

Adverse Affects of Soy

Soybeans were first used as a food by Asians *after* they had learned to ferment them. The **fermented** soy products **tempeh**, **miso** and **tamari** are the only soy products without adverse health effects.

Unfermented soy products have potent **enzyme inhibitors** that block the digestion of protein. In test animals, diets high in these enzyme inhibitors cause enlargement and pathological conditions of the pancreas, including cancer. With long-term use of unfermented soy products, stomach queasiness, sometimes nausea, and occasionally flu-like symptoms can develop.

Soybeans also contain **hemagglutinin**, which causes red blood cells to clump together. Both the enzyme inhibitors and hemagglutinin have been labeled growth depressant substances. Fermenting soy deactivates both. Precipitating the curd (tofu) reduces both.

Soybeans are extremely high in **phytates**. Phytates block the uptake of the essential minerals calcium, magnesium, iron, copper, manganese and especially zinc, which causes stunted growth in children, blood sugar problems, and reproductive problems. Zinc is also needed for proper brain and nerve functioning. Phytates are reduced in the fermented soy products, but not tofu. **Eating tofu with fish or meat** broth, as is the custom in Asia, reduces the mineral-blocking effects of the phytates.

Soymilk is high in phytates, and the processing involved in making soymilk destroys the amino acids lysine and cystine. It also greatly denatures the protein, making it indigestible and thus not usable by the body.

The worst is infant formulas. These often contain **soy protein isolate**, which is very high in phytates and enzyme inhibitors. Part of the processing involves an acid wash in aluminum tanks. The heavy metal aluminum is 100 times greater in soy formula than milk. Aluminum is toxic to the kidneys, brain and nervous system. Soy formulas also lack the cholesterol found in mother's milk that is needed for optimal brain and nervous system development.

Soy protein isolate is further denatured to produce **texturized vegetable protein (TVP)**. Both are used as a cheap protein in school lunch programs, baked goods, diet beverages and fast food products. In test animals, both cause enlarged organs – especially the pancreas and thyroid – and fatty deposits in the liver. SPI and TVP increase our need for vitamins E, D, K and B12.

Isoflavones (including **genistein**) are anti-cancer substances found in fermented soy products. In non-fermented soy products, the isoflavones are in an altered form that have very little anti-cancer effect. Actually, Japan and Asia have much higher rates of cancer of the pancreas, stomach, liver and thyroid than we do, even though Asians consume on average less than 2 teaspoons of soy per day.

The isoflavones in infant formula do have disruptive hormonal effects – based on body weight, infants receive the estrogenic equivalent of 5 birth control pills per day! Female infants raised on soy formula tend to reach puberty prematurely. Male infants given soy formula tend to have

retarded physical maturation and learning disabilities. (Asian monks consider soy as being quite helpful in dampening libido.)

Soybeans are also one of our most highly pesticide and herbicide-contaminated foods, and 99% of soybeans produced are genetically altered.

The **soy industry** spends about \$100 million annually in advertising, public relations, and law firms that lobby for favorable government regulations. The USDA is even being pushed to scrap the 30% limit for soy in school lunches.

Independent research studies show unfermented soy to cause hypothyroidism, pituitary insufficiency, infertility and other endocrine disruptions with as little as 2 tablespoons per day. Soy can produce asthma and other allergic reactions, immune system problems, irritable bowel syndrome, cancers of the digestive system and liver as well as infantile leukemia. Low thyroid function and other hormonal disruptions take 3 months to normalize after discontinuing unfermented soy products.

For more information, with references: www.mercola.com, click on "Soy".

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