

Food Allergies

WHAT YOU SHOULD KNOW



Thank you for your interest in *Food Allergy Basics*.

This nutritional educational packet contains a 12 page study guide, as well as a self test/training certificate, which fulfills two hours of training. This certificate is only valid if the self-test on the backside is completed. You are expected to review the enclosed materials thoroughly prior to completing the self-test. Answers to all questions are contained in the accompanying study guide.

Remember, the training certificate is only valid after review of the enclosed materials and completion of the self test.

If you have any questions as to the proper use of this packet, please contact the ICCB office and we will be glad to assist you.

Patti A. Elste
Nutrition Director
Illinois Child Care Bureau

Many children seem to have bad reactions to foods - notably anything green! But some children are truly allergic to common foods, and that can create more problems than just refusing to eat their vegetables. For a small number of these youngsters, avoiding foods like peanuts and shellfish is a matter of life or death. Fortunately, these life threatening reactions are quite rare.

Although many parents believe that their child has food allergies, only three to six percent of youngsters truly are food allergic. While any food can cause an allergy, 90% are due to milk, eggs, wheat, soybeans, shellfish, fish, peanuts, and tree nuts (like walnuts).



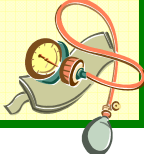
Food allergies are often inherited and are frequently associated with other allergic conditions, such as eczema, asthma, or hay fever.

What causes food allergies?

Our wonderful immune system protects us against foreign substances that enter the body. In the case of food allergy, the immune system misinterprets certain foods as harmful and releases chemicals to protect the body from injury. The resulting reaction is often unpredictable and varies from child to child. Before having a food allergy reaction, a sensitive child must have been exposed to the food at least once before, or could also be sensitized through breast milk. It is the second time the child eats the food that the allergic symptoms happen. At that time, when IgE antibodies react with the food, histamines are released, which can cause the child to experience hives, asthma, itching in the mouth, trouble breathing, stomach pains, vomiting, and/or diarrhea. Symptoms can begin almost immediately or appear days after eating the offending food. For that reason, it is sometimes difficult for parents to figure out what food was responsible.

SYMPTOMS OF FOOD ALLERGIES

VOMITING DIARRHEA CRAMPS
HIVES SWELLING
ECZEMA
**ITCHING OR SWELLING OF THE LIPS,
TONGUE, OR MOUTH**
ITCHING OR TIGHTNESS IN THE THROAT
DIFFICULTY BREATHING
WHEEZING
LOWERED BLOOD PRESSURE



According to the National Institute of Allergy and Infectious Disease, it does not take much of the food to cause a severe reaction in highly allergic people. In fact, as little as 1/44,000 of a peanut kernel can cause an allergic reaction for severely allergic individuals.

The symptoms of food allergy may resemble other problems or medical conditions. Always consult your child's physician for a diagnosis.

In rare cases, a food allergy causes anaphylaxis (ana-fill-axis), a potentially fatal reaction. Symptoms include severe swelling of the throat so that breathing becomes difficult or impossible, sweating, pale skin, rapid heart rate, and a drop in blood -pressure. If this happens, call "911" for immediate treatment.

Treatment for food allergies:

The only treatment of a food allergy is to avoid the food - at least for a while. Most children with mild symptoms outgrow their allergies within a few years. In one study, a third of children who avoided allergy-causing foods for one to two years could begin eating the foods again.

It is frequently not easy to pin down which food is causing the symptoms. Some physicians will place the child on an "elimination diet." The youngster will start by eating foods that usually are non-allergic: rice, vegetables, non-citrus fruits, fresh meats and poultry. Then, one by one, other foods are reintroduced into the diet. Sometimes, pricking the skin and exposing it to a diluted preparation of the suspected food can determine the cause. If this doesn't work, the doctor may send samples of the child's blood to a lab for testing.

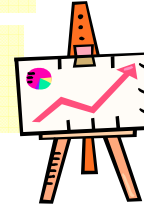
When parents must remove a food from their child's diet, they should make certain that good nutrition is not jeopardized. Children who can't eat peanuts certainly will not be deprived, but that's not true for youngsters who can't tolerate milk. It may be necessary to give the child vitamin and mineral supplements if he/she is unable to eat certain foods.



From 1997 to 2007, reported food allergies increased

18% among children under age 18 years.

