

The Dark Side of Soy

The truth about soy--the whole truth--remained unknown to me for some time. As a bodybuilder, I always supplemented my protein intake with protein shakes. Before I switched to soy, I mixed the powder in cow's milk.

After a while I noticed that I got bloated and experienced stomach cramping. At first I thought that broccoli was causing it. I removed broccoli from my diet, but still experienced the bloating and cramping.

I next removed milk from my diet. Once I did that, I didn't experience any more stomach discomforts. It was then that I substituted soy milk for the cow's milk. I had heard nothing through the advertising media except the health benefits of soy, especially the milk. The media cleverly hides the truth about soy, providing only one side of the story.

"Vegetarians and health enthusiasts have known for years that foods rich in soy protein offer a good alternative to meat, poultry, and other animal-based products. As consumers have pursued healthier lifestyles in recent years, consumption of soy foods has raised steadily, bolstered by scientific studies showing health benefits from these products. Last October, the Food and Drug Administration gave food manufacturers permission to put labels on products high in soy protein indicating that these foods may help lower heart disease risk..."

Soy and its derivatives such as soy lecithin, soy sauce, soy protein isolate, soybean oil, etc. are in or a part of hundreds of food products. Vegetarian foods such as veggie burgers are practically staples. Until I discovered the truth about soy, I regularly ate veggie burgers.

Large scale cultivation of the soybean didn't begin in the United States until after World War II. Production quickly rose to 140 billion pounds of soybeans per year. Now the United States produces more than 50 percent of the world's soybeans.

Historically, soybeans have been eaten for thousands of years. They originated in the Orient. However, the soybean was not used for food until a method of fermentation was discovered. This happened during the Chou dynasty (1134 - 246 B.C.) The first soy products were tempeh, natto, miso, and soy sauce.

The soybean inherently contains toxic and otherwise harmful substances. Enzyme inhibitors interfere with the digestion of protein and can result in pancreatic disorders, and even cancer. Cooking is not sufficient enough to disable these inhibitors. This is the truth about soy that soybean growers and processors don't want you to know.

Soybeans contain hemagglutinin. This substance causes red blood cells to lump together. Hemagglutinin and the enzyme inhibitors have been called growth depressant substances.

The soybean is also high in phytic acid or phytates. Phytic acid is an organic acid naturally found in the bran or hull of all seeds. Phytates block the assimilation of the minerals calcium, copper,

zinc, and iron. Soybeans have a higher phytate content than any other grain or legume that has been studied. Not even a long and slow cooking process will reduce this content. Only fermentation can accomplish that.

Because of the high phytic acid content of soybeans, they should not be used as a meat substitute. That will result in severe mineral deficiencies. Unfortunately this is not widely known because the truth about soy is concealed.

A 2001 study published in the Journal of Agriculture and Food Chemistry reveals that commercially processed soy products, especially textured soy protein have very high oxalate levels. Oxalate will bind with calcium in the kidneys increasing the risk for kidney stone development.

The production of soy milk is interesting. The beans are first soaked in an alkaline solution to remove as much of the enzyme inhibitors as possible. The phytic acid content remains though. However, the alkaline soaking produces a carcinogen (cancer-causing agent) called lysinealine.

Another health-destroying aspect of the creation of soy products from the soybean is that monosodium glutamate is formed during processing.

Unless the soybean has been fermented, all soy products should be avoided. Only the process of fermentation can nullify all the health-destroying aspects of the soybean. It should also be noted that even in countries where soy products are native, they are not eaten in the quantities that Americans eat them.

As I mentioned earlier, soy products and derivatives are included in many food products. You will have to scrutinize food labels very carefully to weed them out. Don't buy soy sauce or any soy protein powders. Avoid soybean oil in snack foods.

Unfortunately textured vegetable protein or textured soy protein is a meat substitute. It is given to children in school lunch programs. Left on the ground, animals will not touch it. Animals have excellent instincts when it comes to food. Anything that they avoid, we, too, should avoid.

Did you know that it has been estimated that soybeans, almost always in the form of oil, accounts for 10 percent of the average American's total caloric intake?

(According to the Soyfoods Association of North America, soy food product sales grew from \$300 million to an astounding \$3.9 billion from the years 1992 to 2006.

Although people in Asia eat soybeans, they are eaten in small amounts and whole. Western nations separate the soybean into protein and oil. Processing which includes high temperatures, high pressures, alkali and acid baths, and petroleum solvents, leave toxic and carcinogenic residues behind. These substances are not removed.

Soybeans naturally contain anti-nutrients and toxins. Due to health claims allowed by the Federal

Drug Agency (FDA), Americans eat soy products in huge amounts. Documented problems related to soy consumption are:

- * thyroid problems (weight gain, lethargy, malaise, fatigue, hair and libido loss)
- * premature puberty and other developmental problems in babies, children, and adolescents
- * cancer
- * brain damage
- * reproductive disorders
- * allergies

Are the Health Claims of Soy Overblown?

Warnings are again being heard about soy products. Although the Food and Drug Administration (FDA) has made it legal for food manufacturers to claim that soy protein may help lower heart disease risk, many studies have found danger in excessive soy consumption.

Laboratory studies conducted in the 1950s found that rats who were fed soy protein had reduced fertility, smaller litters, and an increased mortality rate. As late as 1999, two scientists from the FDA had this to say, "there is abundant evidence that the isoflavones in soy demonstrate toxicity in estrogen sensitive tissues and in the thyroid. Eating as little as 30 grams of soy per day can result in hypothyroidism, with symptoms of lethargy, constipation, weight gain and fatigue."

Here is what science has found out about some of the chemicals in soy:

(1) Phytates- are phosphorus compounds found in cereal grains, legumes and nuts. These compounds interfere with the absorption of calcium, magnesium, copper, zinc, and iron. Excess phytates disrupts the normal growth of children.

(2) Phytoestrogens (isoflavones)- these chemicals mimic the effects of the female hormone estrogen. They could cause infertility in women and lead to breast cancer. Infants should not be given soy-based formulae.

(3) Enzyme inhibitors- interfere with the digestion of protein and can cause pancreatic problems.

(4) Haemagglutinin- cause red blood cells to clot.

According to the Weston A. Price Foundation, "soy infant feeding floods the bloodstream with female hormones that inhibit testosterone..." A Swedish study reveals that 100 grams of infant formula has the same amount of estrogen as a contraceptive pill.

With a greater number of people becoming vegetarian, or including more vegetarian products in their diet, food manufacturers are placing more soy-based products on the market. Soy can be found in cereals, cakes, breads, sausages and cheese. Like monosodium glutamate, it goes by many different names. Some of these aliases are vegetable oil, protein concentrate, textured plant protein or lecithin, and soy protein isolate.

I used to eat veggie burgers which are soy based but I have since stopped. I also replaced soy milk with almond milk. I have substituted whey based protein powders for soy protein isolate. Since soy is almost universal, reducing the amount in the diet, or eliminating it altogether, may be wise.

The dangers of soy don't apply to soy which has been fermented. However, modern production methods don't utilize this procedure.