



# Food Allergies and Food Intolerances

## Understanding Food Allergies in the Family Child Care Home



Sources:

*Food Allergy: An Overview* National Institute of Allergy and Infectious Diseases—National Institutes of Health. November 2010.

American College of Allergy, Asthma, and Immunology—[www.acaai.org](http://www.acaai.org)

KidsHealth.org The Nemour Foundation.

Food Allergy Research & Education—[www.foodallergy.org](http://www.foodallergy.org)

Nutrition and Wellness Tips for Young Children: Provider Handbook for the CACFP Appendix B. Team Nutrition USDA.

*Food Allergies & Sensitivities* The Learning Zone Express 2011

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Recent studies have found that almost 1 in 20 young children under the age of 5 years, and almost 1 in 25 adults, are allergic to at least one food. Other studies show that food allergy, especially peanut allergy, is on the rise. When any child in the child care setting has a reaction to foods, the whole child care is affected.

## **What is Food Allergy?**

Food Allergy is an abnormal response to food triggered by the body's immune system. Your immune system responds to a harmless food—certain proteins in the food—as if it were a threat. The first time a person with a food allergy is exposed to the food, no symptoms occur; but the first exposure primes the body to respond the next time.

Usually you are exposed to a food when you eat it. Sometimes, though, exposure can occur without your knowledge as may be true with a peanut allergy. Peanut allergy may be triggered by touching peanuts or breathing peanut dust. Someone with peanut allergy may then have a reaction the first time a peanut product is eaten.

The response may be mild or in some cases, severe. An allergic reaction to food usually takes place within a few minutes to several hours after exposure to the food and happens even in exposure to small amounts.

## **Symptoms of Food Allergy**

- ◆ Itching in the mouth
- ◆ Swelling of lips and tongue
- ◆ Vomiting, diarrhea, or abdominal cramps and pain
- ◆ Hives
- ◆ Worsening of eczema
- ◆ Tightening of the throat or trouble breathing—seek emergency treatment
- ◆ Drop in blood pressure—seek emergency treatment

## **What is Anaphylaxis?**

**Anaphylaxis is a severe form of allergic reaction and may cause life-threatening symptoms.** These include the above mentioned trouble with breathing and drop in blood pressure. Anaphylaxis caused by an allergic reaction to food is unpredictable. It is important to develop food allergy action plan if you have any children in care with food allergy.

Generally, you are at greater risk for developing food allergies if you come from a family with allergies. These allergies are not necessarily from foods, but other allergic diseases such as asthma or eczema.

Anaphylaxis caused by an allergic reaction to certain foods is highly unpredictable. The severity of a given attack does not predict the severity of future attacks. The response will vary depending on several factors, such as:

- ★ Your sensitivity to the food
- ★ How much food you are exposed to
- ★ How much food entered your body

## How do you know if a person is having an anaphylactic reaction?

Anaphylaxis is highly likely if at least **one** of the following three conditions occurs:

1. Within minutes or several hours of the onset of an illness, a person has skin symptoms (redness, itching, hives) or swollen lips and either:
  - ▲ Difficulty breathing, or
  - ▲ A drop in blood pressure
2. A person was exposed to an allergen likely to cause an allergic reaction, and within minutes or several hours, **two** or **more** of the following symptoms occur:
  - ▲ Skin symptoms or swollen lips
  - ▲ Difficulty breathing
  - ▲ A drop in blood pressure
  - ▲ GI symptoms, such as vomiting, diarrhea, or cramping
3. A person, exposed to an allergen previously known to cause an allergic reaction in that person, experiences a drop in blood pressure

Food allergy is the leading cause of anaphylaxis. Medications, insect stings, and latex allergy can also cause an allergic reaction that leads to anaphylaxis.

Any anaphylactic reaction may become dangerous and needs to be evaluated by a healthcare professional.



