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Soy Isoflavones May Help Lower Breast Cancer Recurrence

By Greg Arnold, DC, CSCS, October 26, 2010, abstracted from "Effect of soy isoflavones on breast cancer recurrence and death for patients receiving adjuvant endocrine therapy" in the 2010 issue of the Canadian Medical Association Journal

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Link - <http://www.nowfoods.com/BasicArticles/080893.htm>

Breast cancer is the second biggest cancer killer of American women after lung cancer, responsible for the deaths of an estimated 40,580 women in 2004 (1) and contributing significantly to cancer's overall cost to society of \$219 billion per year (2). Fortunately, a number of foods, supplements, and lifestyle changes, including fish oil (3), sesame (4), curcumin (5), broccoli (6), and exercise (7), have been found to help women.

Now a new study (8) has found that soy isoflavones may help lower the odds of breast cancer recurrence in postmenopausal women. In the study, researchers obtained dietary intake information from 524 women between the ages of 29 and 72 who underwent breast cancer surgery and were receiving hormone therapy (tamoxifen 20 mg/day or anastrozole 1 mg/day). Their objective was to examine the relationship between soy isoflavone intake and breast cancer recurrence and death.

Dietary information was gathered via a validated food frequency questionnaire (9). The dietary data showed that soymilk accounted for 26% of total intake of soy isoflavones, followed by tofu (21%) and soy flour (15%), with the average daily intake of isoflavones to be 25.6 mg/day for all patients. The patients were followed for 5 years (2003 to 2008).

Although the researchers found no statistically significant effect of soy isoflavones on breast cancer recurrence or death between the highest and lowest intake groups (> 42.3 vs < 15.2 mg/day, $p = 0.87$) in the 248 premenopausal women in the study, there was a significant benefit in the 276 postmenopausal women with varied isoflavone intake. Specifically, those with the highest intakes had a 34% reduced risk of breast cancer recurrence compared to the lowest intakes, $p = 0.02$). However, no statistically significant reduced risks of death were seen from soy isoflavone intake in postmenopausal women.

There was also an effect of soy on patients with certain types of breast cancer in the postmenopausal group. For the postmenopausal women with estrogen- and progesterone-positive breast cancer (the exact number of patients was not given), those in the highest quartile of isoflavone intake had a 34% reduced risk of recurrence compared to those in the lowest soy group ($p = 0.01$). And for the 86 postmenopausal patients receiving anastrozole therapy, those with the highest soy intake had a 35% reduced risk of recurrence compared to the lowest soy intake.

For the researchers, "High dietary intake of soy isoflavones was associated with lower risk of recurrence among postmenopausal patients with breast cancer positive for estrogen and progesterone receptor and those who were receiving anastrozole as endocrine therapy" and that "This finding is potentially important in terms of recommendations for intake of soy isoflavones in conjunction with endocrine therapy."

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Reference:

1. "2004/2005 Fact Sheet Cancer Registries: The Foundation for Cancer Prevention and Control" posted on the CDC website www.cdc.gov/cancer/npcr
2. "Costs of Cancer" posted on www.cancer.org/docroot/MIT/content/MIT_3_2X_Costs_of_Cancer.asp
3. Siddiqui, R. A. (2005). "Anticancer properties of propofol-docosaehaenoate and propofoleicosapentaenoate on breast cancer cells." *Breast Cancer Res* 7(5): R645-54
4. Wu WH. Sesame Ingestion Affects Sex Hormones, Antioxidant Status, and Blood Lipids in *Postmenopausal Women. J. Nutr.* 2006 136: 1270-1275
5. Aggarwal BB. Curcumin Suppresses the Paclitaxel-Induced Nuclear Factor- B Pathway in Breast Cancer Cells and Inhibits Lung Metastasis of Human Breast Cancer in Nude Mice. *Clin Cancer Res* 2005 11: 7490-7498
6. Chlebowski, R. T., M. Pettinger, et al. (2004). "Insulin, physical activity, and caloric intake in postmenopausal women: breast cancer implications." *J Clin Oncol* 22(22): 4507-13
7. Li Y. Sulforaphane, a Dietary Component of Broccoli/Broccoli Sprouts, Inhibits Breast Cancer Stem Cells. *Clin Cancer Res*; 16(9); 2580-90
8. Kang X. Effect of soy isoflavones on breast cancer recurrence and death for patients receiving adjuvant endocrine therapy. *CMAJ* 2010. DOI:10.1503/cmaj.091298
9. Dai Q, Shu XO, Jin F, et al. Population-based case-control study of soyfood intake and breast cancer risk in Shanghai. *Br J Cancer* 2001;85:372-8.