

Tree Nut Allergies

For both children and adults, tree nut allergies are one of the most common food allergies. It affects roughly 3.9 million people in the United States. Approximately 1.2% of adults in the United States have allergic reactions to tree nuts. 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 nuts should be avoided when a person has a tree nut allergy?

Physicians recommend avoiding all tree nuts and possibly peanuts (even though a peanut is a legume and not a nut). Typically, individuals with tree nut allergies are allergic to more than one type of tree nut. Under U.S. law, the following common nuts are considered "tree nuts."

- Almonds
- Beechnuts
- Brazil nuts
- Butternuts (white walnuts)
- Candlenuts (kukui)
- Cashews
- Chestnuts
- Chinquapin nuts (chinkapin)

- Coconut*
- Ginkgo nuts
- Hazelnuts (filberts/cobnuts)
- · Hickory nuts
- Lychee (lichee/litchi nuts)
- Macadamia nuts (bush nuts)
- Nangai nuts
- Pecans

- Pili nuts
- Pine nuts (Indian, piñon, pignoli, pigñolia, pigñon, pigndi, and pinyon nut)
- Pistachios
- Shea nuts (karite)
- Walnuts

*Coconut has not typically been restricted for people with tree nut allergies. However, in 2006, the Food and Drug Administration (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 get clarification from a healthcare professional about serving coconut to a participant with a tree nut allergy.

What are the symptoms of an allergic reaction?

Knowing the symptoms of an allergic reaction can save a participant's life. One or more allergic symptoms can occur and can be mild to severe. Symptoms can happen within a few minutes or up to a few hours after the food allergen is eaten. Participants can display different symptoms, even if they have the same allergy (e.g., one participant with a tree nut allergy may have trouble breathing when exposed to tree nuts while a different participant with a tree nut allergy gets diarrhea after consuming it). Each time a participant has a reaction, the symptoms may be different.



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It is also important to know the symptoms of an allergic reaction as there is a possibility that a participant may have a reaction yet not have a known food allergy. As shown in the following chart, the Food Allergy Research and Education (FARE) organization details how a variety of symptoms can appear in the body.

Mild Symptoms	Severe Symptoms
 Gut: mild nausea or discomfort (stomach pain, abdominal cramping) Mouth: itchy; odd taste; slight, dry cough Nose: itchy, runny nose; sneezing; congestion Skin: a few hives (reddish, swollen, itchy areas on the skin), mild itch (sometimes in the ear canal) 	 Body: lightheadedness, fainting or loss of consciousness, anaphylaxis Gut: repetitive vomiting or severe diarrhea Heart: pale; turning blue; faint, weak, or "thready" pulse; dizziness; chest pain; drop in blood pressure Lung: shortness of breath, wheezing, repetitive cough, difficulty breathing Mouth: significant swelling of the tongue or lips Psychological: feeling something bad is about to happen, sense of impending doom, anxiety, confusion, feeling weak Skin: many hives over the body, widespread redness, eczema Throat: tight, hoarse, trouble breathing/swallowing, swelling

What is anaphylaxis?

Anaphylaxis is a severe allergic reaction with a rapid onset that may cause difficulty breathing and death. It may disrupt breathing and blood circulation. An anaphylactic reaction usually occurs within minutes of being exposed to an allergen, but in some rare instances, it can occur a couple of hours later. Symptoms of anaphylaxis include:

- Difficulty breathing, constriction of airways, tightness of the throat, hoarse voice
- Drop in blood pressure (e.g., pale, weak pulse, confusion, dizziness, fainting, weakness, loss of consciousness)
- Feeling of doom
- Gastrointestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, cramping)
- Rapid pulse, cardiac arrest
- Shock (i.e., drop in blood pressure and narrowing of airways)
- Skin symptoms (e.g., hives, swelling)
- Swollen lips



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What products contain tree nuts?

There are many unexpected sources of tree nuts. Other than food items, tree nuts also can be found in household products, such as lotions and soaps. Always read the ingredients label to check for tree nuts.

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 foods may be produced in a facility where many different varieties of a product (for example, cereals) 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 served to a participant with a tree nut allergy. The following charts list some food products and dishes that often contain tree nuts.

Tree Nut-Based Products

- Artificial nuts and flavoring
- Gianduja (a chocolatehazelnut spread)
- Mandelonas (peanuts soaked in almond flavoring)
- Marzipan (an almond confection)
- Natural nut extracts and flavorings (e.g., almond, black walnut, wintergreen)

- Nougat (a roasted nut confection)
- Nut butters (e.g., cashew, hazelnut, shea nut)
- Nut distillates/alcoholic extracts
- Nut meal/flour
- Nut meat
- Nut milk (e.g., almond milk, cashew milk

- Nut oils* (e.g., walnut oil, almond oil)
- Nut paste (e.g., almond paste)
- Nut pieces
- Praline (a boiled pecan confection)
- Walnut/black walnut hull extract (flavoring)

^{*}Tree nut oils are usually less refined oils and may contain traces of tree nut protein. They are not usually safe for individuals with tree nut allergies.





