

# Allergies and Food Safety

A food allergy is a potentially serious response to consuming certain foods or food additives. For those who are sensitive, a reaction can occur within minutes or hours, and symptoms can range from mild to life threatening. The eight leading causes of food allergies are milk, eggs, fish, shellfish, tree nuts, peanuts, wheat, and soybeans. USDA's Food Safety and Inspection Service (FSIS) and the [U.S. Food and Drug Administration \(FDA\)](#) both have laws requiring that all the ingredients in a food product be listed on the food label.

- [What is a food allergy?](#)
  - [How many Americans have food allergies?](#)
  - [What are common symptoms of an allergic reaction to food?](#)
  - [What should a person do who exhibits symptoms caused by a food allergy?](#)
  - [Is there a cure for food allergies?](#)
- 
- [What foods cause the majority of allergies?](#)
  - [Do red meat and poultry cause allergic reactions?](#)
  - [Can people have an allergic reaction to meat and poultry products?](#)
  - [How do you know if a food contains a major allergen?](#)
  - [How do you know if food was produced in a facility that also uses an allergic ingredient?](#)
  - [Does the Food Allergens Labeling and Consumer Protection Act \(FALCPA\) apply to meat, poultry, and egg products under FSIS jurisdiction?](#)
  - [Can food ingredients cause allergic reactions?](#)
  - [How can you know if there is monosodium glutamate \(MSG\) in a processed meat or poultry product?](#)
  - [What happens if FSIS discovers an allergen in a meat or poultry product that is not listed in the ingredient statement?](#)
  - [What should you do if you believe a food products contains an allergen that is not listed in the ingredients statement?](#)
  - [For More Information](#)

## What is a food allergy?

A food allergy is a specific type of adverse food reaction involving the immune system. The body produces what is called an allergic, or immunoglobulin E (IgE), antibody to a food. Once a specific food is ingested and binds with the IgE antibody, an allergic reaction ensues.

[\[Top of Page\]](#)

## How many Americans have food allergies?

Food allergies affect about 2 percent of adults and 4 to 8 percent of children in the United States. Each year in the U.S., it is estimated that anaphylaxis to food results in 30,000 emergency room visits, 2,000 hospitalizations, and 150 deaths.

[\[Top of Page\]](#)

## What are common symptoms of an allergic reaction to food?

Food allergies are the leading cause of anaphylaxis, a sudden, severe and potentially life-threatening allergic reaction. Anaphylaxis can be caused by food allergies, insect stings, or medications.

Symptoms of food allergies typically appear from within minutes or up to 2 hours after a person has eaten the food to which they are allergic. Allergic reactions can include:

- Hives
- Flushed skin or rash
- Tingling or itchy sensation in the mouth

- Face, tongue, or lip swelling
- Vomiting and/or diarrhea
- Abdominal cramps
- Coughing or wheezing
- Dizziness and/or lightheadedness
- Swelling of the throat and vocal cords
- Difficulty breathing
- Drop in blood pressure

[\[Top of Page\]](#)

### **What should a person do who exhibits symptoms caused by a food allergy?**

Persons with a known food allergy who begin experiencing symptoms while, or after, eating a food should initiate treatment immediately, and go to a nearby emergency room if symptoms progress.

The prompt administration of epinephrine by an autoinjector (EpiPen) during the early symptoms of anaphylaxis may help prevent serious consequences.

[\[Top of Page\]](#)

### **Is there a cure for food allergies?**

There is no cure for food allergies. Some food allergies can be outgrown, and studies have shown that the severity of food allergies can change throughout a person's life. The best preventative is the strict avoidance of food allergens.

[\[Top of Page\]](#)

### **What foods cause the majority of allergies?**

While more than 160 foods can cause allergic reactions in people with food allergies, the [Food Allergen Labeling and Consumer Protection Act \(FALCA\)](#) has identified the eight most common allergenic foods. These eight foods account for 90 percent of food allergic reactions. They are: milk, eggs, fish (such as bass, flounder, cod), crustacean shellfish (such as crab, lobster, shrimp), tree nuts (such as almonds, walnuts, pecans), peanuts, wheat, and soybeans. These eight, and any ingredient that contains protein derived from one or more of them, are designated as "major food allergens" by the FALCPA, which was passed by Congress in 2004 and became effective in 2006.