**Peanut allergy doubled in children over a
five-year period (1997-2002).**



This increase in the prevalence of food allergies has the experts scrambling to determine the reasons why. Currently, there are three possible explanations but no agreement that any one of these is the main culprit in this dramatic increase.

1) More awareness by parents and caregivers

Two researchers from the Centers for Disease Control reviewed four major nutrition surveys conducted between 1997 – 2007. After their review of the research they concluded this much about “increased awareness”.

*“When we looked at health-care surveys filled out by parents and those from the health care sector, we saw the increase across the surveys **so this may be more than just increased awareness**. To see almost a tripling of (ER) visits in a 13 year period is pretty good evidence that this isn’t just parents hearing about food allergies on the news and then thinking their children have it. We used four different surveys, and to see an increase in food allergies in all of those surveys is very telling.” (Dr. Amy Branum)*

2) The Hygiene Hypothesis

The Hygiene Hypothesis is “based on the notion that today’s children are less exposed to germs and other disease-causing substances than previous generations – preventing their immune systems from developing the same responses to protect against invaders. The immune system then overreacts to relatively harmless substances, causing allergies, eczema or asthma. (LA Times; Nov. 17, 2009)

3) Chemical toxins; pesticides in our food.

In the last 15 years, novel proteins, allergens and toxins have been introduced into the American food supply in order to enhance profitability for the food industry. No human trials were ever conducted to assess the safety of these chemicals on children.

Robyn O’Brien

Founder of Allergy Kids Foundation

www.allergykids.com

Perhaps, the reason for the increase in food allergies is a combination of these three theories. Regardless, it is imperative that the experts come to some conclusions as to what parents, especially those whose children are at increased risk of having food allergies, can do to potentially prevent the onset or the ultimate severity of the allergy. Dr. Amy Braun, CDC researcher, states that further scientific studies are necessary to determine the actual causes of food allergies in children and why they are increasing among our children. She concludes: *“Getting to the source of what is causing this trend is critical!”*

Exciting research is being conducted at Cambridge University Hospitals in the United Kingdom regarding peanut allergies. Researchers gave allergic children small amounts of peanuts to eat daily, usually starting with 1 mg. The peanut quantity was increased carefully every two weeks, until the children could eat about five peanuts. The results showed that 21 of the 23 children, or 91 percent, can safely eat at least five peanuts every day without any reaction. Since peanut allergies often result in anaphylaxis, this research is extremely valuable and further trials are being planned involving a larger sampling of children to see if these results can be replicated.

FEEDING BABY: AVOIDING FOOD ALLERGIES

What’s the best way to avoid food allergies once a baby has mastered single-grain cereals and is ready to move on to new foods?

As a day care provider, it is extremely important to coordinate the introduction of new foods with the baby’s parent since it is recommended that new foods be introduced one at a time with a spacing of several days between them. If a baby is given three new foods over the span of a few days and she develops an allergic reaction, you won’t know which of the foods provoked it. It may be a wise policy to not introduce any new food until the parent has done so at home. This will enable the parent to make the decisions and relieve you of the burden of dealing with a potentially dangerous reaction to a new food.

Regardless, with any baby starting solids, you’ll want to be on the lookout for allergic reactions. There are more than 160 allergenic foods, but the eight foods mentioned earlier, milk, eggs, peanuts, tree nuts, fish, shellfish, soy and wheat are the culprits 90% of the time. Food allergy symptoms (page 2) usually appear very soon after the food is eaten -- within a few minutes to a couple of hours.

Severe Food Allergy Symptoms:



911

If a baby in your care is having trouble breathing, has swelling on her face, or develops severe vomiting or diarrhea after eating, don't take time to call the parent or doctor. Call 911 immediately. *Then call the parent.* Severe allergic reactions can be fatal very quickly.

Dealing With Mild Food Allergies in Baby

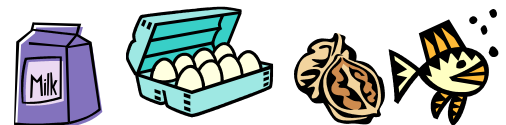
If you see mild symptoms, such as hives or a rash, consult with the baby's parent to report your findings. Hopefully, the offending food can be easily identified and avoided in the future, at least for the time being. However, if the baby seems to be showing allergic symptoms often, you may want to suggest that the parent contact his/her pediatrician, who may decide to perform some allergy testing for the child. Once the baby's specific allergies are identified, the doctor will supply an action plan for managing the allergies (usually, eliminating the food from the baby's diet) and dealing with accidental exposures.