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Dishes, Foods, And Products That May Contain Tree Nuts*

- Baked goods
- Breading
- · Breakfast cereals
- Candies, candy bars, chocolates
- Cereals, cereal bars, breakfast bars
- Crackers
- Energy bars
- Flavored coffees, creamers, and syrups (e.g., hazelnut)
- Frozen desserts

- Gluten-free products
- Granola bars
- Heartnut
- Honey
- Marinades
- Mortadella
- Pancakes
- Pasta
- Pesto
- Pie crust
- Recipes that replace allpurpose flour

- Salads and salad dressings
- Sauces (e.g., barbeque, chili sauce, hot sauce, mole sauce, spaghetti sauce)
- Trail mix
- Vegan cheeses
- Vegan meats
- Vegan spreads
- Veggie burgers
- Waffles

Always read the ingredients, check for allergen information, and consider cross-contact before serving any food to a participant with a food allergy.

Some food items are often confused as tree nuts but are not:

- Nutmeg (is a seed)
- · Poppy seeds
- Sesame seeds
- Sunflower seeds
- Water chestnut (is a root)

The previously mentioned foods are usually safe for a person with a tree nut allergy. They do not usually need to be avoided unless recommended by a healthcare professional or if the participant has an additional allergy to seeds.

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 in the ingredient list: (1) using the common name, (2) common name written in parenthesis after the ingredient, or (3) in a "contains" statement. In 2021, the *Food Allergy Safety, Treatment, Education, and Research Act* (FASTER)



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was passed into law. This act expands what is considered a major allergen that has to be declared on a food label from eight to nine by adding sesame as a major allergen. This law will take effect in January 2023, but manufacturers may begin incorporating sesame as a major allergen in the ingredient list on their food labels before this date.

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. Adult day care staff should look for the word "tree nut" or one of the specific tree nut names that were previously listed.

How cereal that contains tree nuts could be labeled in the ingredient list in different ways is shown in the following examples (bold is used for illustrative purposes only):

Label 1

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

Contains: Almond

Label 2

INGREDIENTS: Whole grain oats (includes oat bran), Sugar, Modified corn starch, Honey, Brown sugar syrup, Salt, Tripotassium phosphate, Canola and/or rice bran oil, Natural almond flavor (**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." Foods with these advisory statements should be avoided as the product may contain a small amount of tree nuts through cross-contact. USDA-regulated 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.

For example, granola bars may or may not contain tree nuts depending on the recipe. Two different recipes could be run on the same line. A granola bar without tree nuts could be labeled like below (bold is used for illustrative purposes only):

INGREDIENTS: Roasted peanuts, soy protein isolate, sugar, soy oil, sunflower seeds, brown rice syrup, honey, cocoa, rice starch, maltodextrin, salt, soy lecithin, baking soda, natural flavors

Contains: Peanuts, soy, and milk.

Produced on equipment that also manufactures tree nuts and wheat.





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How should adult day care employees check and manage food labels?

Adult day care sites have a variety of procedures for preparing and serving food. All staff who prepare and serve food should be trained to read product labels and recognize food allergens in the ingredient list. Because food labels change from time to time, adult day care staff should check labels for tree nuts and tree nut ingredients for every product each time it is received. If the label does not provide clear information, then the manufacturer must be contacted for clarification or a different product should be used. The Centers for Disease Control and Prevention (CDC) recommends that food labels for every product that is served to a participant with food allergies be kept for a minimum of 24 hours afterward in case of a reaction. If the product is saved for later use as leftovers, keep labels for 24 hours after all product has been served or discarded.

What documentation is needed to make substitutions for participant meals?

When menu substitutions or modifications for a participant with food allergies are outside of the Child and Adult Care Food Program (CACFP) meal pattern, a medical statement from a State licensed healthcare professional, such as a general practice physician, registered nurse, or allergist, is required. Refer to the *Modifications to Accommodate Disabilities in the Child and Adult Care Food Program and Summer Food Service Program* on the USDA website for information on the required content of the medical statement. Adult day care sites can also contact their State agencies and sponsors for information. For more information about what is required in the medical statement, refer to ICN's *Adult Day Care Food Allergy Fact Sheet – Common Questions: Adult Day Care Directors*.

If there is uncertainty about the statement, or if it does not provide enough information, contact the State-licensed healthcare professional (as permitted by the participating adult, family, caregiver, or quardian) for clarification.

However, the adult day care staff should not delay in providing a meal modification and a safe environment (i.e., prevent exposure to known allergens) while awaiting clarification of the medical statement. 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.





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

When planning menus for participants 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. Adult day care 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.

Menu Items & Condiments That May Contain Tree Nuts*	Possible Substitutes*†
Bread, bagels, biscuits, muffins, and other bread products*	Bread products without tree nuts
Breakfast cereals	Breakfast cereals without tree nuts
Mixed dish containing tree nuts	Mixed dish without tree nuts
Tree nut butters (such as almond butter and cashew nut butter)	Peanut butter, sesame seed butter, soy nut butter, sunflower seed butter

^{*}All meals claimed for reimbursement must meet the Child and Adult Care Food Program (CACFP) meal pattern requirements. Please visit https://www.fns.usda.gov/cacfp/meals-and-snacks for more information.

Should coconut be avoided by someone with tree nut allergies?

It depends. There is conflicting information about whether or not a person with a tree nut allergy should avoid coconut. Coconut typically has not been restricted for a person with tree nut allergies, but in 2006 the Food and Drug Administration (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 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?

It depends. 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.



[†]Always review the ingredient list on a food label to verify ingredients and check for possible cross-contact (look for advisory statements or contact manufacturer).

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

It depends. 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 www.foodallergy.org

Institute of Child Nutrition www.theicn.org/foodsafety

U.S. Food and Drug Administration
Food Allergens
www.fda.gov/Food/IngredientsPackagingLabeling/FoodAllergens/default.htm



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