

What is a food allergy?

It is a response by the immune system to a food that the body mistakenly believes is harmful. The body creates specific antibodies to it. The next time the food is eaten, the body's immune system releases chemicals (including histamine) to protect the body from what it believes is foreign and dangerous. These chemicals trigger allergic symptoms that can affect your breathing, digestion, heart, and skin. **Food intolerance** can be defined as an adverse reaction to food that results in clinical symptoms but is not caused by a reaction of the immune system.

What are the symptoms of an allergic reaction?

Hives	itching	swelling	rashes	loss of conscience
Headache	nausea	vomiting	diarrhea	sneezing
Coughing	wheezing			difficulty breathing

- Note: These allergic reactions can be immediate or delayed up to 24 - 48 hours.

How common are food allergies?

Between 6 and 7 million Americans suffer from true food allergies. There is no cure for food allergy. The only way to prevent an allergic reaction is to avoid the food. Usually food allergies run in families. Someone with two allergic parents is more likely to develop food allergies than someone with one allergic parent.

What are the foods most likely to cause a reaction?

Milk, Egg, Peanut, Tree nuts (walnut, cashew, etc.), Fish, Shellfish, Soy, and Wheat account for 90 percent of all food-allergic reactions. But only about three percent of children have clinically proven allergic reactions to foods. In adults, the prevalence of food allergy drops to about one percent of the total population.

How do allergic reactions work?

When you eat a food containing a protein to which you are allergic (the allergen), your immune system releases antibodies (IgE) that recognize that specific allergen. The antibodies circulate through your body on white blood cells (basophils) that pass into all your body tissues where they bind to immune system cells called mast cells.

Both basophils and mast cells produce, store, and release histamine, which causes the symptoms-itching, swelling, hives – associated with allergic reactions. That's why some allergy medications are called antihistamines. When the antibodies carried by the basophils and mast cells come in contact with food allergens, you have an allergic reaction.

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How does your doctor diagnose a food allergy?

- **History** – The doctor takes a history from the patient about their symptoms.
- **Food diary** – The patient keeps a log of foods eaten.
- **Elimination diet** - The patient does not eat a food suspected of causing the allergy. If the symptoms go away, the doctor can almost always make a diagnosis. If the patient then eats the food (under the doctor's direction) and the symptoms come back, then the diagnosis is confirmed. This technique cannot be used, however, if the reactions are severe (in which case the patient should not resume eating the food) or infrequent.
- **Scratch skin test** - A diluted extract of the food is placed on the skin of the forearm or back. This portion of the skin is then scratched with a needle and observed for swelling or redness that would indicate a local allergic reaction. Skin tests are quick, simple, and relatively safe.
- **Blood tests such as the RAST and the ELISA.** - These tests measure the presence of food-specific IgE in the blood of patients. These tests may cost more than skin tests, and results are not available immediately.
- **Double-blind food challenge.** This testing has come to be the "gold standard" of allergy testing. Various foods, some of which are suspected of inducing an allergic reaction, are each placed in individual capsules and the patient is asked to swallow them. He is watched to see if a reaction occurs. The advantage of such a challenge is that if the patient has a reaction only to suspected foods and not to other foods tested, it confirms the diagnosis.

How do allergies affect infants and children?

The most common allergies in children are to **milk and soy** and may lead to colic, blood in the stool or poor growth. Softer signs may include runny nose, poor attention, and crankiness. They may be caused because of the immaturity of the immune and digestive systems and can develop within days to months after birth

Avoiding allergies in infants: Exclusive breast-feeding (excluding all other foods) of infants for the first 6 to 12 months of life is often suggested to avoid milk or soy allergies from developing. Such breast feeding often allows parents to avoid infant-feeding problems, especially if the parents are allergic (and the infant therefore is likely to be allergic). There are some children who are so sensitive to a certain food, however, that if the food is eaten by the mother, sufficient quantities enter the breast milk to cause a food reaction in the child. Mothers sometimes must themselves avoid eating those foods to which the baby is allergic. Treatment may include a milk or formula change.

How are food allergies treated?

- **Avoiding the food suspected** of causing the allergy by carefully reading food labels.
- **Medications** - including antihistamines to relieve intestinal symptoms, hives, or sneezing and a runny nose. Bronchodilators can relieve asthma symptoms. These medications are taken after people have eaten a food to which they are allergic. They are not effective in preventing an allergic reaction when taken before eating the food. No medication in any form can be taken before eating a certain food that will prevent an allergic reaction.
- **Injections** are a non-approved treatment that involves injecting small quantities of the food extracts to which the patient is allergic. These shots are given on a regular basis for a long period of time with the aim of "desensitizing" the patient to the food allergen. Researchers have not yet proven that allergy shots relieve food allergies.

Resources

- HOTLINE: National Jewish Medical and Research Center in Denver. Nurses available to answer questions 1/800/222-LUNG <http://www.njc.org>
- ALLERGY REFERRALS: American Academy of Allergy, Asthma and Immunology
611 East Wells Street, Milwaukee, WI 53202, 1/800/822-2762.,
<http://www.aaaai.org/scripts/find-a-doc/main.asp>
- EXTRACTS FOR ALLERGY TESTING: U.S. Food and Drug Administration
Center for Biologics Evaluation and Research, 1/800/835-4709
<http://www.fda.gov/cber/index.html>
- ECZEMA: National Arthritis, Musculoskeletal and Skin Diseases Information Clearinghouse
One AMS Circle, Bethesda, MD 20892-3675, 301/495-4484
<http://www.nih.gov/niams/>
- American Academy of Dermatology: 930 N. Meacham Rd., Schaumburg, IL 60173
1/888/462-DERM, <http://www.aad.org>
- Eczema Association: 1221 S.W. Yamhill, Suite 303, Portland, OR 97205
03/228-4430
- LACTOSE INTOLERANCE and CELIAC SPRUE: National Digestive Diseases Information
Clearinghouse, Box NDDIC, Bethesda, MD 20892, 301/654-3810
<http://www.niddk.nih.gov/health/digest/pubs/lactose/lactose.htm>
<http://www.niddk.nih.gov/health/digest/pubs/celiac/index.htm>
- FOOD CONTENTS: U.S. Department of Agriculture, Food and Nutrition Information Center
301/436-7725, <http://www.nalusda.gov/fnic/index.html>
- RECIPES: American Dietetic Association: 216 W. Jackson Boulevard, Chicago, IL 60606-6995
1/800/877-1600, <http://www.eatright.org>
- RESOURCES: Food Allergy and Anaphylaxis Network, 10400 Eaton Place, Suite 107, Fairfax, VA
22030, 1/800/929-4040, <http://www.foodallergy.org/>
- American College of Allergy, Asthma and Immunology: 85 W. Algonquin Road, Suite 550
Arlington Heights, IL 60005, 1/800/842-7777, <http://allergy.mcg.edu>
- Asthma and Allergy Foundation of America: 1125 15th Street, N.W., Suite 502
Washington, DC 20036, 1/800/7-ASTHMA, <http://www.aafa.org>
- www.foodallergy.org/
- www.niaid.nih.gov/factsheets/food.htm

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www.foodallergy.org/
www.drrapp.com

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