Tree Nut Allergies

For both children and adults, tree nut allergies are one of the most common food allergies. For infants and younger children, in particular, it is the second most common food allergy.

What nuts should be avoided when a person has a tree nut allergy?

Typically, individuals with tree nut allergies are not just allergic to one type of tree nut, so physicians recommend avoiding all tree nuts and possibly peanuts (even though a peanut is a legume and not a nut). Under U.S. law, the following common nuts are considered "tree nuts": almonds, Brazil nuts, cashews, chestnuts, filberts, hazelnuts, macadamia nuts, pecans, pine nuts, pistachios, and walnuts. Less common nuts that also fall under this law include beechnut, butternut, chinquapin, coconut, ginkgo, hickory, lychee nut, pili nut, and shea nut. Disclosure on food labels of all of these tree nuts is required by law.

What are the symptoms?

The most common symptoms of an allergic reaction to tree nuts include:

- Eczema
- Hives
- Itching of mouth, throat, eyes, skin, or other areas
- Asthma, shortness of breath
- Runny nose or nasal congestion
- Nausea
- Vomiting
- Digestive symptoms (abdominal pain, cramps, or diarrhea)
- Difficulty swallowing
- Anaphylaxis
 - Constriction of airways (swollen throat or a lump in the throat making breathing difficult)
 - $\circ~$ Abdominal pain and cramping
 - \circ Rapid pulse
 - Shock (a severe drop in blood pressure felt as dizziness, lightheadedness, or loss of consciousness)



Tree nuts tend to cause particularly severe allergic reactions, even if very small amounts are consumed. Many people are not aware of previous exposure or allergies to tree nuts when they have their first reaction. Tree nut allergies tend to be lifelong; only about 9% of children will outgrow tree nut allergies.

What foods contain tree nuts?

There are many unexpected sources of tree nuts, so reading food labels is important to eliminate exposure to tree nuts. Tree nuts are often ingredients in prepared products and ethnic cuisines, such as African, Chinese, Mexican, Thai, and Vietnamese. Natural extracts, such as almond or wintergreen extract, may contain tree nut protein. Tree nuts also can be found in household products, such as lotions and soaps.

Many items may not contain tree nuts but may be produced in a facility where tree nuts are used. As a result, cross-contact with tree nuts may occur. Many snack foods may be produced in a facility where many different types of snack foods or varieties of a product (for example, cereal bars) are produced. Some of the varieties of that product may include tree nuts. A product that is labeled as being produced in a facility with tree nuts should not be consumed by an individual with a tree nut allergy.





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Products or Ingredients with Tree Nuts

- All tree nuts (see next page for a full list of tree nuts)
- Artificial nuts and flavoring
- Baked goods
- Barbeque sauces
- Black walnut hull extract (flavoring)
- Breading for chicken
- Candies
- Energy bars
- Fish dishes
- Gianduja (a chocolate-nut mixture)
- Granola bars
- Honey
- Mandelonas (peanuts soaked in almond flavoring)
- Marinades
- Marzipan/almond paste
- Meat-free burgers
- Mortadella
- Natural nut extracts and flavorings (for example, almond, walnut)
- Nougat
- Nut butters (for example, cashew butter)
- Nut distillates/alcoholic extracts
- Nut meal
- Nut meat
- Nut milk (for example, almond milk, cashew milk)
- Nut oils (for example, walnut oil or almond oil)
- Nut paste (for example, almond paste)
- Pancakes, waffles
- Pasta
- Pesto
- Pie crust
- Praline
- Salads and salad dressing
- Walnut hull extract (flavoring)

Where are tree nuts located on food labels?

Food labels that are regulated by the U.S. Food and Drug Administration (FDA) follow the regulations of the *Food Allergen Labeling and Consumer Protection Act* (FALCPA). FALCPA requires that the major eight food allergens are listed on the label in one of three ways: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a "contains" statement.

