

# FOOD ALLERGY FACT SHEET

## Soy Allergies

### What population does soy allergies affect?

While soy is a common allergen, most children out-grow soy allergies by the age of two or three. Some adults have soy allergies, but they are rare.

### What are the symptoms?

Symptoms of a soy allergy may occur within a few minutes to an hour after ingesting soy and vary from person to person. Common reactions to soy include:

- Tingling in the mouth
- Hives, itching, or eczema
- Swelling of the lips, face, tongue, and throat, or other parts of the body
- Wheezing, runny nose, or difficulty breathing
- Abdominal pain, diarrhea, nausea, or vomiting
- Dizziness, lightheadedness, or fainting

Symptoms of a soy allergy are usually mild, but in rare cases, anaphylaxis can occur. Signs of anaphylaxis include constriction of airways making breathing difficult, rapid pulse, drop in blood pressure, and dizziness or loss of consciousness.

### What foods contain soy?

Soybeans are not a major food in the United States, but soy is versatile as an ingredient so it can be found in processed food (for example, chicken/vegetable broth, bouillon cubes, cereals, and baked goods) as well as many meat and vegetarian entrees. Asian cuisine often has soy ingredients. It is important that school nutrition staff read all food labels to check for soy to avoid accidental exposure. Below is a list of products that contain soy and should be avoided:

- Edamame (green soybeans)
- Miso (soybean paste)
- Processed meats (for example, hotdogs)



- Soy granules or curds
- Soy milk
- Soy nuts
- Soy protein
- Soy sauce
- Soy sprouts
- Tamari (a type of soy sauce)
- Tempeh (fermented soybean product)
- Textured vegetable protein (TVP)
- Worcestershire sauce

### How is soy located on food labels?

Food labels regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the Food Allergen Labeling and Consumer Protection Act (FALCPA) by listing the top eight allergens on the label in plain language either in the ingredient list or in a “contains” statement.

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For example, cereal that contains soy could be labeled in either of the ways shown below (bold is used for illustrative purposes only):

| Label 1   | Label 2  |
|---|--|
| <b>INGREDIENTS:</b><br>Whole Grain Wheat,<br>Sugar, Raisins, Almond<br>Pieces, Corn Bran,<br>Partially Hydrogenated<br>Cottonseed , Oil, Corn<br>Syrup, Glycerin, Brown<br>Sugar Syrup, Salt, Soy<br>Lecithin, Natural and<br>Artificial Flavor | <b>INGREDIENTS:</b><br>Whole Grain Wheat,<br>Sugar, Raisins, Almond<br>Pieces, Corn Bran,<br>Partially Hydrogenated<br>Cottonseed , Oil, Corn<br>Syrup, Glycerin, Brown<br>Sugar Syrup, Salt, Soy<br>Lecithin ( <b>Soy</b> ), Natural<br>and Artificial Flavor |
| CONTAINS: Wheat,<br>Almond, <b>Soy</b>  |  |

Labels should also be checked for warnings such as “may contain soy,” “produced on shared equipment with soy,” or “produced in a plant that uses soy in other products.” These foods should be avoided because the product may contain a small amount of soy due to cross-contact.

All child nutrition staff should be trained to read product labels and recognize food allergens. Because food labels change from time to time, child nutrition staff should check labels for soy and soy ingredients for every product each time it is purchased. If the label does not provide clear information, then the school must contact the manufacturer for clarification or use a different product. Labels should be maintained for a minimum of 24 hours for every product served to a child with food allergies in case of a reaction.

## What substitutes can be used for soy in student meals?

When menu substitutions or accommodations for a student with life threatening food allergies are requested, a medical statement from a physician is required. Refer to the manual *Accommodating Children with Special Dietary Needs in the School Nutrition Programs: Guidance for School Foodservice Staff* on the USDA web site ([www.fns.usda.gov/cnd/Guidance/special\\_dietary\\_needs.pdf](http://www.fns.usda.gov/cnd/Guidance/special_dietary_needs.pdf)) for information on the required content of the physician’s medical statement. Read and follow the statement exactly. If there is uncertainty about the statement or if it does not provide enough information, contact the household or physician (as permitted by the family) for clarification. Always follow your school’s policies and procedures.

The child nutrition department must not under any circumstance provide a meal to a child with life threatening food allergies if the physician’s statement is not clear or if food labels do not provide clear information on ingredients.

When planning menus for children with soy allergies, consider current food choices offered to determine if a reimbursable meal can be selected from foods offered that do not contain soy. This approach will minimize the need to prepare special recipes or to make menu substitutions.

The chart below lists common menu items that may be used as safe alternatives to items that contain soy. Soy is a common ingredient in many foods. School nutrition staff should always carefully read labels, even for foods that generally do not contain soy.



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| Common Menu Items/Ingredients That May Contain Soy                                | Possible Substitutes or Alternatives That Do Not Typically Contain Soy*                            |
|---|--|
| Asian food  | Asian food made without soy; other ethnic foods  |
| Prepared baked goods, such as bread, cookies, and crackers                        | Homemade baked goods made without soy  |
| Breakfast cereals   | Oatmeal and other hot cereals; cereal without soy  |
| Canned broths and soups, bouillon   | Homemade soups made without soy or canned varieties without soy                                    |
| Canned tuna and meat  | Fresh tuna and meat  |
| Condiments, salad dressings and sauces (for example, soy sauce and soybean paste) | Condiments (for example, ketchup and mustard), salad dressings, and sauces that do not contain soy |
| Processed meats (for example, chicken nuggets, hamburgers, and hotdogs)           | Beef, pork, ham, chicken, turkey, or fish; beans and legumes                                       |

\*Always check the ingredient label to verify ingredients and check for potential cross contamination.

## Common Questions

### Are soybean oil and soy lecithin safe for people with soy allergies?

Research indicates that most people with soy allergies can safely consume soybean oil and soy lecithin. It is always best to check with a physician first. Highly refined soybean oil is exempt from being labeled as an allergen, but soy lecithin must be labeled.

### A physician has stated that soy lecithin is safe for a student to eat. If soy lecithin is the only soy ingredient on the food label but soy is listed in the allergen statement, is the product safe to use?

Not necessarily. Because the common name of an allergen in a product is only required by FALCPA to appear once, it is possible that there are other soy-derived ingredients in the product that are not listed. All ingredients on the food label need to be reviewed carefully. If there are any questions, the manufacturer should be contacted for additional information.





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## References

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- Food Allergy Initiative. (2010). *Soy allergy*. Retrieved July 5, 2010, from <http://www.faiusa.org/?page=soy>
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- U.S. Food and Drug Administration. (2009). *Food allergies: What you need to know*. Retrieved May 27, 2010, from <http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm079311.htm>

## For More Information

Food Allergy & Anaphylaxis Network, Soy Allergy  
<http://www.foodallergy.org/page/soy-allergy>

Food Allergy Initiative, Soy Allergy  
<http://www.faiusa.org/?page=soy>

U.S. Food and Drug Administration, Food Allergens  
<http://www.fda.gov/Food/FoodSafety/FoodAllergens/default.htm>

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