

Soy and Breast Cancer

An Update

It's been ingrained in many women with breast cancer and those at risk for breast cancer, that soy products should be avoided. The confusion around soy and whether or not it is safe for consumption stems from the notion that it is high in isoflavones, which are weak estrogen-like compounds called phytoestrogens. Because estrogen has been shown to promote the development, growth, and spread of breast cancer, doctors have erred on the side of caution and discouraged consumption of soy foods. However, soy foods do not contain estrogen and the current consensus amongst health professionals is that soy foods do not increase cancer risk, if anything they may have a protective effect on gynecologic health.

Recent evidence from high quality studies consistently show that compared with women who do not eat soy, women who regularly eat soy have a lower risk for breast cancer. Some even suggest that soy food consumption can reduce the risk of recurrence in breast cancer survivors. It is important to note, however, that research has only been done on the effect of natural soy foods, not soy supplements. In general, cancer patients should take great caution before taking any dietary supplement as they are not regulated by the FDA and can have serious interactions with cancer treatment and medications. Furthermore, soy supplements contain much higher doses of isoflavones than do natural whole soy foods like tofu, tempeh, edamame, soy beans, and soy milk.

Whole soy foods actually have many health benefits as they are high in polyunsaturated fats, protein, fiber, vitamins, and minerals. They also contain antioxidants and anti-inflammatories that may even help create an anti-cancer environment in the body. Conclusive research supports that a moderate amount (1 to 3 servings per day) of natural soy foods are safe for both cancer survivors and the general population.

Guidelines for Soy Food Serving Sizes:

- **Tofu:** ½ cup (4 ounces)
- **Tempeh:** ½ cup (3 ounces)
- **Edamame:** ½ cup
- **Cooked soybeans:** ½ cup
- **Soy milk, yogurt:** 1 cup
- **Soy nuts:** ¼ cup

Each serving has approximately 7 grams of protein and 25 milligrams of isoflavones

When it comes to soy food consumption, women should feel comfortable eating a balanced diet that includes whole soy foods in moderation. However, try and avoid highly processed soy foods that include only the protein, or soy protein isolates, such as vegetarian meat analogs (e.g. vegetarian burgers) and snack foods. The isoflavones in these foods are very concentrated and may not be safe for consumption. Speak to your healthcare provider or registered dietitian before taking soy or isoflavone supplements and discuss how best to manage soy intake in your diet. For more information regarding gynecologic cancer please see our **Gynecologic Cancer Fact Sheet**.

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