## Common Food Allergens in Infants, Children, and Adults

In infants and children, the most common foods that cause allergic reactions are:

**Egg**



**Milk**



**Peanut**



**Tree nuts**



**Soy**



**Wheat**



In adults, the most common foods that cause allergic reactions are:

**Shellfish**



**Peanut**



**Tree nuts**



**Fish**



Food allergies generally develop early in life but can develop at any age. For example, milk allergy tends to develop early in life, shrimp allergy generally develops later in life.

Children often outgrow egg, milk, and soy allergies. People who develop allergies as adults usually have those allergies for life. Children generally do not outgrow an allergy to peanut.

Foods that are eaten routinely increase the likelihood that a person will develop allergies to that food. In Japan, for example, rice allergy is more frequent than in the United States. In Scandinavia, codfish allergy is more common than in the United States.

## **Oral Allergy Syndrome**

Oral allergy syndrome (OAS) , also known as pollen—food syndrome, is an allergy to certain raw fruits and vegetables, such as apples, cherries, kiwis, celery, tomatoes, and green peppers. OAS occurs in people with hay fever, especially spring hay fever due to birch pollen and late summer hay fever due to ragweed pollen.

For people with OAS, eating the raw food causes an itchy, tingling sensation in the mouth, lips, and throat. It can also cause swelling of the lips, tongue, and throat; watery itchy eyes and other respiratory symptoms. Just handling the raw fruit or vegetable may cause a rash, itching, or swelling where the juice touches the skin. If this type of allergy is suspected, it needs to be addressed with a health care professional.

Cooking or processing easily breaks down the proteins in the fruit or vegetables that cause OAS. OAS typically does not occur with cooked or baked fruits and vegetables, or processed fruits such as applesauce. Even peeling the fruit or vegetable helps, as most trigger proteins are in the peel.

## **Milk Allergy in Infants and Children**

Almost all infants are fussy at times. Some babies, however, are very fussy because they have an allergy to the protein in cow's milk, which is the basis for most commercial infant formulas.

A person at any age can have a milk allergy, but it is more common among infants (about 2-3% of babies), though most outgrow it. Typically, a milk allergy goes away on its own by the time a child is 3 to 5 years old. Some children do not outgrow the allergy.

A milk allergy occurs when the immune system mistakenly sees the milk protein as a threat. This starts the allergic reaction, which can make an infant to be fussy and irritable and cause stomach upset and other symptoms. Most infants allergic to cow's milk also react to goat's milk and sheep's milk, and some also react to the protein in soy milk.

Infants who are breastfed have a lower risk of developing a milk allergy than those who are formula fed. Researchers don't fully understand why some babies develop a milk allergy and others don't. It is believed that in many cases allergy is genetic.

*A milk allergy is not the same as lactose intolerance, the inability to digest the sugar in milk. Lactose intolerance is rare in infants and more common in older children and adults.*

Symptoms of cow's milk protein allergy will generally appear with the first few months of life, often within weeks after the introduction of cow's milk-based formula. An infant may experience symptoms either very quickly after feeding (rapid onset) or not until 7-10 days after consuming the cow's milk protein (slower onset).

The slower onset reaction is more common and more difficult to diagnose because the same symptoms may occur with other health conditions. Symptoms include

- Loose stools, possibly containing blood
- Vomiting
- Gagging
- Refusing food
- Irritability or colic
- Skin rashes, like eczema

Rapid onset reactions and come on suddenly with symptoms including:

- Irritability
- Vomiting
- Wheezing
- Swelling and hives
- Bloody diarrhea
- Anaphylaxis

If a milk allergy is suspected, the infant needs to be seen by a doctor. There is no single lab test to accurately diagnose a milk allergy, so it may take some time. Once a milk allergy is diagnosed in an infant there are several possibilities for infant formula.