[\[Top of Page\]](#)

### **Do red meat and poultry cause allergic reactions?**

Allergies to red meat are extremely rare in the general population.

According to the National Institutes of Health, allergies to poultry meat is a distinct disorder with cross-reactivity among chicken, turkey, and other poultry. People with allergies to hen's eggs may cross-react to other types of eggs (like duck and quail eggs) and poultry, especially chicken. While most people who are sensitive to eggs can eat chicken, there is one protein that is present in both eggs and poultry that can cause allergies to both foods.

[\[Top of Page\]](#)

### **Can people have an allergic reaction to meat and poultry products?**

Some processed meat and poultry products (e.g., hot dogs, chicken nuggets, and canned soup) may be formulated with known allergenic ingredients, such as nonfat dry milk or hydrolyzed wheat protein, that must be listed in the ingredient statement. Therefore, consumers should carefully evaluate the ingredients statement on all meat and poultry products.

In addition to complete ingredient labeling, FSIS supports practices that promote accurate informative product labeling including voluntary statements on labels that alert people who have sensitivities or intolerances to the presence of specific ingredients. For example, a phrase such as "Contains: milk, wheat gluten, soy" has been accepted by the Agency on labeling immediately following the ingredients statement. Additionally, further clarification of the source of a specific ingredient in a parenthetical statement in the ingredients statement on labeling, e.g., "whey (from milk)," is encouraged as a means of informing consumers who may be alerted to a more recognizable term.

[\[Top of Page\]](#)

#### **How do you know if a food contains a major allergen?**

All food products containing two or more ingredients are required by Federal regulations to bear an ingredients statement listing all ingredients by common or usual name in descending order of predominance. In addition, on January 1, 2006, FALCPA), passed by Congress in 2004, became effective. The FALCPA applies only to consumer packaged foods regulated by the Food and Drug Administration (FDA). FDA regulates all foods except meat, poultry, and egg products, which are regulated by the Food Safety and Inspection Service (FSIS).

[\[Top of Page\]](#)

#### **How do you know if food was produced in a facility that also uses an allergic ingredient?**

FALCPA's labeling requirements do not apply to the potential or unintentional presence of major food allergens in foods resulting from "cross-contact" situations during manufacturing, e.g., because of shared equipment or processing lines. In the context of food allergens, "cross-contact" occurs when a residue or trace amount of an allergenic food becomes incorporated into another food not intended to contain it. FDA guidance for the food industry states that food allergen advisory statements, e.g., "may contain [allergen]" or "produced in a facility that also uses [allergen]" should not be used as a substitute for adhering to current good manufacturing practices and must be truthful and not misleading. FDA is considering ways to best manage the use of these types of statements by manufacturers to better inform consumers.

In limited situations, FSIS labeling policies provide for the use of factual labeling statements about a product's manufacturing environment, e.g., "produced in a plant that uses peanuts," may be used where good manufacturing practices, and effective sanitation standard operating procedures (SSOPs), cannot reasonably eliminate the unintended presence of certain ingredients. For example, where chopped peanuts are used in making a dry Thai-style meat sauce mix, the necessity exists for a dry processing environment and, thus, the production equipment cannot be washed with water or other fluids. In this instance, peanut dust may become airborne and unavoidably contaminate other meat or poultry products manufactured in the same production area.

[\[Top of Page\]](#)

#### **Does the Food Allergens Labeling and Consumer Protection Act (FALCPA) apply to meat, poultry, and egg products under FSIS jurisdiction?**

No. The FALCPA passed by Congress did not amend or implement regulations and policies for meat, poultry, and egg products in the acts related to them: the [Federal Meat Inspection Act \(FMIA\)](#), the [Poultry Products Inspection Act \(PPIA\)](#), and the [Egg Products Inspection Act \(EPIA\)](#). FSIS encourages the use of allergen statements, consistent with FALCPA, and other statements that highlight the presence or absence of ingredients of public health concern; particularly the "big eight" allergens. FSIS will consider rulemaking to require allergen statements if it does not continue to observe, through its prior label approval system, widespread voluntary compliance with the use of allergen statements on meat, poultry, and egg product labels. The Agency's compliance policy guide on the use of allergens statements can be found at [http://www.fsis.usda.gov/Regulations\\_&Policies/Labeling\\_Allergens/index.asp](http://www.fsis.usda.gov/Regulations_&Policies/Labeling_Allergens/index.asp).

