Overview

Millions of Americans have an allergy of some kind. You probably know one of those people or are one yourself. Almost 6% of U.S. adults and children have a food allergy.

Food allergy symptoms are most common in babies and children, but they can appear at any age. You can even develop an allergy to foods you have eaten for years with no problems.

Signs of Allergies

The body's immune system keeps you healthy by fighting off infections and other dangers to good health. A food allergy reaction occurs when your immune system overreacts to a food or a substance in a food, identifying it as a danger and triggering a protective response.

While allergies tend to run in families, it is impossible to predict whether a child will inherit a parent's food allergy or whether siblings will have a similar condition. Some research does suggest that the younger siblings of a child with a peanut allergy will also be allergic to peanuts.

Symptoms of a food allergy can range from mild to severe. Just because an initial reaction causes few problems doesn't mean that all reactions will be similar; a food that triggered only mild symptoms on one occasion may cause more severe symptoms at another time.

The most severe allergic reaction is anaphylaxis — a life-threatening whole-body allergic reaction that can impair your breathing, cause a dramatic drop in your blood pressure and affect your heart rate. Anaphylaxis can come on within minutes of exposure to the trigger food. It can be fatal and must be treated promptly with an injection of epinephrine (adrenaline).

While any food can cause an adverse reaction, eight types of food account for about 90 percent of all reactions:

- Eggs
- Milk and Dairy
- Peanuts
- Tree nuts
- Fish
- Shellfish
- Wheat
- Soy
- Sesame

Eggs

Overview

If you feel like you always get sick with a rash or stomach pains after eating eggs, it's time to see an allergist. Egg allergy develops when the body's immune system becomes sensitized and overreacts to proteins in egg whites and/or yolks. When eggs are eaten, the

body sees the protein as a foreign invader and sends out chemicals to defend against it. Those chemicals cause the symptoms of an allergic reaction.

Experts estimate that as many as 2 percent of children are allergic to eggs. Fortunately, studies show that about 70 percent of children with an egg allergy will outgrow the condition by age 16.

Still, the stakes are high: Children who are allergic to eggs can have reactions ranging from a mild rash to anaphylaxis, a life-threatening condition that impairs breathing and can send the body into shock.

Symptoms

- Vomiting
- Stomach cramps
- Indigestion
- Diarrhea
- Wheezing
- Shortness of breath, difficulty breathing
- Repetitive cough
- Tightness in throat, hoarse voice
- Weak pulse
- Pale or blue coloring of the skin
- Hives
- Swelling, can affect the tongue and/or lips
- Dizziness
- Confusion

If you or your child experiences any of these symptoms, see an allergist.

Diagnosis

Eggs are one of the most common food allergens. People with an allergy to chicken eggs may also be allergic to other types of eggs, such as goose, duck, turkey or quail.

Within a short period of time after eating (or even touching) eggs, you may experience the following symptoms:

- Skin reactions, such as swelling, a rash, hives or eczema
- Wheezing or difficulty breathing
- Runny nose and sneezing
- Red or watery eyes
- Stomach pain, nausea, vomiting or diarrhea
- Anaphylaxis (less common)

If you or your child experiences any of these symptoms, see an allergist. Your allergist may diagnose an egg allergy through a skin-prick test and/or a blood test.

In the skin-prick test, a small amount of a liquid containing egg protein is placed on the back or forearm, which is then pricked with a small, sterile probe to allow the liquid to seep into the skin. If a raised, reddish spot forms within 15 to 20 minutes, that can indicate an allergy. Depending on the protein in the liquid, skin-prick tests can determine whether

your allergy is to egg white proteins or egg yolk proteins. Allergy to egg white proteins is most common.

In the blood test, a blood sample is sent to a laboratory to test for the presence of immunoglobulin E antibodies to egg protein.

If these tests aren't definitive, your allergist may order an oral food challenge. Under medical supervision, you'll eat small amounts of egg to see if a reaction develops. Because of the possibility that a reaction could be severe, this test is conducted in your allergists office or at a food challenge center with trained staff, emergency equipment and medication on hand.

A food elimination diet also may be used to determine if an allergy is present. If symptoms disappear when eggs are removed from the diet and reappear when eggs are again eaten, an egg allergy is likely.

Management and Treatment

The best way to manage an egg allergy is to avoid eating eggs.

Unfortunately, eggs are a hidden ingredient in many foods, including canned soups, salad dressings, ice cream and many meat-based dishes, such as meatballs and meatloaf. Even some commercial egg substitutes contain egg protein. As a result, people with an egg allergy must be vigilant about reading labels and asking about the ingredients of foods prepared by others.

Egg is one of eight allergens with specific labeling requirements under the Food Allergen Labeling and Consumer Protection Act of 2004. That law requires manufacturers of packaged food products sold in the U.S. and containing egg as an ingredient to include the presence of egg or egg products, in clear language, on the ingredient label.

Anyone diagnosed with an allergy to either egg whites or egg yolks should avoid eggs altogether; it is not possible to completely separate the white from the yolk.

People with an egg allergy can sometimes tolerate baked goods and other foods containing eggs that have been heated for a prolonged period at a high temperature. Still, there is no way to predict when, or whether, an egg-allergic individual can safely tolerate any product containing eggs. If you're allergic to eggs, or your child is, ask an allergist which foods must be avoided.

Antihistamines may help to relieve mild symptoms of egg allergy, such as itching.

In addition, your allergist may prescribe epinephrine (adrenaline) in an auto-injector, to be taken in the event you develop symptoms of anaphylaxis a potentially fatal reaction that includes shortness of breath, swelling of the throat, and dizziness from a sudden drop in blood pressure. Your allergist will teach you how to use the auto-injector, which should be kept with you at all times and used as soon as symptoms start to appear. You or someone near you should also call for an ambulance, even if epinephrine provides relief, as the symptoms may recur.

Eggs in vaccines

In the past, the seasonal influenza (flu) vaccine has contained a small amount of egg protein. In today's vaccines, this is no longer the case. The Centers for Disease Control

and Prevention (CDC) no longer recommends that egg-allergic individuals avoid the flu vaccine or receive any special testing prior to administration. It is recommended that all individuals receive this vaccine annually.

The yellow fever vaccine also contains egg protein. Both the World Health Organization and CDC state that a severe egg allergy is a contraindication for that vaccine. Yellow fever is most commonly found in parts of Africa and South America; the vaccine may be required for travel to countries where the disease is found. If needed, your doctor can provide a waiver letter for the vaccine requirement.

Egg-free cooking

A registered dietitian or a nutritionist can help you plan your meals to ensure that you get adequate protein in the absence of eggs.

Many recipes can be modified to avoid the need for eggs. When recipes call for three or fewer eggs, substitute each egg with a mixture of 1 tablespoons of water, 1 tablespoons of oil and 1 teaspoon of baking powder. Alternative substitutes are 1 packet of unflavored gelatin dissolved in 2 tablespoons of warm water (mixed when ready to use), or 1 teaspoon of yeast dissolved in cup of warm water.

Don't let an egg allergy hold you back from the things you love. Find expert care with an allergist.

Milk and Dairy

Overview

You might be surprised to learn that between 2% and 3% of children younger than 3 years old are allergic to milk. Although experts once believed that the vast majority of them would outgrow this allergy by the time they turned 3, recent studies contradict this theory. In one study, fewer than 20% of children had outgrown their allergy by age 4. Still, about 80% of children are likely to outgrow their milk allergy before they are 16. Fortunately, allergists are specially trained to assess milk and dairy allergies at all ages.

Milk Allergy Symptoms

- Hives
- Stomach upset
- Vomiting
- Bloody stools, especially in infants
- Anaphylaxis, a rare, potentially life-threatening reaction that impairs breathing and can send the body into shock

Milk Allergy Management and Treatment

- Avoid milk, other dairy products, and products containing milk protein; read labels carefully.
- Administer epinephrine (adrenaline) if symptoms become severe.

Symptoms

Milk is one of the most common food allergens. People with an allergy to cow's milk may also be allergic to milk from other animals, including sheep and goats.

Within a short period of time after consuming milk or a milk protein, you may experience the following symptoms:

- Hives
- Stomach upset
- Vomiting
- Bloody stools, especially in infants
- Anaphylaxis, a rare, potentially life-threatening reaction that impairs breathing and can send the body into shock

Take back control of your life. If you or your child experiences any of these symptoms, see an allergist to find a solution.

