with a lower body mass index, waist-to-hip ratio, and fasting apo B and glucose concentrations.

The findings of this study illustrate the significance of increasing fiber intake from various dietary sources. The results also indicate that 25 grams total dietary fiber per day may be the minimum intake required to attain a significant protective effect against cardiovascular disease, and that total dietary fiber intakes of 30-35 grams/day might provide an even greater protective effect.

Lairon D, Arnault N, Bertrais S, Planells R, Clero E, Hercberg S, Boutron-Ruault MC.

Dietary fiber intake and risk factors for cardiovascular disease in French adults. 2005. AJCN 82(6):1185-94.