

Soy Solutions

Soy has been under heavy attack lately, with all kinds of information circulating on the Internet. This follows an unprecedented surge in the sale of soy products over the past decade, due largely to research that suggests soy provides a variety of health benefits. The recent attacks on soy have centered on issues such as allergies, thyroid function, male fertility, and the suitability of soy for infants. What are the real facts regarding these issues?

Only one in 3,000 adults is estimated to be allergic to soy protein, and the allergic response to soy protein is typically less severe than is the case for many other foods that cause allergies.

There is little evidence to suggest soy foods adversely affect thyroid function in healthy men and women. However, individuals with a compromised thyroid function may need to ensure an adequate intake of iodine when soy is consumed. Other foods that may interfere with thyroid metabolism include cabbage, radish, Brussels sprouts, kale, millet, peaches, and strawberries. Of much greater concern would be the anti-thyroid effect of ingesting erythrosine, a red coloring agent widely used in foods and pharmaceutical agents.

Is it safe for children to consume soy? What are the possible endocrine effects since soy is rich in phytoestrogens? For many decades soy-based infant formulas have been consumed by millions of infants worldwide. Growth in children has been normal and no changes in the timing of puberty or in fertility rates have been reported in those who consumed soy as infants. The isoflavones appear to have a low affinity for estrogen receptors in infants.

In the Honolulu Heart Program, Japanese-American men who regularly consumed tofu during middle age showed signs of greater mental deterioration in later years than the men who consumed tofu infrequently. Other studies have not found any relationship between tofu consumption and a decline in cognitive function. More recent clinical trials have shown that soy isoflavones may actually improve cognitive function in both men and women.

Hundreds of research papers have shown that the regular consumption of soy is associated with a decreased risk of cardiovascular diseases, osteoporosis, and breast and prostate cancer. This can be explained by the fact that soy contains a variety of health-promoting phytochemicals (such as isoflavones and phytosterols), in addition to valuable amounts of soluble fiber and omega-3 fat. The isoflavones in soy decrease blood lipid levels, improve the elasticity of the arteries, and protect against bone loss. These health benefits of soy can be experienced by consuming two to three ounces of soy protein per day. This can be obtained in many ways—tofu with stir-fried vegetables, TVP-containing entrees, soy meat products, soy nuts, soy beverages, and soy flour incorporated into bread and other bakery products.

Winston Craig, Ph.D., R.D., is a professor of nutrition at Andrews University.