Diagnosis

At your appointment, your allergist will take a detailed history, including asking what you ate, what symptoms you experienced, how long the symptoms lasted and what you did to alleviate them. The most common allergy tests are a skin-prick test or a blood test; both look for the presence of immunoglobulin E (IgE) antibodies, which develop when your body is exposed to a substance to which it is sensitive. These antibodies trigger the release of chemicals that cause allergic symptoms.

In the skin-prick test, a liquid containing milk or a milk protein extract is placed on your forearm or back. Your skin is pricked with a small, sterile probe, allowing the liquid to seep into your skin. If you develop a raised, reddish welt, typically within 15 to 20 minutes, that can indicate an allergy. In a blood test, a blood sample is tested for the presence of IgE antibodies. The results are reported as a numerical value.

Research suggests that some types of milk proteins (casein and two proteins found in whey, alpha-lactalbumin and beta-lactalbumin) are more likely to cause serious reactions. A newer type of blood test, known as a component test, can help the allergist determine your risk for a serious reaction by looking for allergies to those specific proteins.

Another test your allergist may order is an oral food challenge. Under medical supervision, you'll eat small amounts of a substance containing milk or a milk powder to see if a reaction develops. Because of the possibility that a reaction could be severe, this test is conducted in your allergist's office or at a food challenge center with emergency equipment and medication on hand.

Management and Treatment

Avoidance of milk or items containing milk products is the only way to manage a milk allergy. People who are allergic to milk and the parents of children who have this allergy must read ingredient labels very carefully.

Milk is one of eight allergens with specific labeling requirements under the Food Allergen Labeling and Consumer Protection Act of 2004. That law requires manufacturers of packaged food products sold in the U.S. and containing milk as an ingredient to include the presence of milk or milk products, in clear language, on the ingredient label.

There are two main types of milk protein — casein and whey. Casein, the "solid" part of milk, comprises about 80 percent of milk protein. Whey proteins, found in the liquid part of milk, make up the other 20 percent. Milk proteins are found in many foods, including all

dairy products, and in many places where they might not be expected. For example, some canned tuna, sausage, meats and other nondairy products may contain casein. Beverage mixes and body-building and energy drinks commonly contain whey. Milk protein has also been found in some chewing gum.

Some companies may voluntarily include information that their food products "may contain traces of milk" or that they are manufactured in a facility that also processes milk, though such advisory statements are not required by law.

Allergies to food (including milk) are the most common causes of anaphylaxis, a potentially life-threatening allergic reaction. Symptoms include swelling of the airways, impairing the ability to breathe, and a sudden drop in blood pressure, causing dizziness and fainting. An allergist will advise patients with a food allergy to carry an auto-injector containing epinephrine (adrenaline), which is the only treatment for anaphylactic shock, and will teach the patient how to use it. If a child has the allergy, teachers and caregivers should be made aware of his or her condition as well.

Some people with this allergy can tolerate foods containing milk that has been extensively heated, such as a baked muffin. Still, people with an allergy to milk protein should consult an allergist before determining whether they should completely avoid milk and other dairy products.

Milk is a fairly easy ingredient to substitute in recipes. Most recipes calling for milk can be just as successful by substituting the equivalent in water, juice, or soy or rice milk. If your infant is allergic to milk, talk to your pediatrician about which formula to use. Often, an extensively hydrolyzed elemental formula or a casein-hydrolysate formula is recommended for milk allergy in infants, as the proteins in these formulas have been extensively broken down. Alternatively, your infant's doctor may recommend a soy-based formula.

Milk Allergy or Lactose Intolerance?

Milk or dairy allergies and lactose intolerance are not related.

People with a milk or dairy allergy experience symptoms because their immune system reacts as though milk and other dairy products are a dangerous invader. This reaction can cause hives, an upset stomach, vomiting, bloody stools and even anaphylactic shock — a life-threatening allergic response.

Individuals who are lactose intolerant cannot digest the sugar in milk (lactose) because they have a deficiency of lactase, an enzyme produced by cells in the lining of the small intestine. Lactase is required to metabolize lactose. The lack of this enzyme — which sometimes can just be temporary, due to infection — causes symptoms such as abdominal gas, diarrhea or abdominal cramps.

If you suffer digestive problems after eating or drinking dairy products, try tracking your diet and noting how your body reacts to the items you consume. You may also try temporarily cutting dairy products — milk, cheese and yogurt, for example — from your diet and see if your symptoms improve. Report the results to your allergist, who can do testing — typically, skin testing — to confirm a diagnosis.

<u>Peanuts</u>

Overview

It's not uncommon these days to find schools that have declared they are "nut-free" That means the onetime staple of kids' lunchboxes — a peanut butter and jelly sandwich — is nowhere to be found on school grounds. That's because peanuts can cause a life-threatening reaction in some people. Peanuts are one of the food allergens most commonly associated with anaphylaxis, a sudden and potentially deadly condition that requires immediate attention and treatment.

In recent years, awareness about peanut allergy in children has risen, as has the number of peanut allergy cases reported. A 2017 study reported that peanut allergy in children had increased 21 percent since 2010, and that nearly 2.5 percent of U.S. children may have an allergy to peanuts. There are several misconceptions about peanut allergies. For example, a peanut is a legume (belonging to the same family as soybeans, peas and lentils), not a tree nut. And while it was previously believed that an allergy to peanuts was lifelong, research has shown up to 20 percent of individuals with a peanut allergy eventually outgrow it.

Symptoms

The most severe allergic reaction to peanuts is anaphylaxis — a life-threatening whole-body response to an allergen. Symptoms may include impaired breathing, swelling in the throat, a sudden drop in blood pressure, pale skin or blue lips, fainting and dizziness. Anaphylaxis should be treated immediately with epinephrine (adrenaline), typically administered in an auto-injector.

Symptoms of a peanut allergy may include:

- Vomiting
- Stomach cramps
- Indigestion
- Diarrhea
- Wheezing
- Shortness of breath, difficulty breathing
- Repetitive cough
- Tightness in throat, hoarse voice
- Weak pulse
- Pale or blue coloring of the skin
- Hives
- Swelling, can affect the tongue and/or lips
- Dizziness
- Confusion

Diagnosis

Diagnosing a peanut allergy can be complicated. Symptoms can vary from person to person, and a single individual may not always experience the same symptoms during every reaction.

If you suspect you are allergic to peanuts, make an appointment to see an allergist. Start a food diary before the appointment and keep track of any reactions. If you have a reaction, you should note:

- What (and how much) you ate
- When the symptoms started (after eating the suspected food)
- What you did to relieve the symptoms
- How long it took before the symptoms were relieved

Your allergist may recommend a skin test or blood test to help diagnose whether you have a peanut allergy or allergy to another substance. The allergist may also recommend an oral food challenge. During this test, you will be fed tiny amounts of peanut or peanut-based products in increasing doses over time in an allergist's office or a food challenge center. Emergency medication and emergency equipment will be on hand during this procedure in case you have a severe reaction.

Management and Treatment

Peanut is one of eight allergens with specific labeling requirements under the Food Allergen Labeling and Consumer Protection Act of 2004. Under that law, manufacturers of packaged food products that contain peanut as an ingredient that are sold in the U.S. must include the word "peanuts" in clear language on the ingredient label.

To avoid the risk of anaphylactic shock, people with a peanut allergy should be very careful about what they eat. Peanuts and peanut products may be found in candies, cereals and baked goods such as cookies, cakes and pies. If you're eating out, ask the restaurant staff about ingredients – for example, peanut butter may be an ingredient in a sauce or marinade. Be extra careful when eating Asian and Mexican food and other cuisines in which peanuts are commonly used. Even ice cream parlors may be a source for accidental exposures, since peanuts are a common topping.

Foods that don't contain peanuts as an ingredient can be contaminated by peanuts in the manufacturing process or during food preparation. As a result, people with a peanut allergy should avoid products that bear cautionary statements on the label, such as "may contain peanuts" or "made in a factory that uses nut ingredients." Note that the use of those advisory labels is voluntary. It may be a good idea to discuss with your allergist the risks of consuming products with voluntary labeling.

If you're cooking from scratch, it's easy to modify recipes to remove peanut ingredients and substitute ingredients that aren't allergens, such as toasted oats, raisins or seeds. Most people who can't tolerate peanuts or eat peanut butter can consume other nut or seed butters. Keep in mind that these products may be manufactured in a facility that also processes peanuts – so check the label carefully and contact the manufacturer with any questions.