All FDA-regulated manufactured food products that contain a tree nut as an ingredient are required to list the specific tree nut on the product label. Child nutrition staff should look for the word "tree nut" or any of the specific tree nuts listed below:

- Almonds
- Beechnuts
- Brazil nuts
- Bush nuts
- Butternuts
- Cashews
- Chestnuts
- Chinquapin nuts
- Coconut
- Filberts
- Ginkgo nuts
- Hazelnuts
- Hickory nuts

- Lychee/lichee/litchi nuts
- Macadamia nuts
- Nangai nuts
- Nut pieces
- Pecans
- Pili nuts
- Pine nuts (pignoli, pignolia, pignon, pigñon, and pinyon nut)
- Pistachios
- Shea nuts
- Walnuts

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

Label 1	Label 2
INGREDIENTS:	INGREDIENTS:
Whole grain oats	Whole grain oats
(includes oat bran),	(includes oat bran),
Sugar, Modified corn	Sugar, Modified corn
starch, Honey, Brown	starch, Honey, Brown
sugar syrup, Salt,	sugar syrup, Salt,
Tripotassium phosphate,	Tripotassium phosphate,
Canola and/or rice bran	Canola and/or rice bran
oil, Natural almond	oil, Natural almond
flavor.	flavor (Almond).
Contains: Almond	
Contains: Almond	



Labels should also be checked for warnings such as "may contain tree nuts," "produced on shared equipment with tree nuts," or "produced in a plant that uses tree nuts in other products." These foods should be avoided as the product may contain a small amount of tree nuts through cross-contact. USDAregulated foods, namely meat, poultry, and egg products are not required to follow FALCPA labeling regulations but may do so voluntarily. Only common or usual names of the ingredients are required to be identified on these labels.

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 tree nuts and tree nut ingredients for every product each time it is received. It is recommended that labels be maintained for a minimum of 24 hours following every product served in case of a reaction. If the product is saved for later use as leftovers, the labels should be kept for 24 hours after all product has been used up or discarded.



What substitutes can be used for tree nuts in student meals?

When menu substitutions or accommodations for a student with life-threatening food allergies are outside of the meal pattern, a medical statement from a state licensed healthcare professional, such as a physician, is required. Refer to the manual *Accommodating Children with Disabilities in the School Meal Programs; Guidance for School Foodservice Professionals* on the USDA website (https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs) for information on the required content of the physician's statement. 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.

However, clarification of the medical statement should not delay the child nutrition department from providing a meal modification. Child nutrition staff should follow the portion of the medical statement that is clear and unambiguous to the greatest extent possible while obtaining the additional information or amended statement.

When planning menus for children with tree nut allergies, consider current food choices offered to determine if a reimbursable meal can be selected from foods offered that do not contain tree nut protein. This approach will minimize the need to prepare special recipes or to make menu substitutions. Child nutrition staff should always read labels carefully, even for foods that do not generally contain tree nuts. The following chart lists common menu items that may be used as safe alternatives to items that contain tree nuts.





Common Menu Items That May Contain Tree Nuts	Possible Substitutes or Alternatives That Do Not Typically Contain Tree Nuts*
Granola bars, cereal bars, and breakfast bars	Bars without tree nut proteins
Ready-to-eat cereals	Hot cereals and ready-to-eat cereals without tree nut proteins
Tree nut butters (for example, almond butter and cashew butter) and products including tree nut butters	Soy butter (check label for cross-contact), bean spreads such as hummus
Trail mix or snack mix	Trail mix without tree nuts; soy nuts
Baked goods (for example, breakfast breads, rolls, or cookies)	Breads, rolls, and cookies without tree nut proteins
Asian entrees	Entrees without tree nut proteins (for example, macaroni and cheese)

*Always check the ingredient label to verify ingredients and check for potential cross-contact.

Common Questions

Should coconut be avoided by someone with tree nut allergies?

There is conflicting information about whether or not a person with a tree nut allergy should avoid coconut. Coconut has not been typically restricted for a person with tree nut allergies, but in 2006 the FDA began identifying coconut as a tree nut. There are some documented cases of coconut allergies, but most occurred in people without other tree nut allergies. Always try to get clarification from a healthcare professional.

Are nutmeg and water chestnuts safe for a person with tree nut allergies?

Yes. These foods are not tree nuts and are usually considered safe for a person with a tree nut allergy. Nutmeg is a seed, and water chestnut is a root.

Can a person with a tree nut allergy use oils made from tree nuts?

Tree nut oils are frequently less refined oils and may contain traces of tree nut protein. They are not usually considered safe for individuals with tree nut allergies.

Should a person with a tree nut allergy also avoid seeds such as sunflower, sesame, poppy, etc.?

Seeds usually do not need to be avoided unless recommended by a healthcare professional or unless the person has an additional allergy to seeds.





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For More Information

Food Allergy Research & Education http://www.foodallergy.org

Institute of Child Nutrition http://www.theicn.org/foodsafety

U.S. Food and Drug Administration Food Allergens https://www.fda.gov/food/food-ingredients-packaging/food-allergens

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