Soy Improves Blood Vessel Health in Postmenopausal Women

By Greg Arnold, DC, CSCS, June 16, 2008, abstracted from “Effect of Soy Nuts on Adhesion Molecules and Markers of Inflammation in Hypertensive and Normotensive Postmenopausal Women” printed online in the American Journal of Cardiology

Link – http://www.nowfoods.com/M102490.htm?cat=Women's Specialty Formulas

As a food found to “have considerable value to heart health”, the FDA currently recommends 25 grams of soy protein per day as part of a healthy diet. Soy has been found to help boost brain function and mood, control inflammation in blood clotting, keep blood pressure in normal range, maintain heart health, bone health, breast cell health and cholesterol health.

Now a new study has found that soy may help blood vessel health and blood pressure. High blood pressure affects 65 million Americans aged 20 years and older, with the number affected by this condition rising 26.8% between 1992 and 2002. It killed nearly 50,000 Americans in 2002, is estimated to cost our healthcare system over $64 billion per year, and is now considered a worldwide epidemic. Previous research has shown that soy can help maintain healthy blood pressure and lower systolic and diastolic blood pressure by 9.9% (average reduction 15 mm Hg) and 6.8% (average reduction 6 mm Hg), respectively, in postmenopausal women with high blood pressure and by 5.2% and 2.9%, respectively, in postmenopausal women with normal blood pressure.

The study involved 60 postmenopausal women without atherosclerosis or diabetes (48 with normal blood pressure and 12 with high blood pressure). They were given either ½ cup of soy nuts (providing 25 g soy protein and 101 mg soy isoflavones) which replaced 25 grams of non-soy protein daily or placebo for 8 weeks. After 8 weeks, they switched diets. After 8 weeks of soy supplementation, the average systolic blood pressure decreased by 9.9% and the average diastolic blood pressure decreased by 6.8% in women with high blood pressure, compared to the placebo group. In women with normal blood pressure, the average systolic blood pressure decreased by 5.2% and the average diastolic blood pressure decreased by 2.9%, compared to the placebo group.

Regarding levels of a blood protein called sVCAM-1, a known marker of vascular disease, the soy group had an 11.2% decrease in women with high blood pressure but no significant drop (1.5%) in women with normal blood pressure. Levels of C-reactive protein, another marker of inflammation and chronic disease, dropped by only 5% in the high blood pressure group but dropped 27% in the normal blood pressure group.

For the researchers, “the reduction in [inflammatory protein levels] with soy nuts in women with [high blood pressure] suggests an improvement in [blood vessel] function that may reflect an overall improvement in the…inflammatory process underlying atherosclerosis.”

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Reference:

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