Many individuals with an allergy to peanuts can safely consume foods made with highly refined peanut oil, which has been purified, refined, bleached and deodorized to remove the peanut protein from the oil. Unrefined peanut oil – often characterized as extruded, cold-pressed, aromatic, gourmet, expelled or expeller-pressed – still contains peanut protein and should be avoided. Some products may use the phrase "arachis oil" on their

ingredient lists; that's another term for peanut oil. If you have a peanut allergy, ask your allergist whether you should avoid all types of peanut oil.

While some people report symptoms such as skin rashes or chest tightness when they are near to or smell peanut butter, a placebo-controlled trial of children exposed to open peanut butter containers documented no systemic reactions. Still, food particles containing peanut proteins can become airborne during the grinding or pulverization of peanuts, and inhaling peanut protein in this type of situation could cause an allergic reaction. In addition, odors may cause conditioned physical responses, such as anxiety, a skin rash or a change in blood pressure.

Oral immunotherapy for peanut allergy

If your 4-17-year-old has a peanut allergy, a new treatment using peanut protein powder may offer additional protection. Palforzia is the only oral immunotherapy product currently approved by the FDA for treatment of peanut allergy. This type of treatment is called oral peanut immunotherapy. It slowly exposes an allergic child to peanuts so their immune system is less likely to react after an accidental ingestion of peanut product. That means if your child accidentally eats something containing peanuts, the treatment may protect them from a severe reaction. Even with this treatment, your child must continue to avoid peanuts and carry two epinephrine auto-injectors.

It's important to understand:

- The treatment is not a cure – your child will still be allergic to peanuts and must avoid them.
- It will not enable your child to eat peanuts or peanut products anytime they wish.
- It works only while your child is taking it on a daily basis.
- Your child will need to continue to carry two epinephrine auto-injectors and you and your child will still need to read food labels.
- Reactions can occur due to the treatment itself.

For children with peanut allergy and their parents, the benefits may be worth the drawbacks. Discuss peanut oral immunotherapy with your allergist if your child is interested.

Can peanut allergy be prevented?

In 2017, the National Institute for Allergy and Infectious Disease (NIAID) issued new updated guidelines in order to define high, moderate and low-risk infants for developing peanut allergy. The guidelines also address how to proceed with introduction of peanut based on risk in order to prevent the development of peanut allergy.

The updated guidelines are a breakthrough for the prevention of peanut allergy. Peanut allergy has become much more common in recent years, and there is now a roadmap to prevent many new cases.

According to the new guidelines, an infant at high risk of developing peanut allergy is one with severe eczema and/or egg allergy. The guidelines recommend introduction of peanut-containing foods as early as 4-6 months for high-risk infants who have already started solid foods, after determining that it is safe to do so.

If your child is determined to be high risk, the guidelines recommend having them tested for peanut allergy. Your allergist may do this with a skin test or blood test. Depending on the results, they may recommend attempting to try peanut for the first time in the office. A positive test alone does not necessarily prove your child is allergic, and studies have shown infants who have a peanut sensitivity aren't necessarily allergic.

For high-risk infants, if the skin test does not reveal a large wheal (bump) updated guidelines recommend that infants have peanut fed to them the first time in the specialist's office. However, if the skin test reaction is large (8 mm or larger) the guidelines recommend not pursuing an oral challenge, as the infant is likely already allergic at that point. Therefore, an allergist may decide not to have the child try peanut at all if they have a very large reaction to the skin test. Instead, they might advise that the child avoid peanuts completely due to the strong chance of a pre-existing peanut allergy. An allergist might also still proceed with a peanut challenge after explaining the risks and benefits to the parents.

Moderate risk children – those with mild to moderate eczema who have already started solid foods – do not need an evaluation. These infants can have peanut-containing foods introduced at home by their parents starting around six months of age. Parents can always consult with their primary health care provider if they have questions on how to proceed. Low risk children with no eczema or egg allergy can be introduced to peanut-containing foods according to the family's preference, also around 6 months.

Parents should know that most infants are either moderate- or low-risk for developing peanut allergies, and most can have peanut-containing foods introduced at home. Whole peanuts should never be given to infants as they are a choking hazard. More information can be found here and also in the ACAAI video, "Introducing peanut-containing foods to prevent peanut allergy."

Although parents want to do what's best for their children, determining what "best" means isn't always easy. So if your son or daughter is struggling with peanut allergies, take control of the situation and consult an allergist today.

<u>Tree nuts</u>

Overview

Along with peanuts and shellfish, tree nuts are one of the food allergens most often linked to anaphylaxis — a serious, rapid-onset allergic reaction that may be fatal. A tree nut allergy usually lasts a lifetime; fewer than 10 percent of people with this allergy outgrow it.

There's often confusion between peanuts and tree nuts. Peanuts are legumes, not nuts; still, between 25% and 40% of individuals who are allergic to peanuts also react to at least one tree nut, according to studies. The best way to clear up confusion and manage your tree nut allergy is to see an allergist.

Tree Nut Allergy Symptoms

- Abdominal pain, cramps, nausea and vomiting
- Diarrhea
- Difficulty swallowing
- Itching of the mouth, throat, eyes, skin or any other area

- Nasal congestion or a runny nose
- Nausea
- Shortness of breath
- Anaphylaxis, a potentially life-threatening reaction that impairs breathing and can send the body into shock

Tree Nut Allergy Triggers

- Tree nuts
- Tree nut products, including nut oils and butters

Tree Nut Allergy Management and Treatment

- Avoid nuts and nut products; read ingredient labels carefully.
- Administer epinephrine (adrenaline) as soon as severe symptoms develop.

Symptoms

An allergy to tree nuts is one of the most common food allergies. Along with peanuts and shellfish, it is also one of the food allergens most frequently linked to anaphylaxis, a potentially life-threatening reaction that impairs breathing and can send the body into shock.

Symptoms of a tree nut allergy include:

- Abdominal pain, cramps, nausea and vomiting
- Diarrhea
- Difficulty swallowing
- Itching of the mouth, throat, eyes, skin or any other area
- Nasal congestion or a runny nose
- Nausea
- Shortness of breath
- Anaphylaxis (less common)

If you experience any of these symptoms after consuming tree nuts, see an allergist.

Diagnosis

Because a tree nut allergy can cause a life-threatening reaction, an accurate diagnosis is essential. Your allergist will start by taking a medical history, asking about any previous allergic reactions and about any family history of allergies. Skin-prick tests and/or blood tests may be used to determine the presence of allergen-specific immunoglobulin E, an antibody that binds to allergens and triggers the release of chemicals that cause symptoms.

If those tests are inconclusive, your allergist may order an oral food challenge. In this test, a patient is fed tiny amounts of the suspected allergy-causing food in increasing doses over a period of time, under strict supervision in an allergist's office or a food challenge center. Emergency medication and emergency equipment must be on hand during this procedure.

Management and Treatment

As with most food allergies, the best way to avoid triggering an allergic reaction is to avoid eating the offending item.

People who are diagnosed with an allergy to a specific tree nut may be able to tolerate other tree nuts, but allergists usually advise these patients to avoid all nuts. Tree nuts are often used as garnishes in salads, as an ingredient in Asian dishes, and as an ice cream topping. They may also be found in baking mixes, breading, sauces, desserts and baked goods.

Tree nuts are among the eight most common food allergens affecting adults and children, and are specifically mentioned in the Food Allergen Labeling and Consumer Protection Act (FALCPA) of 2004. This means that the presence of these items must be highlighted, in clear language, on ingredient lists. Some companies may voluntarily include information that their food products that don't contain nuts were manufactured in a facility that also processes nuts, though such a statement is not required by law. It is important for people with tree nut allergies to read labels carefully.

Some alcoholic beverages may contain nuts or nut flavoring added in the distillation process. Most alcoholic beverages aren't covered by the FALCPA requirements; if "natural flavors" or "botanicals" are cited as an ingredient, you may need to call the manufacturer to determine whether that indicates the presence of nuts or nut flavoring.

Tree nut oils, which may contain nut protein, can be found in lotions, hair care products and soaps; those allergic to tree nuts should avoid using these products.

Fortunately, allergists are specially trained to help identify these hidden sources of tree nut allergens.

Tree nuts and peanuts

There's often confusion between peanuts and tree nuts. Peanuts are legumes, not nuts; still, between 25 and 40 percent of individuals who are allergic to peanuts also react to at least one tree nut, according to studies.

Allergists generally advise people who are allergic to tree nuts also to avoid peanuts because of the risk of cross-contact and cross-contamination between tree nuts and peanuts in food processing facilities. If you or your child is allergic to either peanuts or tree nuts, ask your allergist whether you should avoid both products.

