

Overview of Food Allergies

In the United States, food allergies have increased significantly among children and adults. Nearly 11% of people in the U.S. age 18 or older—more than 26 million adults—have food allergies. Five percent of patients with food allergies are first diagnosed in adulthood. More than one in four adults with food allergies report that all of their food allergies developed during adulthood, and nearly half of adults with food allergies report developing at least one food allergy during adulthood.

What is a food allergy?

A food allergy is when the body mistakenly reacts to a certain food protein or ingredient as if it were harmful. The food that causes the reaction is called an allergen.

How are food allergies diagnosed?

A State licensed healthcare professional can diagnose food allergies by using a variety of tests. A State licensed healthcare professional is an individual authorized to write medical prescriptions under State law.



What are the most common foods that cause allergic reactions?

Although there are over 170 foods that can cause food allergies, nine major food allergens account for 90% of all food-allergic reactions in the United States. The nine major allergens are:

- Crustacean shellfish (e.g., shrimp, lobster, and crab)
- Eggs
- Fish
- Milk
- Peanuts
- Sesame
- Soy
- Tree nuts (e.g., walnuts, almonds, cashews, pistachios, and pecans)
- Wheat

The Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) is a Federal law that became effective January 2006. It requires that food manufacturers identify any of the eight major food allergens (shellfish, eggs, fish, milk, soy, peanuts, tree nuts, and wheat) in plain language on the food label. In 2021, the Food Allergy Safety, Treatment, Education, and Research Act (FASTER) was passed into law. This act added sesame to the list of major allergens that had to be declared on a food label. There are now nine major allergens in the U.S. This law took effect on January 1, 2023. Contact the food manufacturer if there is any uncertainty about a food containing sesame.



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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 peanut allergy may have trouble breathing when exposed to peanuts while a different participant with a peanut allergy gets hives after consuming it). Each time a participant has a reaction, the symptoms may be different.

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 Body: lightheadedness, fainting or loss of pain, abdominal cramping) consciousness, anaphylaxis • Mouth: itchy; odd taste; slight, dry cough Gut: repetitive vomiting or severe diarrhea • Nose: itchy, runny nose; sneezing; • Heart: pale; turning blue; faint, weak, or congestion "thready" pulse; dizziness; chest pain; drop in blood pressure • **Skin:** a few hives (reddish, swollen, itchy areas on the skin), mild itch (sometimes in Lung: shortness of breath, wheezing, repetitive cough, difficulty breathing the ear canal) • 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

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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



What are the treatment methods for an allergic reaction?

Treatment for an allergic reaction for a participant will be determined by the State licensed healthcare professional and written in the emergency care section of the participant's food allergy action plan. Include specific State rules and licensing regulations about how and who can administer medicines in the food allergy action plan/emergency care plan. Follow the participant's food allergy emergency care plan when responding to an allergic reaction. Treatment cannot be provided beyond what is written in the plan. Treatments for an allergic reaction may include:

- Epinephrine (administered by an epinephrine auto-injector)
- Antihistamine
- Inhaler (bronchodilator)

Call 911 immediately if an anaphylactic reaction is expected. If the participant has an epinephrine auto-injector, the staff member who has been trained in administering epinephrine should administer the medicine. Up to 20% of people with food allergies have had a second reaction. Have the participant transported to the hospital in an emergency vehicle so they can be monitored and receive further treatment if needed. Contact the participant's family, caregiver, or guardian as soon as possible.

How can an allergic reaction be avoided?

The best way to avoid a reaction is to avoid the food that causes the allergy. Develop a system for checking the ingredient statements on food labels carefully and have a plan to limit the ways that the participant could have contact with the allergens, including airborne.



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For More Information

Centers for Disease Control and Prevention

Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs

www.cdc.gov/healthyschools/foodallergies/

Institute of Child Nutrition www.theicn.org/foodsafety

U.S. Department of Agriculture www.usda.gov

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

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