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Study Finds Soy Isoflavones Reduce Heart Disease Plaques

By Greg Arnold, DC, CSCS, November 30, 2005, abstracted from "Soy Protein Containing Isoflavones Reduces the Size of Atherosclerotic Plaques without Affecting Coronary Artery Reactivity in Adult Male Monkeys" in the December 2005 issue of the Journal of Nutrition

Link – http://www.nowfoods.com/HealthLibrary/HealthArticles/HealthNotes/M075656.htm

Although surpassed by Cancer as the number one killer of Americans,[1] heart disease still claims over 700,000 Americans each year.[2] According to the American Heart Association, there are over 13 million Americans alive today with a history of heart attack or a condition called angina pectoris (chest pains). What's more, an estimated 1.2 million Americans will have a new or recurrent coronary attack.[3]

There is almost universal agreement that exercise and a healthy diet are essential to prevent heart disease[4] Although there are many different nutritional choices to make in heart disease prevention, including decreasing sugar intake[5] and increasing omega-3 fatty acid intake,[6] a new study[7] has found that one food may not only prevent heart disease but may even help reverse progression of the disease.

Soy protein now generates over $1.4 billion in sales in the U.S. each year (8). Soy may help decrease breast cancer risk,[9] improve insulin sensitivity,[10] and decrease inflammation[11] and fractures[12] in postmenopausal women. Finally, soy may even help treat high blood pressure.[13]

In the study, researchers fed mice diets that differed only in the type of protein used. Thirty rats that served as the control group were fed casein protein, 30 rats were fed soy protein containing .94 mg of soy isoflavones per gram of soy protein, and 31 rats were fed soy protein containing 1.88 mg of soy isoflavones per gram of soy protein. Researchers measured plaque size in the coronary arteries of the mice along with HDL and LDL cholesterol.

The researchers found that not only did LDL cholesterol decrease, but HDL cholesterol increased in both groups consuming soy protein. Perhaps most important was that the average plaque size in the coronary arteries was reduced by 34% in both groups that were fed soy protein.

For the researchers, "The results indicate that long-term consumption of soy protein containing a modest amount of isoflavones inhibits the early progression of coronary artery atherosclerosis without affecting endothelium-dependent or -independent arterial function."

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