Remember, just because a baby's initial allergic reaction to a new food may be mild, it may not stay that way. Subsequent exposures may be similar or they could be much worse. All children in your care must be carefully observed for signs and symptoms of food allergies at all times.

Some allergies do go away with time. Peanut, tree nut, and shellfish allergies tend to persist, while egg and milk allergies often go away as children get older.

The Thought on Delaying Introduction of More Allergic Foods

Until very recently, the American Academy of Pediatrics recommended that parents wait until age 1 to introduce dairy products, age 2 to introduce eggs, and age 3 to add peanuts, tree nuts, and fish. In early 2008, however, the AAP amended these recommendations, which were based on expert opinion rather than specific evidence.



The new AAP guidelines say that unless there is a significant history of food allergies in a child's family, there's no evidence that waiting until after a year to introduce the potentially allergic foods reduces a child's risk of developing allergies. In fact, there is some evidence that early introduction of some of these foods may make a child less likely to become allergic.

Many pediatricians still recommend waiting until a baby is a bit older -- 9 or 10 months -- before offering these foods. Even if there's no added risk of causing an allergy, they note that an allergic reaction may be easier to manage in an older baby. And some pediatricians, concerned about the particular severity of allergic reactions to peanuts and shellfish, still suggest staying away from them until your child is up to 3 years old.

Whole cow's milk should not be given to babies younger than 1 year old because the proteins in whole milk can irritate the stomach. Yogurt and soft cheeses are fine, however, because the proteins in these dairy products are broken down and less likely to cause tummy trouble. You should also still wait until at least 1 – some experts say 2 -- to introduce honey, which can cause a potentially serious disease called infant botulism.

The regulations of the Child and Adult Care Food Program state that until the baby is 1 year old the following foods should not be served due partially to potential allergic reactions and in some cases choking hazards:

- Whole cow's milk
- Egg whites
- Nuts, peanuts, peanut butter
- Fish, fish sticks, shellfish

This list includes six out of the eight foods that cause 90% of allergic reactions. Remember, however, that a child (or adult) may be allergic or become allergic to any food and since the reaction may not be immediate, it is necessary to be vigilant at all times with the children in your care.



MILK AND SOY ALLERGIES:

Milk has something for everybody - calcium, phosphorus, protein . . . and allergic reactions. Of the foods most often guilty of causing food allergy, milk is the greatest offender. And since milk is the first food infants receive, food allergies may be evident in the newborn period, particularly those babies with a family history of allergies. Even mother's milk can be a source of trouble. Although there has never been a confirmed case of a baby being allergic to breast milk itself, substances that pass through the breast milk from the mother's diet can cause reactions. In a study of colicky babies, one out of five improved when milk was eliminated from their mother's diet. In another study, infants with eczema had a decrease in the rash when their mothers stopped eating eggs. Excessive gas and crying, sleeplessness, diarrhea, poor weight gain or vomiting are symptoms suggestive of milk allergy in formula fed infants. Since there are other causes for the same symptoms, parents should check with their child's physician to make sure that nothing else is going on. If the formula is the problem, a switch to a soy formula (such as IsomilR) may solve the problem. Fortunately, by their third birthday most children can tolerate foods they were allergic to in earlier months.

SYMPTOMS OF MILK ALLERGY IN INFANTS

colic (fussy baby)
blood in your baby or
child's stool
poor growth
sleeplessness
diarrhea
vomiting

Food intolerances in children may be mistaken for a food allergy. Some examples include:

LACTOSE:

Children whose bodies do not produce enough of the lactase enzyme to digest lactose, the major sugar in milk. Large amounts of undigested lactose then overwhelm the large intestines - producing gas, diarrhea, and recurrent abdominal pain.

SULFITES

Sulfites are used as preservatives on dried fruits and potato products.

MONOSODIUM GLUTAMATE (MSG):

This flavor enhancer frequently used in Chinese restaurants can cause headaches, diarrhea, and, in severe cases, difficulty breathing.

SUGAR:

Many parents and teachers swear that children become "hyper" and unmanageable after eating sugary foods. Several controlled studies, however, have found that only a small number of kids are actually sensitive to sugar. Therefore, in the vast majority of cases food allergies are unrelated to the attention deficient disorder and other behavioral conditions.

