

# 12 Reasons To Avoid Any Kind of Soy

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By Natasha Longo

Soy has become a major source of toxicity for human beings, especially in the last three decades. Not only is more than 99% of soy genetically modified, but sources labeled organic or non-GMO are often exposed to the same problems as conventional soy. If you consume processed foods, soy is almost impossible to avoid. With the exception of wheat, there are few foods that are causing as many health problems as soy in the food supply. Here are 12 reasons to avoid any kind of soy.

## 1. Soy Reduces Assimilation of Minerals

Phytic acid is present in the bran or hulls of all seeds and when we compare the phytate of soy to many other types of beans and nuts, the percent mass is not that far off, but that's not the problem. The problem is how much we are consuming. Most people stuck on the soy bandwagon are consuming far more phytate by the sheer volume through mass consumption of things like soy milk, tofu, cereals, and processed foods. It doesn't even compare to the amount they would consume through seeds and nuts. The effect of phytic acid on iron absorption has been thoroughly studied. As evident in a study in the *American Journal of Clinical Nutrition*, as phytic acid increases, it has a diminishing impact on iron while inhibiting its absorption. This applies to almost every major mineral including zinc—one of the most important minerals for the human body. [Two billion people may now have zinc deficiency](#). Phytates bind to zinc and thereby decrease its bioavailability. Phytic acid levels in soy reduce assimilation of calcium, magnesium, copper, iron and zinc.

## 2. Soy Causes Growth Problems and Even Cancer In Children

The phytic acid in soy is not neutralized by ordinary preparation methods such as soaking, sprouting and long, slow cooking. Consequently these high phytate diets have caused growth problems in children. Combined with the presence of both phytoestrogens and arsenic, soy-based formulas are a disease promoting ticking time bomb for infants. A [study](#) published in the peer-reviewed journal *The Prostate*, revealed that humans exposed to a combination of both toxicants were almost twice as likely to develop cancerous cells in their prostate. While it is established that both arsenic and estrogen can cause cancer, the research raises concerns about the dangers of chemicals in combination, and the efficacy of regulations that are established by testing one chemical at a time.

True cancer of the prostate, carcinoma, is seldom seen in infants and children, but other forms of malignant tumors may develop and more cases are appearing in developed nations where the link appears to center around soy infant formula. While many claims have been made about the health benefits of these estrogen-like compounds, animal studies indicate that soy (both conventional and organic) contain powerful endocrine disruptors that alter growth patterns and cause sterility. Soy formula is also laden with toxic chemicals such as aluminum and manganese, which can cause both physical and mental health problems, learning disabilities, brain damage, and behavioral problems. A study published in the Proceedings of the National Academy of Sciences found that the highly concentrated phytoestrogens in soy formula weaken the immune systems of babies. Toxicologists estimate that an infant exclusively fed soy formula receives the estrogenic equivalent of at least five birth control pills per day.

### 3. Soy Linked To Cancer

The Chinese did not eat unfermented soybeans as they did other legumes such as lentils because the soybean contains large quantities of natural toxins or “antinutrients”. First among them are potent enzyme inhibitors that block the action of trypsin and other enzymes needed for protein digestion. These inhibitors are large, tightly folded proteins that are not completely deactivated during ordinary cooking. They can produce serious gastric distress, reduced protein digestion and chronic deficiencies in amino acid uptake. In test animals, diets high in trypsin inhibitors cause enlargement and pathological conditions of the pancreas, including cancer. What about the Japanese?

The Japanese, and Asians in general, have much higher rates of other types of cancer, particularly cancer of the esophagus, stomach, pancreas and liver. Asians throughout the world also have high rates of thyroid cancer. The logic that links low rates of reproductive cancers to soy consumption requires attribution of high rates of thyroid and digestive cancers to the same foods, particularly as soy causes these types of cancers in laboratory rats. Just how much soy do Asians eat? A 1998 survey found that the average daily amount of soy protein consumed in Japan was about eight grams for men and seven for women – less than two teaspoons. Americans are consuming amounts far exceeding this quantity. Thousands of women are now consuming soy in the belief that it protects them against breast cancer. Yet, in 1996, [researchers found](#) that women consuming soy protein isolate had an increased incidence of epithelial hyperplasia, a condition that presages malignancies. A year later, dietary genistein was found to stimulate breast cells to enter the cell cycle – a discovery that led the study authors to [conclude that women should not consume soy products to prevent breast cancer](#).

