

are you allergic to soy?



According to the American Academy of Allergy, Asthma and Immunology, soy is among the most common of food allergens. Next to wheat, dairy, eggs, and peanuts, soy is among the top five food allergens. The part of any food that usually causes an allergic reaction is the protein portion. Thus, the protein found in soy is what causes the allergic reactions. In fact, there may be up to 15 different proteins in soy that can cause allergic reactions. There has even been evidence linking soy allergic reactions to genetic backgrounds.¹

The allergy to soy can be mild for most and life-threatening for some. Some of the symptoms that may be experienced are:

- Hives
- Diarrhea
- Eczema
- Abdominal cramping
- Skin conditions
- Colic in babies
- Wheezing or respiratory issues
- Abdominal swelling
- Bloating
- Gas
- Nervous system irritation

- Itching
- Chest tightness
- Abdominal pain
- Hay fever-like symptoms
- Mouth sores and itching

According to the National Institute of Allergy and Infectious Diseases, soy allergies are particularly common in infants and young children. However, the allergy may show up at any age and even with foods that have been previously eaten without reactions.

It is very difficult to avoid eating soy! It is one of the top four subsidized crops, and therefore, inexpensively and readily used by food manufacturers. On top of that, there has been great media exposure on the health benefits of soy. In reality, it is a common food allergen and for those who are sensitive to soy, strict avoidance is the only way to prevent a reaction. Thus, purchasing foods and food products takes vigilance and awareness as hidden soy exists in thousands of foods and cosmetics. Even cardboards, paints, cars, biodiesel fuels, fabric softeners, mattresses, and books contain soy.²



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In 2004, the Food Allergy Labeling Consumer Protection Act was passed. It is required that food manufacturers clearly state whether a product contains any of the top allergens. Some manufacturers can hide the soy in vitamin E, lecithin, and soy oil, as these are not required to be listed on labels. Additionally, consuming meat from animals that have been fattened with soy feed may cause allergic reactions in those who are highly sensitive.

Cross-reactivity is the reaction between an antigen and an antibody, which was generated against a different but similar antigen. Some people with a soy allergy may have reactions after eating other foods from the legume family such as peanuts, kidney beans, lima beans, pinto beans, string beans, garbanzo beans, lentils, peas, black-eyed peas, and licorice. There also may be a cross-reactivity to birch pollen. This is not as common and is usually found in those with the most reactivity to soy. However, if you suffer any symptoms when eating legumes, this may not be just a digestive issue, but a sensitivity or allergy to the legume family of foods.

Avoiding exposure

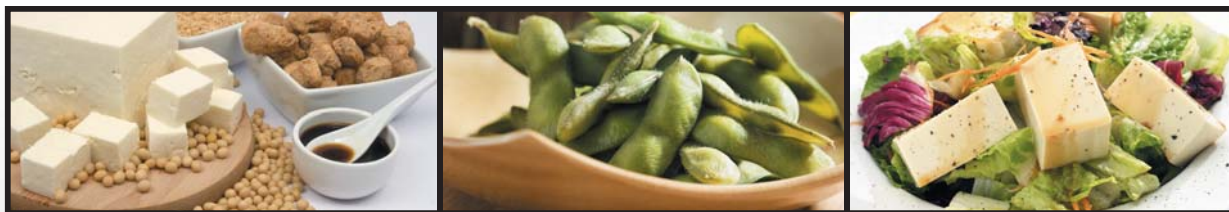
These are the foods that contain soy and must be avoided:

- Edamame (soybeans)
- Natto
- Tempeh
- Soy milk
- Miso
- Tofu
- Soy protein in protein bars
- Soy ice cream
- Soy sauce
- Soy nuts
- Soy flour

When reading labels, look for soy, soya, or soybeans, either in bold print or following the ingredient list after the word “contains.” The following is a list of foods and food preparations that commonly contain soy or soy derivatives:

- Soy oil
- Tamari soy sauce
- Sausages
- Marinades
- Teriyaki sauce
- Hydrolyzed and textured
- Artificial flavoring
- Infant formula
- Nutritional supplements
- Breads
- Canned tuna (some)
- Soy yogurt
- Hot dogs
- Soy protein isolate
- Vegetable protein
- Salad dressings
- Soups
- Asian foods
- Vegetable broth
- Bouillon cubes
- Soy protein powder
- Doughnuts
- Vegetable starch
- Vegan burgers
- Margarine
- Sauces
- Gravies
- Seitan
- Lecithin (vegetable protein)
- Vegetable gum
- Canned chicken broth
- Oyster sauce
- Pancake mix
- Probiotic supplements
- Medications (Benadryl®)

Please check the labels thoroughly!



Is soy oil or soy lecithin OK?

There has been some recent controversy over whether soybean oil and soy lecithin actually contain the soy protein. Soybean oil goes through a process to make it more fluid. In that process, hexane is used, leaving a gummy residue called lecithin. The lecithin is then dried and bleached. It is then sold to food manufacturers, cosmetic companies, supplement manufacturers and health-food stores. Both soybean oil and lecithin do contain small amounts of soy protein and an enzyme inhibitor that may cause allergic reactions.³

Soybean oil is used extensively in salad dressings, and lecithin is found in many packaged foods, protein bars and as a fat emulsifier in all sorts of food items from chocolate bars to ice cream. Lecithin is a good source of choline, which is an essential part of every cell membrane. It also aids memory and cognitive function as well as fat metabolism. A study, published in the *Journal of Clinical and Experimental Allergy*, tested soybean-sensitive individuals for reactions to soybean oil and soy lecithin. The study concluded that even though these products were produced from extracts of soybeans, it was exceedingly rare for the participants in the study to suffer a reaction to these soybean-derived products.⁴

Since there are conflicting opinions and research people with the more severe reactions to soy may wish to also stay away from soybean oil and lecithin. Perhaps people who do not have severe soy allergies may consume lecithin and soy oil, as these may be less problematic for them. It just requires personal attention and further investigation as well as taking note of any reactions.

The real problem with soy oil is that it is used in deep-frying foods and on the griddle, where it becomes a damaged fat. Damaged fats can cause free radicals and inflammation.

Eating out

In order to avoid eating a hidden food allergen, people who eat out need to ask about the ingredients. It is not uncommon for many fast-food chains to use soy flour in their bread products or soy derivatives as fillers for their meat dishes. For example, McDonald's and Burger King list soy flour as an ingredient in their hamburger buns. Carl's Jr. adds soy protein as a filler in its Philly Cheese Steak Sandwich. Stir frying or serving marinades made with soy sauce is a staple at many restaurants, particularly Asian ones. This is not to say that people shouldn't enjoy eating out, but just to remind them to exercise caution when ordering their favorite dishes.

Eat wholesome fresh food!

If people eat wholesome fresh foods, they won't have to be frustrated about poring over food labels. They can prepare nutritious foods and never have to be concerned about inadvertently consuming any soy.

Sources:

1. *Soy Allergy*, retrieved on June 30, 2009 at www.allergicchild.com/soy_allergies.htm.
2. Daniel, K. Part I – A Strategy for Dealing with Soy Allergies, retrieved on June 20, 2009 at www.westonaprice.org/soy/soy-allergies.html.
3. Xuelin, G. et.al. Identification of IgE-Binding Proteins in Soy Lecithin, *International Archives of Allergy and Immunology*, 2001; Vol. 3, No.126:218-225.
4. Awazuvara, H. et.al. Antigenicity of the proteins in soy lecithin and soy oil in soybean allergy, *Journal of Clinical and Experimental Allergy*, December, 1998; 28 (12): 1559-1664.

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