[\[Top of Page\]](#)

### **Can food ingredients cause allergic reactions?**

Yes, some food ingredients can cause allergic reactions (e.g., soy protein concentrate and hydrolyzed wheat protein). In all cases, ingredients must be listed on the product label, in the ingredients statement in order by weight, from the greatest amount to the least.

Substances such as spices and spice extractives may be declared as "natural flavors," "flavors," or "natural flavoring" on meat and poultry labels without naming each one. This is because they are used primarily for their flavor contribution and not their nutritional contribution.

[\[Top of Page\]](#)

### **How can you know if there is monosodium glutamate (MSG) in a processed meat or poultry product?**

MSG is classified as a flavor enhancer by Federal regulation. When it is added to a product, it must be identified as "monosodium glutamate" on the label. MSG and hydrolyzed protein are related. MSG is the sodium salt of glutamic acid. Glutamic acid is an amino acid, one of the building blocks of protein. It is found in virtually all food and, in abundance, in food that is high in protein, including meat, poultry, cheeses, and fish. Labeling is required when MSG or hydrolyzed protein is added as a direct ingredient.

Substances such as dried meat, poultry stock, meat extracts, or hydrolyzed protein must be listed on the label by their common or usual name because their primary purpose is not flavor. They may be used as flavor enhancers, binders, or emulsifiers. They must be labeled using the species of origin of the additive, for example, dried beef, chicken stock, pork extract, or hydrolyzed wheat protein.

[\[Top of Page\]](#)

### **What happens if FSIS discovers an allergen in a meat or poultry product that is not listed in the ingredient statement?**

Undeclared allergens in a meat or poultry product results in a product recall. A product is misbranded under the FMIA, PPIA, or EPIA when it contains ingredients that are permitted but are not declared on product labeling. FSIS routinely conducts recall effectiveness checks to verify recalling firms notify their customers of the recall and that steps are taken to make certain that the product is no longer available to consumers. For more information on recalls or to receive e-mail notification when recalls or public health alerts are issued, go to [http://www.fsis.usda.gov/Fsis\\_Recalls/index.asp](http://www.fsis.usda.gov/Fsis_Recalls/index.asp).

[\[Top of Page\]](#)

### **What should you do if you believe a food products contains an allergen that is not listed in the ingredients statement?**

Separate government agencies are responsible for protecting different segments of the food supply. For help with meat, poultry and egg products, call the toll-free USDA Meat and Poultry Hotline at 1-888-MPHotline (1-888-674-6854).

For help with non-meat food products (cereals, fish, produce, fruit juice, pastas, cheeses, etc.), call or write to the FDA. Check your local phone book under U.S. Government, Health and Human Services, to find an FDA office in your area. The FDA's Center for Food Safety and Applied Nutrition can be reached at 1-888-723-3366.

[\[Top of Page\]](#)

### **FOR MORE INFORMATION**

American Academy of Allergy Asthma & Immunology  
<http://www.aaaai.org/>

- Asthma and Allergy Foundation of America  
<http://www.aafa.org/>
- Eatright: The American Dietetic Association

<http://www.eatright.org/>

- FDA-CFSAN Information about Food Allergens

<http://www.fda.gov/Food/default.htm>

- Food Allergy & Anaphylaxis Network,

<http://www.foodallergy.org> . To place an order for publications, call 800-929-4040. For questions, call 703-691-3179.

- International Food Information Council Foundation

[http://www.foodinsight.org/Resources/Detail.aspx?topic=Food\\_Allergy\\_Resource\\_Page](http://www.foodinsight.org/Resources/Detail.aspx?topic=Food_Allergy_Resource_Page)

- National Institute of Allergy and Infectious Diseases

<http://www.niaid.nih.gov>

- MedicAlert

<http://www.medicalert.org>

- National Food Safety Database

<http://www.foodsafety.gov> (search on Food Allergies)

[\[Top of Page\]](#)

*Last Modified Dec 01, 2016*