- Soy protein based formula, if the infant can tolerate soy. No medical statement required for Yours for Children, even though you should have documentation in the child's EEC records.
- Hypoallergenic formulas, of which there are 2 major types:
  - ▲ Extensively hydrolyzed formula that have the cow's milk protein broken down into very small particles so the proteins are less allergenic. Examples of this type of formula are: Alimentum, Nutramigen, and Pregestimil.
  - ▲ Amino acid based formula which contain protein in its simplest form. This type is recommended if the baby doesn't do well on the above formulas. Examples are Neocate, Elecare, and Nutramigen AA.

If an infant in your care is being fed a hypoallergenic formula, you need to have medical documentation in the child's EEC records. Forward a copy to the Yours for Children office.

## Food Allergy: Pregnancy, Breastfeeding, and Introducing Solid Foods to Infants

Healthcare experts still do not have enough conclusive evidence to tell pregnant women, nursing mothers, and parents of infants how to prevent food allergy from developing in their children. Be sure to advise parents to talk with their doctor before changing their baby's diet.



Here's what the healthcare community knows now:

### Pregnancy

- ◆ When you are pregnant, you should eat a balanced diet.
- ◆ If you are allergic to a food, avoid it.
- ◆ If you are not allergic to foods, especially the common food allergens listed on page 3, you should **not** avoid them. There is no conclusive evidence that avoiding these foods will prevent food allergy from developing in your child in the future.

### Breastfeeding

- ◆ Healthcare experts recommend that mothers feed their babies only breast milk for the first 4 months of life because of the health benefits of breastfeeding.
- ◆ Mothers who breastfeed do not need to avoid common food allergens because there is no conclusive evidence that avoiding these foods will prevent food allergy from developing in their infants.
- ◆ If an infant is diagnosed with a milk allergy, mothers then would want to limit dairy products in their diet as the milk protein can cross into breast milk. These mothers would want to make sure they are getting calcium and other important nutrients found in milk from other sources.

### Introducing Solid Foods

- ◆ The American Academy of Pediatrics currently recommends that you do not introduce solid food into a baby's diet until 4—6 months of age.
- ◆ There is no conclusive evidence to suggest that you should delay the introduction of solid foods beyond 4—6 months of age to avoid food allergy.
- ◆ There is no conclusive evidence to suggest that you should delay the introduction of most common potentially allergenic foods (see page 3) beyond 4—6 months of age. Delay will not prevent your child from developing an allergy to a food in the future. However, peanut products and nuts should never be served to a child under the age of 3 years due to the risk of choking.

## Food Intolerance and Food Sensitivities

Food intolerance and sensitivities are sometimes confused with food allergy. While some symptoms are the same, food intolerance causes symptoms in the digestive system that may involve other systems in the body. While all suspected food intolerance symptoms need to be brought to the attention of a health care professional, two points to remember about food intolerance or sensitivity:

- Doesn't involve the immune system
- Can be unpleasant but is rarely dangerous

Lactose intolerance is a common food intolerance caused by the body's inability to digest the sugar, lactose, found in milk. The body is not producing enough *lactase*, the enzyme needed to digest lactose. Lactose intolerance is uncommon in babies and young children under age 5. Becoming lactose intolerant at an older age is more common as lactase levels decline as we get older.

Another food intolerance is Celiac disease which develops when the body responds abnormally to gluten. Gluten is the protein found in wheat, barley and rye. The abnormal response does not involve the same cells as an allergic response and so the disease is not labeled a food allergy. Celiac disease causes a range of symptoms from mild to intense and long term leads to malabsorption of nutrients.