### 4. Soy Promotes Infertility

Soy beans contain genistein, a natural compound that has estrogenic effects because it binds the estrogen receptor with relatively high affinity. A study in the *Journal Toxicology and Applied Pharmacology* showed that dietary genistein exhibits a strongly increased estrogenic effect and cautionary attitude towards the consumption of large amounts of soy or soy supplements is warranted to prevent infertility. Another study in the journal *Obstetrics and Gynecology International* found that soy ingestion increases amniotic fluid phytoestrogen concentrations in female and male fetuses. Phytoestrogens daidzein and genistein may, alone or in combination with other chemicals, [function as endocrine disruptors](#), with potentially adverse effects on male reproductive function.

### 5. D-Glutamic Acid

Natural glutamate in plants and animals is known as L-glutamic acid. Our normal digestive process slowly breaks down this natural or “bound” glutamic acid and it is then delivered to glutamate receptors in our body and brain. Broken down this way, it is harmless. However, factory, artificially bound D-glutamic acid in soy is broken down or made “free” by various processes ([hydrolyzed](#), [autolyzed](#), modified or fermented with strong chemicals, bacteria, or enzymes) is toxic to the human body. Since free glutamate can be a component part of certain food additives, such as hydrolyzed soy protein and cheap soy sauce, it is essentially unregulated when it comes to labeling standards. Many people who are very sensitive to D-glutamic acid experience respiratory, neurological, muscular, skin, urological and even cardiac symptoms.

## 6. High Levels of Aluminum

Soy has to go through a process to become soy protein isolate. Acid washing in aluminum tanks, which is designed to remove some of the antinutrients (but the results often vary widely), leeches aluminum into the final product. Aluminum can have [adverse effects on brain development](#) and cause symptoms such as antisocial behavior, learning disabilities, Alzheimer's disease and dementia. Harsh alkaline soaking solutions are used mainly in the production of modern soy foods such as soy protein concentrates, soy supplements, soy protein shakes, textured soy protein (TSP), etc. Much of the trypsin inhibitor content can be removed through high-temperature processing, but not all. Trypsin inhibitor content of soy protein isolate [can vary as much as fivefold](#).

## 7. Blocks Production of Thyroid Hormone

In 1991, [Japanese researchers reported](#) that consumption of as little as 30 grams or two tablespoons of soybeans per day for only one month resulted in a significant increase in thyroid-stimulating hormone. Soy foods have a high concentration of goitrogens which block production of thyroid hormones. Scientists have known for years that soy-based formula can cause thyroid problems in babies. Scientists Daniel Sheehan and Daniel Doerge, from the National Center for Toxicological Research [presented findings](#) from rat feeding studies, indicating that genistein in soy foods causes irreversible damage to enzymes that synthesize thyroid hormones. Soy consumption is [associated with thyroid disorders](#) such as hypothyroidism, goiter, and autoimmune thyroid disease (ATD) as well as increased iodine requirement in certain cases.

## 8. Causes Allergic Reactions

Soy is one of the top allergens — substances that cause allergic reactions. Today, soy is widely accepted as one of the “big eight” that cause immediate hypersensitivity reactions. Some 28 different proteins present in soy have been found to bind to IgE antibodies. It's also worth noting that the more soy protein you eat, the more likely you are to develop allergies to it — and the more severe those allergies are likely to become. Delayed allergic responses to soy are less dramatic than the top allergens like peanuts or shellfish, but are even more common. These are caused by antibodies known as immunoglobulins A, G or M (IgA, IgG or IgM) and occur anywhere from two hours to days after the food is eaten. These have been linked to sleep disturbances, bed wetting, sinus and ear infections, crankiness, joint pain, chronic fatigue, gastrointestinal woes and other mysterious symptoms.

