



# Food Allergies and Food Intolerances

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## Who Has Food Allergies?

About one-third of all adults believe they have a food allergy. However, true food allergies affect less than two percent of the total population. About five percent of young children are diagnosed with food allergies. Most childhood food allergies appear early in life and are usually outgrown. It is important to understand food allergies in order to avoid life threatening reactions or unnecessary food restrictions.

Although anyone can develop a food allergy, the ability to become allergic tends to be inherited. Children with one allergic parent have about twice the risk of developing a food allergy than children without allergic parents. A child is about four times more likely to develop a food allergy if both parents are allergic, than if neither parent is allergic. Many people who have food allergies also have asthma, or show sensitivities to inhaled allergens such as dust, cat, and pollen.

## What Is A Food Allergy?

- A **food allergy** is an adverse reaction to a food or food component that involves the immune system.
- A **food allergen** is the part of a food that a person is allergic to.

When an individual eats a food they are allergic to, the food allergen stimulates the immune system to release antibodies. These antibodies cause body cells to release substances, which cause allergic reactions. Usually the allergens in foods are proteins, not carbohydrates, fats, vitamins, or minerals.

## Most Common Food Allergies

Food allergies can occur to almost any food. However, a limited number of foods such as milk, eggs, wheat, fish, shellfish, soy, peanuts, and tree nuts such as walnuts cause most allergic reactions.

## Food Allergy Symptoms

Allergic reactions to foods usually occur within minutes to a few hours after eating an offending food. However, in very sensitive people, even smelling or touching the offending food may produce an allergic reaction. Food allergy reactions vary from person to person, as well as within the same person. The same food can produce totally different symptoms in different people, as well as varying symptoms within the same person.

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Food allergy symptoms usually fall into three areas:

- **Skin Reactions:** swelling of lips, mouth, tongue, face, or throat; hives, rashes, itching, skin redness.
- **Nose, Throat, and Lung Reactions:** sneezing, nasal congestion, runny nose, chronic cough, shortness of breath or other breathing difficulties, asthma.
- **Stomach and Intestinal Reactions:** nausea, abdominal pain and bloating, vomiting, diarrhea, cramping, gas.

## Severe Allergy Reactions

Most food allergic reactions are mild, but a small number of food-allergic individuals have severe reactions that can be life threatening. Anaphylaxis is rare, but can be a possibly fatal food allergy reaction. With anaphylaxis, different parts of the body experience food allergy reactions at the same time. These reactions can progress rapidly and may include itching, hives, sweating, swelling of the throat, breathing difficulties, lowered blood pressure, unconsciousness, and even death. Most severe food allergy reactions occur when an individual is away from home and accidentally eats a food they are allergic to.

Individuals who experience severe allergic reactions need to have a plan for handling situations if they accidentally eat a food they are allergic to. They may need to carry epinephrine for self-injection and warning medical alert bracelets or necklaces in case they become unconscious.

## Proper Diagnosis

It is important to have food allergies properly diagnosed. Elimination tests and food challenges for diagnosing suspected food allergies need to be performed only under medical supervision. Medical personnel can also perform tests such as skin pricks or blood tests to determine if a person's immune system is sensitized to a specific food.

## Living with a Food Allergy

Once a food allergy has been diagnosed, the only proven treatment is to avoid the offending food. An elimination diet must be developed carefully. Any elimination diet must be personalized to take into account the ability of an individual to tolerate an allergic food. Strict adherence to an elimination diet for one to two years can help promote outgrowing

a food allergy. However, some food allergies, particularly to peanuts, nuts, fish, and shellfish can last a lifetime. Currently no drugs are available to treat food allergies. Allergy shots, which are useful in desensitizing some people to pollen and other environmental allergens, are not recommended to treat food allergies and may be dangerous.

## Other Types Of Food Reactions

Food intolerances are conditions where the body cannot adequately digest a portion or component of a food. For example, persons with lactose intolerance have inadequate amounts of the digestive enzyme “lactase,” which is needed to digest lactose found in milk and dairy foods. Persons with gluten intolerance are unable to tolerate the gliadin fraction in gluten.

## Lactose Intolerance

Lactose intolerance is a condition where an individual cannot digest lactose, the main sugar in milk. Lactose is a disaccharide composed of two single sugars, glucose and galactose. Lactose is normally digested in the small intestine by lactase, an enzyme that breaks lactose into the smaller sugars, glucose, and galactose, which can be absorbed by the small intestine. If there is not enough lactase, the lactose goes undigested, and the intact lactose moves into the large intestine and is fermented by bacteria found normally in the large intestine.

Lactose intolerance is not a food allergy to milk. A milk allergy is an allergic reaction to the protein components in milk, not the sugar in milk, like lactose. Individuals with milk allergy usually must avoid all milk products. Individuals with lactose intolerance can use certain dairy products or other foods that are low in lactose.

Typical symptoms include abdominal cramps, bloating, intestinal gas, diarrhea, and nausea. Symptoms of lactose intolerance vary with individuals, and the severity of symptoms depends on the amount of lactose consumed and the degree of individual intolerance. Symptoms may appear any time from 15 minutes to several hours after eating lactose-containing foods and beverages.

The amount of lactose you need to eliminate from your diet will depend on your individual tolerance level. A physician or registered dietitian can determine your degree of lactose tolerance, and the number of grams of lactose you can tolerate.

Lactose is usually found in foods containing milk or milk solids. If you are very sensitive to lactose, you may need to check labels carefully. Key words to look for on food labels are milk, whey, lactose, nonfat milk solids, dry milk solids, curds, cheese, margarine, and sweet or sour cream.

A variety of prepared, processed, and baked foods contain small amounts of lactose. Examples are breads, dry cereals, cold cuts, cream soups, salad dressings, candy, cookies, drink mixes, sugar substitutes, and medications. However, most lactose-intolerant people do not have a problem with the small amount of lactose in these foods.

## Gluten Intolerance

Gluten is a protein found in wheat, rye, oats, and barley or derivatives of these grains such as malt. Some individuals cannot tolerate the gliadin fraction in gluten. Gluten intolerance is also referred to as celiac disease, celiac-sprue, nontropical sprue, or gluten sensitive enteropathy. Individuals do not outgrow gluten intolerance.

Non-gluten containing flours and starches include tapioca, corn flour, corn starch, rice flours, potato starch, potato flour, and soy flour.

As a result of gliadin intolerance the intestinal lining is flattened which results in reduced food absorption, diarrhea, steatorrhea (fat in the stool), bloating, loss of appetite, muscle wasting, weight loss, and can lead to progressive malnutrition. Lactose intolerance may temporarily occur secondarily to gluten intolerance. However, lactose containing foods can be returned to the diet in a short time.

## References

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