### Symptoms of food intolerance and sensitivity

#### Digestive Symptoms:

- ◇ Abdominal bloating
- ◇ Stomach pain
- ◇ Excessive burping and/or flatulence (gas)
- ◇ Increased mucus
- ◇ Reflux or Irritable Bowel Syndrome

#### Nervous System & Emotional Symptoms

- ◇ Anxiety
- ◇ Dark circles under eyes
- ◇ Headaches
- ◇ Mood Swings

#### Physical Signs & Symptoms

- ◇ Abnormal tiredness
- ◇ Nasal congestion
- ◇ Skin irritation
- ◇ Acne

#### Some causes of food intolerances and sensitivities:

- \* Eating a lot of the same food often
- \* Food additives, preservatives, coloring, and flavor enhancers
- \* Some medications
- \* Low levels of stomach acid
- \* Stress

## Preventing and Treating Food Allergy

There is currently no cure for food allergies. You can only prevent the symptoms of food allergy by avoiding the allergenic food. After a child in care has been diagnosed and you have written doctor's instructions identifying food(s) that the child is allergic to, strict avoidance of the food allergens are important to prevent serious consequences, including anaphylaxis. Be sure to forward a copy of the doctor's written instructions to the Yours for Children office.

### Read food labels

You must read the ingredient list on the label of each prepared food. Many allergens appear in prepared foods that you would not normally associate with those foods. Since 2006, U.S. food manufacturers have been required by law to list the ingredients in prepared foods. In addition, food manufacturers must use plain language to disclose whether their products contain any of the top allergenic foods. The 8 foods identified by law are: eggs, milk, fish, shellfish, tree nuts, peanuts, wheat, and soy beans. Those foods are pictured on page 3. There is also a list of ingredients on page 9 that identify other words that may indicate the presence of milk, egg, soy, and wheat.



Current food labeling laws do not apply to the potential or unintentional presence of major food allergens resulting from cross—contact in manufacturing. Food manufacturers statements such as “may contain milk” or “produced in a facility that also processes peanuts” may not be used as a substitute for adhering to current good manufacturing practices. The Food and Drug Administration is considering the ways to best manage the use of these types of statements.

### Keep clean

Simple measures of cleanliness can remove most allergens from the environment of a person with food allergies. For example, simply washing your hands with soap and water will remove peanut allergens. However, hand sanitizers alone were not effective and left traces of the peanut allergen on hands. Most household cleaners will remove allergens from surfaces.

### Be Prepared

Suggest that parents and doctors complete a Food Allergy Action Plan. A form can be found at the Food Allergy Research and Education website; [www.foodallergy.org](http://www.foodallergy.org) A copy of the plan is part of the child's medical records and will be invaluable to providing care for a food allergic child.

If a child has been prescribed Epinephrine for severe reactions, be sure that you are trained to administer or help the child administer the medication. The child may wear an emergency medical identification. Emergency medication such as this must have easy and quick access, including how you will pack the medication and the action plan for field trips.

## Food Labels/Ingredients that may indicate the presence of:

<b>Milk Proteins</b>	<b>Egg Protein</b>	Vegetable starch
Artificial butter flavor	Lysozyme	<b>Wheat Protein</b>
Butter	Meringue	All-purpose flour
Butter Fat	Ovalbumin	Bleached flour
Buttermilk Solids	Ovamucin Ovamucoïd	Bulgur (cracked wheat)
Carmel color	Ovovitellin	Bran
Carmel flavoring	Powdered egg	Cornstarch
Casein	Vitellin	Couscous
Caseinate	Whole egg	Durum wheat
Cheese	<b>Soy Protein</b>	Enriched flour
Cream curds	Gum arabic	Farina
“De-lactosed” whey	Bulking agent	Gelatinized starch
Demineralized whey	Carob	Gluten
Dried milk	Edamame	Graham flour
Dry milk solids	Emulsifier	Hard durum flour
Fully cream milk powder	Guar gum	High gluten flour
Ghee	Hydrolyzed vegetable protein (HVP)	Hydrolyzed vegetable protein
High protein flavor	Miso	Kamut
Lactalbumin and	MSG (monosodium glutamate)	Matzoh
Lactalbumin phosphate	Protein	Millers bran
Milk in all forms	Protein extender	Modified food starch
Milk derivate	Shoyu	MSG (monosodium glutamate)
Milk protein	Soy flour	Pasta
Milk solids	Soy nuts	Protein
Natural flavoring	Soy panthenol	Seitan
Pasteurized milk	Soy protein	Semolina
Rennet casein	Soy protein isolate or concentrate	Spelt
Skim milk powder	Soy sauce	Sprouted wheat
Sour cream (or solids)	Soybean	Triticale
Sour milk solids	Soybean oil	Unbleached flour
Whey	Stabilizer	Vegetable gum
Whey powder	Starch	Vegetable starch
Whey protein concentrate	Tamari	Vital gluten
Yogurt	Tempeh	Wheat bran
<b>Egg Protein</b>	Textured vegetable protein (TVP)	Wheat flour
Albumin	Thickener	Wheat germ
Binder	Tofu	Wheat gluten
Coagulant	Vegetable broth	Wheat starch
Egg white	Vegetable gum	White flour
Egg yolk or yellow		Whole wheat
Emulsifier Globulin		Whole wheat flour
Lecithin		
Livetin		