Food “intolerances”, “sensitivities” and “idiosyncrasies” to soy are commonly called “food allergies”, but differ from true allergies in that they are not caused by immune system reactions but by little-understood or unknown metabolic mechanisms. Strictly speaking, gas and bloating — common reactions to soy and other beans — are not true allergic responses. However, they may serve as warnings of the possibility of a larger clinical picture involving allergen-related gastrointestinal damage. The soybean industry knows that some people experience severe allergic reactions to its products. In a recent petition to the FDA, Protein Technologies International (PTI) identified “allergenicity” as one of the “most likely potential adverse effects associated with ingestion of large amounts of soy products.”

## 9. Genetically Modified

Any ingredient listed as soybean or soy on any product ingredient list has a 93% chance of being GMO if it is not listed as organic. But even organic soy cannot be trusted. Soy is very problematic crop. Non-organic sources of soy in many agricultural practices are being passed off as organic. In 2011, the USDA [uncovered a plot to import fraudulent organic certificates](#) produced by an uncertified supplier in China. The Chinese firm used the counterfeit certificate to represent non-organic crops, including soybeans, millet and buckwheat, as certified organic. These types of things are happening every year and only a fraction are being discovered. Even domestically sourced organic soybean crops are now being investigated for having GMO origins. Organic soy also does not change the toxicity of unfermented sources so abundant in the food supply.

## 10. Most Soy is Unfermented

Phytates in unfermented soy products actually obstruct absorption of protein and four key minerals: calcium, magnesium, iron, and zinc better than fermented sources. In their natural form, soybeans contain phytochemicals with toxic effects on the human body. The three major anti-nutrients are phytates, enzyme inhibitors and goitrogens. These anti-nutrients are the way nature protects the soybean plant so that it can live long enough to effectively reproduce. They function as the immune system of the plant, offering protection from the radiation of the sun, and from invasion by bacteria, viruses, or fungi. They make the soybean plant unappetizing to foraging animals.

All plants have some anti-nutrient properties, but the soybean plant is especially rich in these chemicals. If they are not removed by extensive preparation such as fermentation or soaking, soybeans are one of the worst foods a person can eat. The net protein utilization of unfermented soy is 61 which is quite low. The most common soy (99%) sold at major grocery retailers in soy milks and processed foods is unfermented soy. It is deadly. Unfermented soy has been linked to digestive distress, immune system breakdown, PMS, endometriosis, reproductive problems for men and women, allergies, ADD and ADHD, higher risk of heart disease and cancer, malnutrition, and loss of libido. Fermented sources of soy such as natto, miso, tempeh and some fermented tofus are likely the only types of soy that should be consumed by humans and that's only if you can get around the crap shoot that they're non-GMO and organic (which there is no guarantee despite labeling).

## 11. Enzyme Inhibitors

When food is eaten, digestive enzymes such as amylase lipase and protease are secreted into the digestive tract to help break it down and free nutrients for assimilation into the body. The high content of enzyme inhibitors such as trypsin in unfermented soybeans interferes with this process and makes carbohydrates and proteins from soybeans impossible to completely digest. When foods are not completely digested because of enzyme inhibitors, bacteria in the large intestine try to do the job, and this can cause discomfort, bloating, and embarrassment. Anyone with naturally low levels of digestive enzymes such as elderly people would suffer the most from the enzyme inhibiting action of soy. In precipitated products, enzyme inhibitors concentrate in the soaking liquid rather than in the curd. Thus, in tofu and bean curd, growth depressants are reduced in quantity but not completely eliminated.

## 12. Immunotoxic

The prevalence of autoimmune diseases has significantly increased over the recent years. It has been proposed that this epidemiological evidence could be in part attributable to environmental estrogens, compounds that display estrogen-like activity. Environmental estrogens can be found in phytoestrogens which occur in soy. There is a considerable burden of evidence both in vitro and in animal models that these compounds exert immunotoxic effects. Phytoestrogens drastically reduce not only the size of the thymus, but also the bone marrow cavity as well, the sites where most deletion of autoreactive cells occur. Isoflavones, which are phytoestrogens present in large quantities in soy and soy-derived products, inhibit protein tyrosine kinase, and exert other effects in the body such as [exacerbating the clinical course of this autoimmune disease](#).

### Sources:

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