The prevalence of these allergies in children appears to be growing. Approximately 2.2% of children/adolescents in the U.S. have peanut allergies. Annual incidence has increased since 2001, where the current annual incidence in one year olds is nearly 5%.

Allergies to tree nuts and peanuts are among the most common causes of anaphylaxis in the United States. An allergist will advise patients with these allergies to carry an auto-injector containing epinephrine (adrenaline), which is the only treatment for anaphylactic shock, and will teach the patient how to use it. If a child has the allergy, teachers and caregivers should be made aware of his or her condition as well.

People with tree nut allergies often wonder if they must also avoid coconut and nutmeg.

Coconut is not a botanical nut; it is classified as a fruit, even though the Food and Drug Administration recognizes coconut as a tree nut. While allergic reactions to coconut have

been documented, most people who are allergic to tree nuts can safely eat coconut. If you are allergic to tree nuts, talk to your allergist before adding coconut to your diet.

Nutmeg is a spice that is derived from seeds, not nuts. It may be safely consumed by people with a tree nut allergy.

Use the Find an Allergist tool to find expert care for your tree nut allergy.

Fish

Overview

Do you suspect that you've recently developed a fish allergy? Unlike other food allergies, which are typically first observed in babies and young children, an allergy to fish may not become apparent until adulthood; in one study, as many as 40 percent of people reporting a fish allergy had no problems with fish until they were adults.

Having an allergy to a finned fish (such as tuna, halibut or salmon) does not mean that you are also allergic to shellfish (shrimp, crab and lobster). While some allergists recommend that individuals with a fish allergy avoid eating all fish, it may be possible for someone allergic to one type of fish to safely eat other kinds. If you are allergic to a specific type of fish, your allergist can help you determine whether other varieties may be safe to eat, so you can take control of your fish allergy and start enjoying life again.

Fish Allergy Symptoms

- Hives or a skin rash
- Nausea, stomach cramps, indigestion, vomiting and/or diarrhea
- Stuffy or runny nose and/or sneezing
- Headaches
- Asthma
- Anaphylaxis (less common), a potentially life-threatening reaction that impairs breathing and can cause the body to go into shock

Fish Allergy Management and Treatment

- Avoid fish and fish products.
- Read food labels carefully.
- Treat symptoms of anaphylaxis with epinephrine (adrenaline).

Symptoms

As with other food allergies, the symptoms of a fish allergy may range from mild to severe. They include:

- Hives or a skin rash
- Nausea, stomach cramps, indigestion, vomiting and/or diarrhea
- Stuffy or runny nose and/or sneezing
- Headaches
- Asthma
- Anaphylaxis (less common), a potentially life-threatening reaction that impairs breathing and can cause the body to go into shock

Diagnosis

Your allergist may diagnose an allergy to a specific kind of fish through a skin-prick test or a blood test.

In the skin-prick test, a small amount of a liquid containing protein from the fish being tested is placed on the back or forearm, which is then pricked with a small, sterile probe to allow the liquid to seep into the skin. If a raised, reddish spot forms within 15 to 20 minutes, that can indicate an allergy.

In the blood test, a blood sample is sent to a laboratory to test for the presence of immunoglobulin E antibodies to protein from the fish being tested.

If these tests aren't definitive, your allergist may order an oral food challenge. Under medical supervision, you'll eat small amounts of fish or a fish product to see if a reaction develops. Because of the possibility that a reaction could be severe, this test is conducted in your allergist's office or at a food challenge center with emergency equipment and medication on hand.

Management and Treatment

Managing a fish allergy includes strict avoidance of the fish to which you are allergic. Doctors typically advise people who are allergic to one type of finned fish to avoid all types. If you are allergic to a specific fish and would really like to have other varieties of fish in your diet, speak to your allergist about testing for those varieties. Do not change your diet without guidance from your allergist.

Fish is one of eight allergens with specific labeling requirements under the Food Allergen Labeling and Consumer Protection Act of 2004. Under that law, manufacturers of packaged food products sold in the U.S. and containing fish or a fish product as an ingredient must identify on the ingredient label, in clear language, the specific type of fish used.

Many prepared foods contain fish in some form. Fish is a common ingredient in Worcestershire sauce and Caesar salad and is sometimes found in imitation crab products in the form of surimi, a processed food made mainly from Alaska pollock. Fish is also prevalent in Asian cuisine, which uses fish-based stock for many dishes.

While an allergy to fish protein is most common, it is possible to be allergic to fish gelatin (made from fish skin and bones). People with a fish allergy should consult their allergist before taking fish oil dietary supplements.

If your allergist gives you the go-ahead to eat certain types of fish, take extra precautions to avoid eating fish that has come in contact with the type of fish that causes your allergic reaction. Be advised that some restaurants may substitute cheaper types of fish for what is on the menu (for example, what is listed as red snapper could really be tilapia). Since many types of fish look alike once they are filleted, dishonest suppliers to supermarkets may substitute cheap fish for more expensive types, according to an investigation by Oceana, a conservation nonprofit.

To avoid either cross-contact or the possibility of eating a mislabeled fish, be sure to tell whoever handles the fish you plan to eat about your allergy. Ask whether there is a risk that you will eat something that triggers your allergy.

Due to the high risk for cross-contact during food preparation, it is best to avoid seafood restaurants in general, even if you plan to order something other than fish. Stay out of areas where fish is being cooked, as proteins may be released into the air during cooking.

People with a fish allergy do not necessarily have to avoid shellfish (and vice versa); there appears to be no relationship between fish and shellfish allergies. However, an individual can be allergic to both fish and shellfish, just as someone can be allergic to both eggs and peanuts.

Treatment for fish allergy includes strict avoidance of the fish to which you are allergic. Because fish is often implicated in cases of food-induced anaphylaxis, allergists advise fish-allergic patients to treat symptoms of a reaction with epinephrine (adrenaline), which is prescribed by your doctor and administered in an auto-injector. Anaphylaxis can come on quickly and can be fatal unless epinephrine is injected as soon as you notice symptoms developing. Be sure to call for an ambulance, and alert the dispatcher that epinephrine has been used and more may be needed.

Only epinephrine can reverse the symptoms of anaphylaxis; for less severe symptoms, you may find that antihistamines are helpful.

Life's too short to struggle with allergies to fish. Find answers with an allergist.

Shellfish

Overview

Shellfish is among the most common food allergens. A shellfish allergy is different from an allergy to fish. Those who are allergic to shellfish do not necessarily have to avoid fish, and vice versa.

Symptoms

Within the shellfish family, the crustacean group (shrimp, lobster and crab) causes the greatest number of allergic reactions. Many shellfish-allergic people can eat mollusks (scallops, oysters, clams and mussels) with no problem. Still, anyone with shellfish allergy symptoms should consult an allergist before eating any other kind of shellfish. Shellfish are often stored together in restaurants and markets, so cross-contamination can occur.

Shellfish allergies most frequently develop in adulthood but can affect children.

Shellfish allergy symptoms

- Vomiting
- Stomach cramps
- Indigestion
- Diarrhea
- Wheezing
- Shortness of breath, difficulty breathing
- Repetitive cough
- Tightness in throat, hoarse voice
- Weak pulse
- Pale or blue coloring of the skin
- Hives

- Swelling, can affect the tongue and/or lips
- Dizziness
- Confusion

Shellfish allergy triggers

Within the shellfish family, it is the crustacean group (shrimp, lobster and crab) that causes the greatest number of allergic reactions. Many shellfish-allergic people can tolerate mollusks (scallops, oysters, clams and mussels).

Diagnosis

Diagnosing shellfish allergies can be complicated. Symptoms can vary from person to person, and an individual may not always experience the same symptoms during every reaction. What's more, people who are allergic to shellfish don't necessarily have to eat it to develop a reaction. They may react if they are close to shellfish being cooked, or if their food came in contact with shellfish.

Allergic reactions to shellfish can affect the skin, respiratory tract, gastrointestinal tract and/or cardiovascular system. While shellfish allergies most commonly aren't seen until adulthood, the condition can appear at any age.

When a food allergy is suspected, it's important to consult an allergist, who can determine which tests to perform, decide if an allergy exists and counsel patients on managing exposure and symptoms once the diagnosis has been confirmed.

To make a diagnosis, allergists ask detailed questions about the history of allergy symptoms. Be prepared to answer questions about what and how much you ate, how long it took for symptoms to develop, which symptoms you experienced and how long the symptoms lasted. The allergist will usually perform skin-prick tests and/or order a blood test (such as an ImmunoCAP test), which indicate whether food-specific immunoglobulin E (IgE) antibodies are present in your body.

