

Prognosis and Management

Soy allergies are more common in young children and are usually outgrown early in life. The chance of outgrowing soy allergy often depends on whether it is IgE-mediated or non-IgE mediated. Non-IgE mediated soy allergies are usually outgrown in early childhood.

IgE-mediated soy allergies can be outgrown, but in some cases may persist throughout life. IgE levels to soy will be monitored throughout your child's care. Changes in IgE levels can predict the likelihood of your child outgrowing his/her allergy. If the levels are dropping and they reach a certain level, a food challenge may be done in a controlled medical setting to determine whether or not your child has outgrown the allergy.

What about soy oil and soy lecithin?

After reading a few food labels, you may become overwhelmed because it seems almost everything contains soy! However, it's helpful to know that studies show both soy oil and soy lecithin can be safely eaten by children with soy allergy. This is likely because the soy protein in these foods is so processed it cannot be recognized by the immune system. However, be sure to discuss this with your allergist!



FOOD ALLERGY PROGRAM

The Food Allergy Program at Children's National Medical Center provides comprehensive services in the evaluation and management of a wide variety of food allergies, including IgE-mediated food allergy, gastrointestinal food allergy, and eosinophilic gastrointestinal disorders.

Food Allergy Program
Children's National Medical Center
111 Michigan Avenue, NW
Washington, DC 20010
Phone: 202-476-3016
Fax: 202-476-2280

RESOURCES

For more detailed information about food allergies, visit:

- The Food Allergy and Anaphylaxis Network (www.foodallergy.org)
- The Food Allergy Initiative (www.faiusa.org)

www.childrensnational.org

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ALL about **SOY** ALLERGY



Soy Allergy Overview

Soybeans are legumes. Peanuts are also in the legume family, and in fact soybeans and peanuts are structurally very similar. However, this does not mean that if your child has a soybean allergy they will have a peanut allergy as well. Soy is one of the eight most common food allergens. Soy allergy is most commonly found in children and affects about 0.3-0.4% of the population in the United States. Soy is used in a number of food products and as a result avoiding soy is a difficult task. In the next section, we will go into detail about reading labels and how to identify foods that contain soy so you can help your child eat soy-free!



Different kinds of soy allergy

You may have heard that there are different kinds of soy allergies. This is because the immune system can respond in a couple of different ways to soy protein - a soy allergy can be either IgE-mediated or non-IgE mediated:

IgE-mediated soy allergic reactions are caused by IgE antibodies to soy protein and can usually be detected by skin and RAST testing. This kind of soy allergy can cause immediate symptoms after exposure to soy, including:

- Skin: hives and eczema
- Gastrointestinal tract: abdominal pain and vomiting
- Respiratory system: nasal congestion, sneezing, and wheezing

Non-IgE mediated allergic reactions do not involve IgE antibodies, and therefore skin and RAST tests to soy are usually negative. This kind of soy allergy usually involves the gastrointestinal tract and can cause chronic vomiting, diarrhea, bloody stools, or poor growth. Disorders belonging to this category of soy allergy include:

- soy protein-induced enterocolitis syndrome
- soy protein-induced proctocolitis syndrome
- eosinophilic esophagitis (actually both IgE- and non-IgE-mediated)

Now that we've reviewed the two kinds of soy allergy, the remainder of our discussion will focus mostly on IgE-mediated soy allergy.

Management of soy allergy

Preventing a soy allergic reaction

The only way to prevent a soy allergic reaction is to avoid soy and any food products containing soy. Soy is found in a number of foods.

What foods contain soy and how can my child avoid it?

- Any packaged food product that contains soy must list it clearly on the ingredients label.
- Soy can be found in a number of different breads, cookies, crackers, breakfast cereals, energy bars, and bakery items because manufacturers often include soy flour in these foods.
- Soy is also used in a number of food substitutes, particularly because it is very high in protein.
- Look for soy in canned tuna and meat, processed meats, and canned broths and soups.
- Asian cuisines often use soy as an ingredient. It is better to avoid Asian restaurants because of the risk of cross-contamination.
- It is best to avoid the following ingredients as they indicate the presence of soy:
 - Tempeh
 - Shoyu Sauce
 - Miso
 - Soy protein
 - Soy sauce
 - Tamari
 - Edamame
 - Tofu
 - Niso
 - Textured vegetable protein