FOOD ADDITIVES:

An occasional child will react to artificial flavors, food dyes, and other food additives. A youngster who has a "bad" reaction to an antibiotic, for example, may be sensitive to the artificial flavor used to improve the medication's taste.

FALCPA is an amendment to the Federal Food, Drug, and Cosmetic Act requiring that the label of a food that contains an ingredient that is or contains protein from a "major food allergen" declare the presence of the allergen in the manner described by the law. It was enacted so that food allergic consumers and their caregivers could more accurately identify and avoid foods that contain major food allergens. Since many food processing plants process more than one item and many people can be "highly" allergic to very small amounts of an allergen, this law is a life-saver. For example, chocolate chip granola bars may not have peanuts listed on their ingredient list, however, they may be processed on equipment that also makes peanut butter granola bars. As a result, the chocolate chip granola bars may contain peanut residues. In this case, FALCPA ensures that the consumer is aware of this fact and can take precautions to avoid these if necessary.

When labeling for allergens, food manufacturers have two options.

The first option is to include the name of the food source in parenthesis following the common or usual name of the major food allergen in the list of ingredients.

FOR EXAMPLE:

Ingredients: Enriched flour (**wheat** flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated soybean oil, and/or cottonseed oil, high fructose corn syrup, whey (**milk**), **eggs**, vanilla, natural and artificial flavoring) salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin (**soy**), mono-and diglycerides (emulsifier)

The second option is to place the word "Contains" followed by the name of the food source from which the major food allergen is derived, immediately after or adjacent to the list of ingredients, in type size that is no smaller than the type size used for the list of ingredients.

For example:

Contains Wheat, Milk, Egg, and Soy



INGREDIENTS: WHOLE GRAIN ROLLED OATS, SUGAR, CANOLA OIL, PEANUT BUTTER (PEANUTS, SALT), CRISP RICE (RICE FLOUR, SUGAR, MALT, SALT), HIGH FRUCTOSE CORN SYRUP, SOY PROTEIN, BROWN SUGAR SYRUP, SALT, SOY LECITHIN, BAKING SODA, ALMOND FLOUR, PECAN FLOUR, HAZELNUT FLOUR, WALNUT FLOUR.
CONTAINS SOY, ALMOND, PEANUT, PECAN, HAZELNUT AND WALNUT INGREDIENTS.



Reading those nutrition facts labels is extremely important in order to avoid a potentially, life threatening allergic reaction.

Food allergies trigger more than reactions. They can also initiate misinformation and misconceptions that may discourage food allergy sufferers from seeking help for their children or inspire them to blame any ailment their child may have on food allergies. Here are the most common food allergy myths:

MYTH: ANY NEGATIVE REACTION TO A FOOD IS A FOOD ALLERGY.

FACT: Adverse reactions to food can have many causes. If something does not "agree with your child," it does not necessarily mean your youngster is allergic to it. Food allergy is a very specific reaction involving the immune system of the body, and it is important to distinguish food allergy from other food sensitivities. Whereas food allergies are rare, food sensitivities are more common. A good example of a food intolerance is lactose intolerance. Lactose intolerance may result in your child having a bloated feeling or flatulence after consuming milk or dairy products, whereas a milk allergy can have life-threatening consequences.

MYTH: A LITTLE TASTE CAN'T HURT.

FACT: To an allergic child's immune system, even a tiny amount of a problem food is enough to trigger an all-out attack. Children with severe allergies can have life-threatening reactions. For example, a child allergic to peanuts can have a severe reaction when a spatula used to serve them a peanut-free cookie was previously used to make a peanut-containing cookie. Some parents believe that a small amount of allergic food may actually help their child rid themselves of the problem. Although some food allergy treatments call for exposing the immune system to increasing amounts of a known allergen to desensitize the immune system, trying to do this on your own is very dangerous.

MYTH: ALL FOOD ALLERGIES IN CHILDREN RESOLVE AS THEY GET

FACT: As a youngster grows older, some may tolerate foods that previously caused allergic reactions. This is more likely to happen in the case of allergies to milk, eggs, and wheat, in which the symptoms may decrease by late childhood. It is not clear in all cases, however, if the improved symptoms are an indication that the allergy has disappeared or the child really wasn't allergic in the first place. On the other hand, children rarely outgrow allergies to peanuts, tree nuts, fish and shellfish.