Skin-prick tests are conducted in a doctor's office and provide results within 15 to 30 minutes. A drop of a liquid containing the suspected allergen is placed on your forearm or back. The skin is then pricked with a small, sterile probe, allowing the liquid to seep under the skin. The tests, which are not painful but can be uncomfortable, are considered positive if a wheal (resembling a bump from a mosquito bite) develops at the site.

Blood tests, another testing option for food allergy, measure the amount of IgE antibody to the specific food(s) being tested. Results are typically available in about one to two weeks and are reported as a numerical value.

Your allergist will interpret these results and use them to aid in a diagnosis. While both of these diagnostic tools can signal a food allergy, neither one is conclusive. A positive test result to a specific food does not always indicate that you will react to that food when it's eaten. A negative test is more helpful to rule out a food allergy. Neither test, by size of the skin test wheal or the level of IgE antibodies, necessarily predicts how severe your allergic reaction to shellfish will be.

An allergist may use these tests and your history to make a food allergy diagnosis. For a definitive diagnosis, the allergist may wish to conduct an oral food challenge, in which the patient is fed gradually increasing amounts of the suspected allergy-causing food under

strict supervision. Experienced personnel, emergency medication and emergency equipment must be on hand during this procedure.

Oral food challenges also may be performed to determine if a patient has outgrown a food allergy.

Management and Treatment

Once a shellfish allergy is identified, the best management is to avoid the food. You need to carefully check ingredient labels of food products. You should learn other names for the foods you need to avoid to be sure not to eat them.

You must be extra-careful when you eat out. Waiters (and sometimes the kitchen staff) may not always know every dish's ingredient list. Vapors may carry small particles of shellfish protein, so being close to where food is being prepared can potentially cause a dangerous reaction in sensitive individuals.

Fortunately, shellfish is an ingredient that is rarely "hidden" in foods. Shellfish may be found in fish stock, seafood flavoring (for example, crab extract), sushi and surimi. Crustacean shellfish is one of the eight allergens that fall under the labeling requirements of the Food Allergen Labeling and Consumer Protection Act of 2004. This means that manufacturers of packaged food items sold in the United States and containing crustacean shellfish or a crustacean shellfish-based ingredient must state, in clear language, the presence of crustacean shellfish in the product. (Note: Those regulations apply only to crustacean shellfish, such as shrimp, lobster and crab, and not to mollusks, such as oysters, scallops and clams.)

Anyone with a food allergy must understand how to read ingredient labels and practice avoidance measures. Your allergist can direct you to helpful resources, such as special cookbooks, patient support groups and registered dietitians, who can help you plan your meals.

Many people with food allergies wonder if their condition is permanent. There is no clear-cut answer. Over time, allergies to milk, eggs and soy may disappear. Allergies to peanuts, tree nuts, fish and shellfish typically last a lifetime. About one-third of children and adults with a food allergy eventually outgrow the allergy. But rates of naturally outgrowing food allergies will vary depending on the specific food allergen and the person.

Managing a severe food reaction with epinephrine

Shellfish is among the most common food allergens. But all food allergies can be dangerous.

Epinephrine is the first-line treatment for anaphylaxis, a severe whole-body allergic reaction that causes symptoms, including tightening of the airway. Anaphylaxis can occur within seconds or minutes of exposure to the allergen, can worsen quickly, and can be deadly.

Once a food allergy diagnosis is made, your allergist likely will prescribe an epinephrine auto-injector and teach you how to use it. Check the expiration date of your auto-injector, note the expiration date on your calendar and ask your pharmacy about reminder services for prescription renewals.

Be sure to have two doses available, as the severe reaction may recur. Epinephrine should be used immediately if you experience severe symptoms such as shortness of breath, repetitive coughing, weak pulse, generalized hives, tightness in the throat, trouble breathing or swallowing, or a combination of symptoms from different body areas such as hives, rashes or swelling on the skin coupled with vomiting, diarrhea or abdominal pain. Repeated doses of epinephrine may be necessary.

If you are uncertain whether a reaction requires epinephrine, use it right away, because the benefits of epinephrine far outweigh the risk that a dose may not have been necessary.

Common side effects of epinephrine may include temporary anxiety, restlessness, dizziness and shakiness. Rarely, the medication can lead to an abnormal heart rate or rhythm, a heart attack, a sharp increase in blood pressure and fluid buildup in the lungs, but these adverse effects are generally caused by errors in dosing which is unlikely to occur with use of epinephrine autoinjectors. Some people with certain pre-existing conditions might be at higher risk for adverse effects and should speak to their allergist about epinephrine use.

Your allergist will provide you with a written emergency treatment plan that outlines which medications should be administered and when (note that between 10 and 20 percent of life-threatening severe allergic reactions have no skin symptoms). Be sure you understand how to properly and promptly use an epinephrine auto-injector.

Once you have used your epinephrine auto-injector, immediately call 911 and tell the dispatcher that you used epinephrine and that more may be needed from the emergency responders.

Other medications, such as antihistamine and corticosteroids, may be prescribed to treat mild symptoms of a food allergy, but it is important to note that there is no substitute for epinephrine — this is the only medication that can reverse the life-threatening symptoms of anaphylaxis.

Managing shellfish allergies in children

Because shellfish allergy reactions, like other food allergy symptoms, can develop when a child is not with his or her parents, parents need to make sure that their child's school, day care or other program has a written emergency action plan with instructions on preventing, recognizing and managing these episodes in class and during activities such as sporting events and field trips.

If your child has been prescribed an auto-injector, be sure that you and those responsible for supervising your child understand how to use it.

<u>Wheat & Gluten</u>

Overview

Wheat allergies, like hay fever and other allergies, develop when the body's immune system becomes sensitized and overreacts to something in the environment — in this case, wheat — that typically causes no problem in most people.

Generally, you are at greater risk for developing an allergy to any food, including wheat, if you come from a family in which allergies or allergic diseases, such as asthma or eczema,

are common. If both of your parents have allergies, you're more likely to develop a food allergy than someone with only one parent who has allergies.

Wheat Allergy Symptoms

- Hives or skin rash
- Nausea, stomach cramps, indigestion, vomiting or diarrhea
- Stuffy or runny nose
- Sneezing
- Headaches
- Asthma
- Anaphylaxis (less common), a potentially life-threatening reaction that can impair breathing and send the body into shock

Wheat Allergy Triggers

- Bread, pasta or any other food containing wheat
- Nonfood items with wheat-based ingredients, such as Play-Doh, cosmetics or bath products

Wheat Allergy Management and Treatment

- Avoid foods and other products that trigger symptoms.
- Control some symptoms with antihistamines and corticosteroids.
- Use epinephrine (adrenaline), available by prescription, to reverse anaphylactic symptoms.

Symptoms

While the symptoms of a wheat allergy are usually mild, in some cases they may be severe and can be deadly, making a diagnosis and appropriate management of the allergy imperative.

Wheat allergy is most common in children; about two-thirds of them outgrow it at a relatively young age. Though many patients with wheat allergy can eat other grains, that's not true for everyone. Talk with your allergist about what you can safely eat and what you should avoid, so you and your children can live the lives you want.

Generally, you are at greater risk for developing an allergy to any food, including wheat, if you come from a family in which allergies or allergic diseases, such as asthma or eczema, are common. If both of your parents have allergies, you're more likely to develop a food allergy than someone with only one parent who has allergies.

Wheat allergy is typically outgrown by adulthood — about 65 percent of children with a wheat allergy will outgrow it by the time they are 12.

As with reactions to other foods, the symptoms of a wheat allergy may include:

- Hives or skin rash
- Nausea, stomach cramps, indigestion, vomiting or diarrhea
- Stuffy or runny nose
- Sneezing
- Headaches

- Asthma
- Anaphylaxis (less common), a potentially life-threatening reaction that can impair breathing and send the body into shock

Symptoms may range from mild to severe. If you experience any of these reactions after exposure to something containing wheat, see an allergist.

Diagnosis

Some indications of an allergy to wheat — stomach cramps, diarrhea and other gastrointestinal symptoms — overlap with those produced by a sensitivity to gluten or by celiac disease, an autoimmune disorder, so it's crucial to get an accurate diagnosis. An allergist can determine whether an allergy is present.

Your allergist will first take a medical history, asking particularly about other family members with allergies or allergic diseases, such as asthma or eczema. If both of your parents have food allergies, you're more likely to have them as well.

Diagnosis of an allergy can be made through a skin-prick test or a blood test.

