



# Food Allergies and Gastrointestinal (GI) Tract

## What is food allergy?

The immune system consists of cells in the body that help protect from infection. Your child's immune system protects your child from infections by attacking bacteria or viruses that cause illness.

Food allergy happens when the immune system causes the body to develop a reaction to a specific food or food component (such as proteins in milk, wheat, or nuts).

Common gastrointestinal symptoms of food allergy are:

- Abdominal pain
- Vomiting
- Diarrhea
- Nausea
- Other symptoms include hives (red blotches or welts on skin that itch), red itchy eyes, mouth swelling, throat tightness, cough, and shortness of breath

## How common is food allergy?

About 6%–8% of all children younger than 5 years old are allergic to one or more foods.

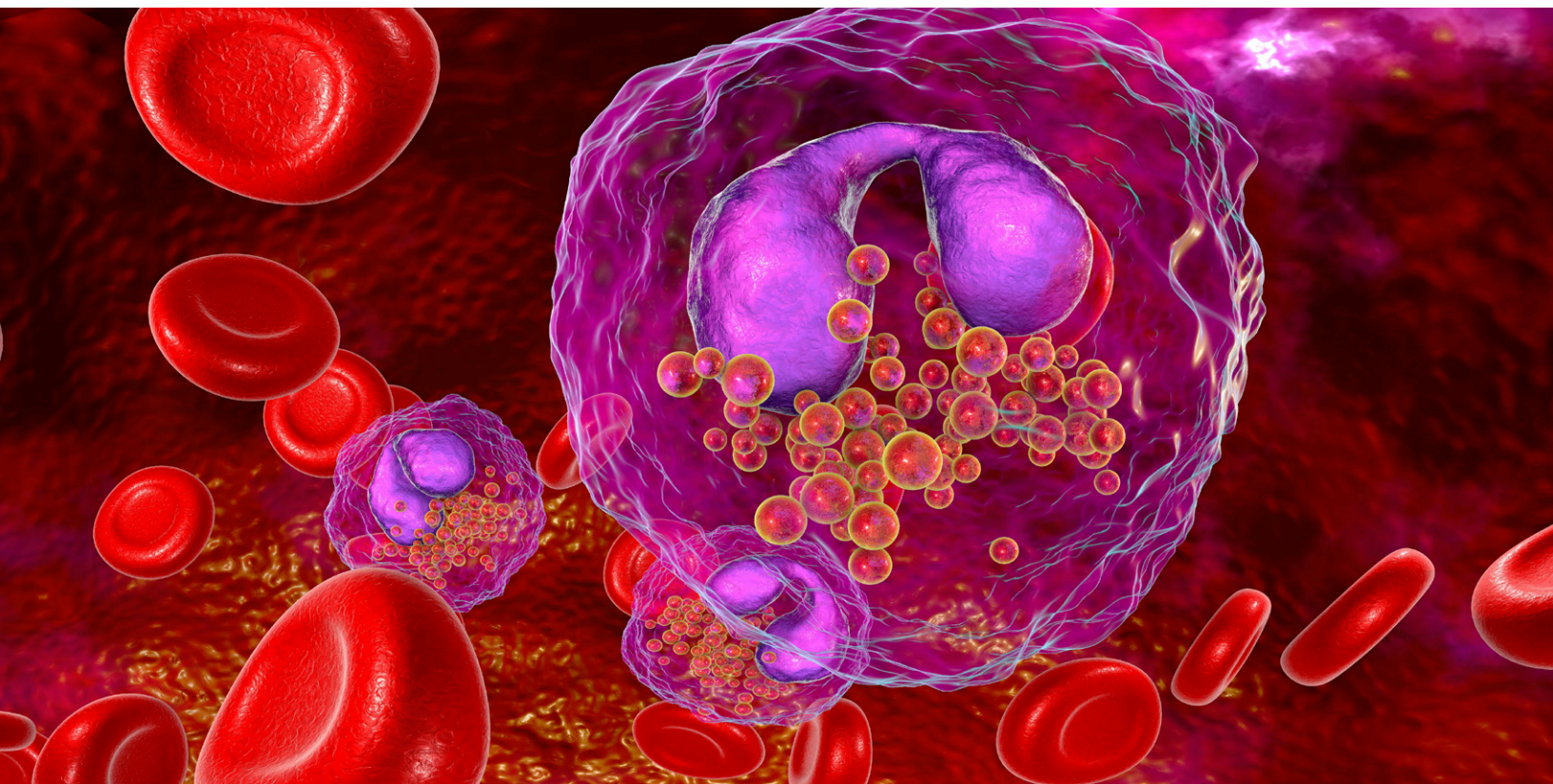
The most common reactions are to milk, eggs, soy, peanuts, wheat, and seafood. However, almost any food protein can cause an allergic response. Also, common foods may vary in different parts of the world.

Not all children who react to a certain food have a food allergy. They may have a food intolerance, which causes intestinal symptoms without allergy. For example, in children with lactose intolerance, the digestive system has trouble breaking down the sugar in milk, which causes cramping and gas. This is a food intolerance and not a food allergy.

## Why do food allergies happen?

The exact cause of food allergies is unknown. Food allergies are more common in children who have asthma,

*Illustration of eosinophil cells with purple lobed nuclei in a blood vessel.*



eczema, hay fever, or other allergies. They are also common in family members of people with food allergies.

## What are the kinds of food allergies?

Food allergies can have immediate or delayed reactions.

Immediate reactions happen within minutes to hours of eating a food. Your child may develop hives, wheezing, or swelling of the face.

In rare, more serious reactions, children may feel their “throat closing up” or tightening of the chest. The reaction can be so severe that the child cannot breathe (called anaphylaxis), which needs emergency treatment. However, these dangerous reactions are relatively uncommon.

Delayed reactions can happen from hours to days after eating a food. Symptoms may include vomiting, abdominal pain, diarrhea, blood in stool, or difficulty swallowing.

## How is food allergy diagnosed?

Your doctor will take a detailed history, asking about various foods and your child’s symptoms after eating those foods.

Your doctor may recommend blood or skin testing for allergies or may recommend you meet with an allergist. However, a positive allergy test does not always mean that a child will have an allergic response to the food, and a negative test does not always rule it out.

In some cases, an allergist may conduct an oral food challenge, which is the most accurate way to diagnose a food allergy. During an oral food challenge, which is done under strict medical supervision, a child is fed tiny amounts of a “trigger” food in increasing doses over a period of time. The child is then observed for a few hours to see if a reaction to the food occurs. This test is helpful when the history is unclear, if skin or blood tests are inconclusive, or to determine if an allergy has been outgrown.

If your child has predominantly digestive symptoms, then your doctor may refer you to a gastrointestinal specialist for an endoscopy and/or colonoscopy to take tiny samples of tissue from the esophagus, stomach, or intestine. When examined under a microscope, these samples can identify inflammation in the lining of the intestine.

## What is the treatment for food allergy?

Based on your child’s reaction, your doctor may recommend that the child not eat the allergy-causing food.

The doctor may ask you to keep an “EpiPen”, a medicine that you can administer if your child has a severe reaction to food.

In some situations, allergists may recommend a “desensitization protocol” that can sometimes allow children to tolerate the food that is causing the allergy.

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June 2018*

### ➔ Locate a Pediatric Gastroenterologist

**IMPORTANT REMINDER:** This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general educational information as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.



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