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 : Processed foods, such as lunch meats and baked goods, are all possible sources of food :  
 : allergens, typically milk and wheat. African, Asian, and Mexican cuisines often use peanut :  
 : products in preparation. Individuals with egg allergy should also avoid eggs from duck, :  
 : turkey, goose, etc. as these are known to be cross-reactive with chicken egg. :  
 : .....

## Food Allergies and Intolerances and the Child and Adult Care Food Program (CACFP)

It is possible that a child may have the first reaction in your care. Here are some ways a child may describe what they are experiencing:

 “This food is too spicy”	 “My mouth feels funny”
 “My tongue is hot”	 “My mouth itches”
 “My tongue feels like there is hair on it”	 “It feels like something is stuck in my throat”
 “There’s a frog in my throat”	 “It feels like there are bugs in my ear”
 “My lips feel tight”	 “It feels like there is a bump in the back of my throat”

A child may not always be able to tell the child care educator in words that she is having an allergic reaction. If you see a child doing some of these behaviors, she may be having an allergic reaction:

- ◆ If a child is pulling or scratching at his tongue, she may be having an allergic reaction.
- ◆ Some children’s voices may become hoarse or squeaky if they are having an allergic reaction.
- ◆ The child’s words may become slurred if his mouth is beginning to swell from an allergic reaction.

It is critical to work with parents with any suspected food allergy or intolerance. Whether you notice symptoms first or the child comes with a diagnosed food allergy there are documentation requirements for participation in the CACFP.

USDA regulations require substitutions or modifications in meals for children whose disabilities restrict their diets. Generally, children with food allergies or intolerances do not have a disability as defined by law, and the care giver would not be required to provide the food substitution. However, food allergies that may result in severe life-threatening anaphylaxis would meet the definition of “disability”. In this case the substitutions prescribed by the licensed medical authority must be made.

**In either case, be sure to have a medical statement and care plan on file stating the specific food allergy or intolerance and the specific food or foods that are to be avoided and food that should be provided instead.** You will find blank physician statement forms in the Yours for Children handbook and at [www.yoursforchildren.com](http://www.yoursforchildren.com). ***A copy of the medical statement must be forwarded to the Yours for Children office as soon as you have it. Make sure your YFCI provider number is on the form.***

Always actively supervise children while they are eating, and discourage food sharing. Pay particular attention during special events such as picnics, field trips, or parties.

Follow a regular menu whenever possible. It is still very important that all children, including food allergic or food intolerant children, receive a diet that contains a variety of foods for healthy growth and development.



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***Food Allergies & Food  
Intolerances  
May 2013***

***Nutrition Training  
FY 2013***

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## **Food Allergies & Food Intolerances**

**Nutrition Training 2013  
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**Successful completion meets your Nutrition  
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**Complete all the home study questions  
and submit to the YFCI office  
within two (2) weeks of receipt of this home study.**