In the skin-prick test, a small amount of a liquid containing wheat protein is placed on the back or forearm, which is then pricked with a small, sterile probe to allow the liquid to seep into the skin. If a raised, reddish spot forms within 15 to 20 minutes, that can indicate an allergy.

In the blood test, a blood sample is sent to a laboratory to test for the presence of immunoglobulin E antibodies to wheat protein. The results are reported as a numerical value. A blood test that looks for different antibodies can be used to screen for celiac disease.

If these tests aren't definitive, your allergist may order an oral food challenge. Under medical supervision, you'll eat small amounts of wheat to see if a reaction develops. Because of the possibility that a reaction could be severe, this test is conducted in your allergist's office or at a food challenge center with emergency equipment and medication on hand.

Management and Treatment

Managing a wheat allergy — your own or someone else's — includes strict avoidance of wheat ingredients in both food and nonfood products.

Wheat is one of eight allergens with specific labeling requirements under the Food Allergen Labeling and Consumer Protection Act (FALCPA) of 2004. Under that law, manufacturers of packaged food products sold in the U.S. and containing wheat as an ingredient must include the presence of wheat, in clear language, on the ingredient label.

The grain is found in a myriad of foods — cereals, pastas, crackers and even some hot dogs, sauces and ice cream. It is also found in nonfood items such as Play-Doh, as well as in cosmetic and bath products. Note that the FALCPA labeling rules do not apply to nonfood items; if you have questions about ingredients in those products, check the manufacturer's website or contact the company.

Foods that don't contain wheat as an ingredient can be contaminated by wheat in the manufacturing process or during food preparation. As a result, people with a wheat allergy

should also avoid products that bear precautionary statements on the label, such as "made on shared equipment with wheat," "packaged in a plant that also processes wheat" or similar language. The use of those advisory labels is voluntary, and not all manufacturers do so.

A challenging aspect of managing a wheat allergy is baking. While there's no simple substitution for wheat as an ingredient, baked goods such as breads, muffins and cakes may be made using a combination of non-wheat flours, such as those made from rice, sorghum, soy, tapioca or potato starch. Your allergist can provide you with guidance on which grains are safe for you.

Options for wheat-free grocery shopping include foods made from other grains such as rice, quinoa, oats, rye and barley.

The recent growth in gluten-free products is making it easier to manage a wheat allergy. Gluten is a protein found in wheat, barley and rye.

A gluten-free product may be safe for those who are allergic to wheat because the product should not contain wheat ingredients. However, because a product marketed as "gluten-free" must also be free of rye and barley in addition to wheat, those who must avoid only wheat may be limiting themselves. Anyone managing a food allergy shouldn't rely on a "free from" label as a substitute for thoroughly reading the complete ingredient label.

People with any kind of food allergy must make some changes in the foods they eat. Allergists are specially trained to direct you to helpful resources, such as special cookbooks, patient support groups and registered dietitians, who can help you plan your meals.

Managing a severe food reaction with epinephrine

A wheat allergy reaction can cause symptoms that range from mild to life-threatening; the severity of each reaction is unpredictable. People who have previously experienced only mild symptoms may suddenly experience a life-threatening reaction known as anaphylaxis. In the U.S., food allergy is the leading cause of anaphylaxis outside the hospital setting.

Epinephrine (adrenaline) is the first-line treatment for anaphylaxis, which can occur within seconds or minutes, can worsen quickly and can be deadly. In this type of allergic reaction, exposure to the allergen causes the whole-body release of a flood of chemicals that can lead to lowered blood pressure and narrowed airways, among other serious symptoms.

Once you're diagnosed with a food allergy, your allergist will likely prescribe an epinephrine auto-injector and teach you how to use it. Check the expiration date of your auto-injector, note the expiration date on your calendar and ask your pharmacy about reminder services for prescription renewals.

Be sure to have two doses available, as the severe reaction may recur. If you have had a history of severe reactions, take epinephrine as soon as you suspect you have eaten an allergy-causing food or if you feel a reaction starting. Epinephrine should be used immediately if you experience severe symptoms such as shortness of breath, repetitive coughing, weak pulse, generalized hives, tightness in the throat, trouble breathing or

swallowing, or a combination of symptoms from different body areas such as hives, rashes or swelling coupled with vomiting, diarrhea or abdominal pain. Repeated doses of epinephrine may be necessary.

If you are uncertain whether a reaction warrants epinephrine, use it right away, because the benefits of epinephrine far outweigh the risk that a dose may not have been necessary.

Common side effects of epinephrine may include anxiety, restlessness, dizziness and shakiness. Rarely, the medication can lead to abnormal heart rate or rhythm, heart attack, a sharp increase in blood pressure, and fluid buildup in the lungs. Patients with certain pre-existing conditions, such as diabetes or heart disease, may be at higher risk for adverse effects and should speak to their allergist about using epinephrine.

Your allergist will provide you with a written emergency treatment plan that outlines which medications should be administered and when (note that between 10 and 20 percent of life-threatening severe allergic reactions have no skin symptoms). Be sure that you understand how to properly and promptly use an epinephrine auto-injector.

Once epinephrine has been administered, immediately call 911 and inform the dispatcher that epinephrine was given and that more may be needed from the emergency responders.

Other medications, such as antihistamine and corticosteroids, may be prescribed to treat symptoms of a food allergy, but it is important to note that there is no substitute for epinephrine — this is the only medication that can reverse the life-threatening symptoms of anaphylaxis.

Managing food allergies in children

Because fatal and near-fatal wheat allergy reactions, like other food allergy symptoms, can develop when a child is not with his or her family, parents need to make sure that their child's school, day care or other program has a written emergency action plan with instructions on preventing, recognizing and managing these episodes in class and during activities such as sporting events and field trips. A nonprofit group, Food Allergy Research & Education, has a list of resources for schools, parents and students in managing food allergies.

If your child has been prescribed an auto-injector, be sure that you and those responsible for supervising your child understand how to use it.

Gluten "Allergy"

Gluten is a protein found in grains, such as wheat, barley and rye. Some people are allergic to wheat, but that is not the same as a gluten allergy. Gluten allergy is a misleading term commonly confused with wheat allergy, or sometimes celiac disease. There is no such thing as a gluten allergy, but there is a condition called Celiac Disease. Celiac Disease is a digestive condition that is potentially serious if not diagnosed or treated. Symptoms of celiac disease include severe diarrhea after eating gluten-containing products, a rash, severe weight loss or failure to properly gain weight, and abdominal pain. In small children, you may only see poor weight gain and no pain, or other symptoms. Diagnosis of celiac disease can only be made by a board-certified gastroenterologist. It must also be made when the person is eating foods with gluten, as gluten avoidance is the active treatment.

A gluten intolerance is not an allergy, and there are currently no tests for accurate diagnosis. People with certain symptoms might need to be tested for celiac disease, but few people with gluten intolerance have celiac disease. Gluten intolerance is not an indication for allergy testing and is not a condition where an allergist could offer help. There are many people who label themselves as "allergic" to gluten, and unfortunately limit their diet without having seen a specialist. People with gluten intolerance should be seen by their primary care provider or referred to a gastroenterologist if there is concern about celiac disease.

If you need more answers about a possible wheat allergy, then it's time to see an allergist.

Soy

Overview

A member of the legume family, soy is a common ingredient in infant formulas and many other processed foods. In young children, soy is one of the most common food allergens. Typically, allergic reactions first appear in infants and young children under 3, and many outgrow the allergy during childhood.

Common Triggers of a Soy Allergy

- Soy and soy products (including some infant formulas), soy milk and soy sauce

Soy Allergy Management

- Avoid products containing soy. This includes reading labels carefully.
- Always be prepared to treat an allergic reaction because reactions are unpredictable in severity and can occur anywhere. Epinephrine autoinjectors should be readily available to treat severe allergic reactions or anaphylaxis.
- Get more information on soy allergy management.

Symptoms

Symptoms of a soy allergy include:

- Vomiting
- Stomach cramps
- Indigestion
- Diarrhea
- Wheezing
- Shortness of breath, difficulty breathing
- Repetitive cough
- Tightness in throat, hoarse voice
- Weak pulse
- Pale or blue coloring of the skin
- Hives
- Swelling, can affect the tongue and/or lips
- Dizziness
- Confusion

Rarely, a soy allergy will cause anaphylaxis, a potentially life-threatening reaction that impairs breathing, causes a sudden drop in blood pressure and can send the body into shock. The only medication that can treat anaphylaxis is epinephrine (adrenaline), administered through an auto-injector as soon as symptoms are apparent.