MYTH: LOTS OF PEOPLE HAVE FOOD ALLERGIES.

FACT: From talking with the public, you might think almost everyone has a food allergy. In surveys, nearly one-in-three American adults indicated he or she was allergic to some food." But in reality, the most conservative estimates indicate two percent of the population in the United States are food allergic. Children are more susceptible than adults to food allergy—up to five percent have some type of food allergy. However, common allergens such as eggs and milk are typically outgrown by age five. The eight most common food allergens in people are: Peanuts, tree nuts (for example, almonds, pecans and walnuts), dairy, soy, wheat, eggs, fish and shellfish (for example, shrimp and crab). The incidence of food allergies, however, seems to be on the rise.

MYTH: FOOD ALLERGIES CAN MAKE YOUR CHILD "HYPER."

FACT: Food allergies are often blamed for some childhood disorders such as ADHD (Attention-Deficit/Hyperactivity Disorder). Although food may play a role in the severity of the symptoms, food allergies are not the root cause or even a strong contributor. The most common "sudden" symptoms of food allergy are hives (large "bumps" on the skin), swelling, itchy skin, itchiness or tingling in the mouth, a metallic taste in the mouth, coughing, trouble breathing or wheezing, throat tightness, diarrhea and vomiting. There may also be a feeling of "impending doom"—a feeling that something bad is going to happen, pale skin because of low blood pressure, or loss of consciousness (fainting). The most common chronic illnesses associated with food allergies are eczema and asthma.

MYTH: SOME CHILDREN ARE ALLERGIC TO FOOD ADDITIVES.

FACT: Although some food additives-- sulfites and tartrazine—have been shown to trigger asthma or hives in children, these reactions do not follow the same pathway observed with food. Many food additives, including monosodium glutamate, aspartame and most food dyes have been studied extensively and the results show little scientific evidence exists to suggest they cause any reaction at all.

MYTH: IF A CHILD WAS NOT ALLERGIC TO IT BEFORE, THEY CAN'T BE ALLERGIC TO IT NOW.

FACT: The onset of a food allergy is brought on by a genetic susceptibility and exposure to the problem food. The more exposure to the problem food, the higher the risk of developing an allergy to it if your child is susceptible.

MYTH: ALLERGY SHOTS ARE AN EFFECTIVE TREATMENT FOR FOOD ALLERGIES.

FACT: Desensitization to certain allergens by injecting small quantities of extracts of the allergen over a long time has been an effective therapy for certain allergies (such as allergies to pollens). However, there is no scientific evidence that these shots can prevent allergic reactions to food.

MYTH: If a child is allergic to peanuts, he should not eat anything with peanut oil.

FACT: There are many misunderstandings regarding exactly what might stimulate the food allergic reaction. Since all food allergens are proteins, the process of refining oil removes the protein which would trigger an allergic reaction. Oils used in processed foods and in cosmetics are highly refined and should pose no problem for the food allergic individual. Yet, caution should be taken with natural, cold pressed or flavored oils. These oils, as well as oil that has been used to cook peanuts (or another food to which an individual might have an allergy), might contain the protein of the allergen and should be avoided.

MYTH: CHILDREN WITH FOOD ALLERGIES ARE ALLERGIC TO MANY FOODS.

FACT: Most people with food allergies are allergic to fewer than 4 foods.

MYTH: FOOD ALLERGY IS NOT DANGEROUS.

FACT: Food allergy can be fatal if it is severe enough to cause a reaction called anaphylaxis. This reaction makes it hard for a child to breathe. Fast treatment with a medicine called epinephrine can save their life. If a child has a severe allergy, epinephrine self-injection pens should be prescribed and always available to administer to the child. A child having an allergic reaction should be taken by ambulance to a hospital emergency room, because the symptoms can start again hours after the epinephrine is given.

RESOURCES:

Resource List on Food Allergies and Intolerances for Consumers February 2008

<http://www.nal.usda.gov/fnic/pubs/bibs/gen/allergy.pdf>

This publication is a collection of resources on the topic of Food Allergies and the most COMPLETE AND COMPREHENSIVE listing of resources pertaining to food allergies. Twenty-seven pages of links to websites for information on this important topic.

Food Allergy Myths: <http://www.kidsgrowth.com/resources/articledetail.cfm?id=2442>