If you or your child experiences any of these symptoms after eating soybeans or a product containing soy, see an allergist.

Diagnosis

Diagnosing soy allergies can be as complicated as the medical condition itself. Symptoms can vary from person to person, and a single individual may not always experience the same symptoms during every reaction.

Allergic reactions to soy can affect the skin, respiratory tract, gastrointestinal tract and/or cardiovascular system.

When a food allergy is suspected, it's important to consult an allergist, who can determine which tests to perform, decide if an allergy exists and counsel patients on managing exposure and symptoms once the diagnosis has been confirmed.

To make a diagnosis, allergists ask detailed questions about the history of allergy symptoms. Be prepared to answer questions about what and how much you ate, how long it took for symptoms to develop, which symptoms you experienced and how long the symptoms lasted. The allergist will usually perform skin-prick tests and/or order a blood test (such as an ImmunoCAP test), which indicate whether food-specific immunoglobulin E (IgE) antibodies are present in your body.

Skin-prick tests are conducted in a doctor's office and provide results within 15 to 30 minutes. A drop of a liquid containing the suspected allergen is placed on the patient's forearm or back. The skin is then pricked with a small, sterile probe, allowing the liquid to seep under the skin. The tests, which are not painful but can be uncomfortable, are considered positive if a wheal (resembling a bump from a mosquito bite) develops at the site.

Blood tests, another testing option for food allergy, measure the amount of IgE antibody to the specific food(s) being tested. Results are typically available in about one to two weeks and are reported as a numerical value.

Your allergist will interpret these results and use them to aid in a diagnosis. While both of these diagnostic tools can signal a food allergy, neither is conclusive. A positive test result to a specific food does not always indicate that a patient will react to that food when it's eaten. A negative test is more helpful to rule out a food allergy. Neither test, by size of the skin test wheal or the level of IgE antibodies, necessarily predicts the severity of an allergic reaction to soy.

An allergist may use these tests and the patient's history to make a food allergy diagnosis. For a definitive diagnosis, the allergist may wish to conduct an oral food challenge, in which the patient is fed gradually increasing amounts of the suspected allergy-causing food under strict supervision. Experienced personnel, emergency medication and emergency equipment must be on hand during this procedure.

Oral food challenges also may be performed to determine if a patient has outgrown a food allergy.

Management and Treatment

As with other food allergies, the best way to manage a soy allergy is to avoid consuming products that contain soy.

Soy is one of the eight allergens that fall under the labeling requirements of the Food Allergen Labeling and Consumer Protection Act of 2004. This means that manufacturers of packaged food items sold in the United States and containing soy or a soy-based ingredient must state, in clear language, the presence of soy in the product.

Soy or derivatives of soy are found in some infant formulas, canned broths, soups, canned tuna, processed meats and hot dogs, energy bars, baked goods and many other processed foods. Soy also is a common ingredient in Asian cuisine and is sometimes contained in chicken nuggets, low-fat peanut butter, alternative nut butters and even vodka. People with a soy allergy should not consume soy milk, soy yogurt or ice cream, edamame, miso, tempeh and tofu.

Most individuals allergic to soy can safely consume highly refined soybean oil. Ask your allergist about avoiding this ingredient. Also, be cautious when eating foods that have been fried in any type of oil, due to the risk of cross-contact: If a soy-containing food is fried in oil, that oil will absorb certain soy proteins; if a different food that doesn't contain soy is then fried in that same oil, consuming it could trigger an allergic reaction.

People with a soy allergy often can eat foods that contain soy lecithin — a mixture of fatty substances derived from soybean processing. If you have a soy allergy, ask your allergist if soy lecithin is safe for you.

People with a soy allergy sometimes wonder if they should also avoid peanuts — another legume that is a common allergy trigger. The answer is "not necessarily." They are separate foods and their allergen triggers are unrelated. Soybeans also are unrelated to tree nuts such as almonds, walnuts and cashews. Those allergic to soy are no more likely to be allergic to tree nuts or peanuts than they would be to another food.

Talk to an allergist to take control of your soy allergy and live the life you want.

Managing a severe food reaction with epinephrine

Soy is among the most common food allergens. But all food allergies can be dangerous.

Epinephrine is the first-line treatment for anaphylaxis, a severe whole-body allergic reaction that causes symptoms, including tightening of the airway. Anaphylaxis can occur within seconds or minutes of exposure to the allergen, can worsen quickly, and can be deadly.

Once a food allergy diagnosis is made, your allergist likely will prescribe an epinephrine auto-injector and teach you how to use it. Check the expiration date of your auto-injector, note the expiration date on your calendar and ask your pharmacy about reminder services for prescription renewals.

Be sure to have two doses available, as the severe reaction may recur. Epinephrine should be used immediately if you experience severe symptoms such as shortness of breath,

repetitive coughing, weak pulse, generalized hives, tightness in the throat, trouble breathing or swallowing, or a combination of symptoms from different body areas such as hives, rashes or swelling on the skin coupled with vomiting, diarrhea or abdominal pain. Repeated doses of epinephrine may be necessary.

If you are uncertain whether a reaction warrants epinephrine, use it right away, because the benefits of epinephrine far outweigh the risk that a dose may not have been necessary.

Common side effects of epinephrine may include transient anxiety, restlessness, dizziness and shakiness. Rarely, the medication can lead to an abnormal heart rate or rhythm, a heart attack, a sharp increase in blood pressure and fluid buildup in the lungs, but these adverse effects are generally caused by errors in dosing which is unlikely to occur with use of epinephrine autoinjectors. Patients with certain pre-existing conditions who may be at higher risk for adverse effects should speak to their allergist about epinephrine use.

Your allergist will provide you with a written emergency treatment plan that outlines which medications should be administered and when (note that between 10 and 20 percent of life-threatening severe allergic reactions have no skin symptoms). Be sure you understand how to properly and promptly use an epinephrine auto-injector.

Once epinephrine has been administered, immediately call 911 and inform the dispatcher that epinephrine was given and that more may be needed from the emergency responders.

Other medications, such as antihistamine and corticosteroids, may be prescribed to treat mild symptoms of a food allergy, but it is important to note that there is no substitute for epinephrine — this is the only medication that can reverse the life-threatening symptoms of anaphylaxis.

Managing soy allergies in children

Because soy allergy reactions, like other food allergy symptoms, can develop when a child is not with his or her parents, parents need to make sure that their child's school, day care or other program has a written emergency action plan with instructions on preventing, recognizing and managing these episodes in class and during activities such as sporting events and field trips. A nonprofit group, Food Allergy Research & Education, has a list of resources for schools, parents and students in managing food allergies.

If your child has been prescribed an auto-injector, be sure that you and those responsible for supervising your child understand how to use it.

Sesame is the 9th most common food allergen and is found in many popular dishes, including hummus, under the name "tahini." According to the FDA, "Under the FASTER Act of 2021, sesame is being added as the 9th major food allergen effective January 1, 2023. Until that time, manufacturers do not have to list it as an allergen, although in most cases it must appear in the ingredient statement. An exception is when sesame is part of a natural flavoring or spice."

Symptoms of an allergic reaction may involve the skin, the gastrointestinal tract, the cardiovascular system and the respiratory tract. They can surface in one or more of the following ways:

- Vomiting and/or stomach cramps
- Hives
- Shortness of breath
- Wheezing
- Repetitive cough
- Shock or circulatory collapse
- Tight, hoarse throat; trouble swallowing
- Swelling of the tongue, affecting the ability to talk or breathe
- Weak pulse
- Pale or blue coloring of skin
- Dizziness or feeling faint
- Anaphylaxis, a potentially life-threatening reaction that can impair breathing and send the body into shock; reactions may simultaneously affect different parts of the body (for example, a stomachache accompanied by a rash)

Most food-related symptoms occur within two hours of ingestion; often they start within minutes. In some very rare cases, the reaction may be delayed by four to six hours or even longer. Delayed reactions are most typically seen in children who develop eczema as a symptom of food allergy and in people with a rare allergy to red meat caused by the bite of a lone star tick.

Another type of delayed food allergy reaction stems from food protein-induced enterocolitis syndrome (FPIES), a severe gastrointestinal reaction that generally occurs two to six hours after consuming milk, soy, certain grains and some other solid foods. It mostly occurs in young infants who are being exposed to these foods for the first time or who are being weaned. FPIES often involves repetitive vomiting and can lead to dehydration. In some instances, babies will develop bloody diarrhea. Because the symptoms resemble those of a viral illness or bacterial infection, diagnosis of FPIES may be delayed. FPIES is a medical emergency that should be treated with IV rehydration.

Not everyone who experiences symptoms after eating certain foods has a food allergy or needs to avoid that food entirely; for instance, some people experience an itchy mouth and throat after eating a raw or uncooked fruit or vegetable. This may indicate oral allergy syndrome – a reaction to pollen, not to the food itself. The immune system recognizes the pollen and similar proteins in the food and directs an allergic response to it. The allergen is destroyed by heating the food, which can then be consumed with no problem.

Triggers

Once a food allergy is diagnosed, the most effective treatment is to avoid the food. The foods most associated with food allergy in children are:

- Milk
- Eggs
- Peanuts

Children may outgrow their allergic reactions to milk and to eggs. Peanut and tree nut allergies are likely to persist.

The most common food allergens in adults are:

- Fruit and vegetable pollen (oral allergy syndrome)
- Peanuts and tree nuts
- Fish and shellfish

People allergic to a specific food may also potentially have a reaction to related foods. A person allergic to one tree nut may be cross-reactive to others. Those allergic to shrimp may react to crab and lobster. Someone allergic to peanuts – which actually are legumes (beans), not nuts – may have problems with tree nuts, such as pecans, walnuts, almonds and cashews; in very rare circumstances they may have problems with other legumes (excluding soy).

Learning about patterns of cross-reactivity and what must be avoided is one of the reasons why people with food allergies should receive care from a board-certified allergist. Determining if you are cross-reactive is not straightforward. Allergy testing to many items in the same "family" may not be specific enough – many times, these tests are positive, given how similar two food items in a "family" may look to the test. If you have tolerated it well in the past, a food that is theoretically cross-reactive may not have to be avoided at all.

Negative tests may be very useful in ruling out an allergy. In the case of positive tests to foods that you have never eaten but that are related to items to which you've had an allergic reaction, an oral food challenge is the best way to determine whether the food poses a danger.

How to Get Tested

A food allergy will usually cause some sort of reaction every time the trigger food is eaten. Symptoms can vary from person to person, and you may not always experience the same symptoms during every reaction. Allergic reactions to food can affect the skin, respiratory tract, gastrointestinal tract and cardiovascular system. It is impossible to predict how severe the next reaction might be, and all patients with food allergies should be carefully counseled about the risk of anaphylaxis, a potentially fatal reaction that is treated with epinephrine (adrenaline).

While food allergies may develop at any age, most appear in early childhood. If you suspect a food allergy, see an allergist, who will take your family and medical history, decide which tests to perform (if any) and use this information to determine if a food allergy exists.

To make a diagnosis, allergists ask detailed questions about your medical history and your symptoms. Be prepared to answer questions about:

- What and how much you ate
- How long it took for symptoms to develop
- What symptoms you experienced and how long they lasted.

After taking your history, your allergist may order skin tests and/or blood tests, which indicate whether food-specific immunoglobulin E (IgE) antibodies are present in your body:

- Skin-prick tests provide results in about 20 minutes. A liquid containing a tiny amount of the food allergen is placed on the skin of your arm or back. Your skin is pricked with a small, sterile probe, allowing the liquid to seep under the skin. The test, which isn't painful but can be uncomfortable, is considered positive if a wheal (resembling the bump from a mosquito bite) develops at the site where the suspected allergen was placed. As a control, you'll also get a skin prick with a liquid that doesn't contain the allergen; this should not provoke a reaction, allowing comparison between the two test sites.
- Blood tests, which are a bit less exact than skin tests, measure the amount of IgE antibody to the specific food(s) being tested. Results are typically available in about a week and are reported as a numerical value.

Your allergist will use the results of these tests in making a diagnosis. A positive result does not necessarily indicate that there is an allergy, though a negative result is useful in ruling one out.

In some cases, an allergist will recommend an oral food challenge, which is considered the most accurate way to make a food allergy diagnosis. During an oral food challenge, which is conducted under strict medical supervision, the patient is fed tiny amounts of the suspected trigger food in increasing doses over a period of time, followed by a few hours of observation to see if a reaction occurs. This test is helpful when the patient history is unclear or if the skin or blood tests are inconclusive. It also can be used to determine if an allergy has been outgrown.

Because of the possibility of a severe reaction, an oral food challenge should be conducted only by experienced allergists in a doctor's office or at a food challenge center, with emergency medication and equipment on hand.

Management and Treatment

The primary way to manage a food allergy is to avoid consuming the food that causes you problems. Carefully check ingredient labels of food products, and learn whether what you need to avoid is known by other names.

The Food Allergy Labeling and Consumer Protection Act of 2004 (FALCPA) mandates that manufacturers of packaged foods produced in the United States identify, in simple, clear language, the presence of any of the eight most common food allergens – milk, egg, wheat, soy, peanut, tree nut, fish and crustacean shellfish – in their products. The presence of the allergen must be stated even if it is only an incidental ingredient, as in an additive or flavoring.

Some goods also may be labeled with precautionary statements, such as "may contain," "might contain," "made on shared equipment," "made in a shared facility" or some other indication of potential allergen contamination. There are no laws or regulations requiring those advisory warnings and no standards that define what they mean. If you have questions about what foods are safe for you to eat, talk with your allergist.

Be advised that the FALCPA labeling requirements do not apply to items regulated by the U.S. Department of Agriculture (meat, poultry and certain egg products) and those regulated by the Alcohol and Tobacco Tax and Trade Bureau (distilled spirits, wine and beer). The law also does not apply to cosmetics, shampoos and other health and beauty aids, some of which may contain tree nut extracts or wheat proteins.

Avoiding an allergen is easier said than done. While labeling has helped make this process a bit easier, some foods are so common that avoiding them is daunting. A dietitian or a nutritionist may be able to help. These food experts will offer tips for avoiding the foods that trigger your allergies and will ensure that even if you exclude certain foods from your diet, you still will be getting all the nutrients you need. Special cookbooks and support groups, either in person or online, for patients with specific allergies can also provide useful information.

Many people with food allergies wonder whether their condition is permanent. There is no definitive answer. Allergies to milk, eggs, wheat and soy may disappear over time, while allergies to peanuts, tree nuts, fish and shellfish tend to be lifelong.

Eating out

Be extra careful when eating in restaurants. Waiters (and sometimes the kitchen staff) may not always know the ingredients of every dish on the menu. Depending on your sensitivity, even just walking into a kitchen or a restaurant can cause an allergic reaction.

Consider using a “chef card” – available through many websites – that identifies your allergy and what you cannot eat. Always tell your servers about your allergies and ask to speak to the chef, if possible. Stress the need for preparation surfaces, pans, pots and utensils that haven’t been contaminated by your allergen, and clarify with the restaurant staff what dishes on the menu are safe for you.

Anaphylaxis

Symptoms caused by a food allergy can range from mild to life-threatening; the severity of each reaction is unpredictable. People who have previously experienced only mild symptoms may suddenly experience a life-threatening reaction called anaphylaxis, which can, among other things, impair breathing and cause a sudden drop in blood pressure. This is why allergists do not like to classify someone as “mildly” or “severely” food allergic – there is just no way to tell what may happen with the next reaction. In the U.S., food allergy is the leading cause of anaphylaxis outside the hospital setting.

Epinephrine (adrenaline) is the first-line treatment for anaphylaxis, which results when exposure to an allergen triggers a flood of chemicals that can send your body into shock. Anaphylaxis can occur within seconds or minutes of exposure to the allergen, can worsen quickly and can be fatal.

Once you’ve been diagnosed with a food allergy, your allergist should prescribe an epinephrine auto-injector and teach you how to use it. You should also be given a written treatment plan describing what medications you’ve been prescribed and when they should be used. Check the expiration date of your auto-injector, note the expiration date

on your calendar and ask your pharmacy about reminder services for prescription renewals.

Anyone with a food allergy should always have his or her auto-injector close at hand. Be sure to have two doses available, as the severe reaction can recur in about 20 percent of individuals. There are no data to help predict who may need a second dose of epinephrine, so this recommendation applies to all patients with a food allergy.

Use epinephrine immediately if you experience severe symptoms such as shortness of breath, repetitive coughing, weak pulse, hives, tightness in your throat, trouble breathing or swallowing, or a combination of symptoms from different body areas, such as hives, rashes or swelling on the skin coupled with vomiting, diarrhea or abdominal pain. Repeated doses may be necessary. You should call for an ambulance (or have someone nearby do so) and inform the dispatcher that epinephrine was administered and more may be needed. You should be taken to the emergency room; policies for monitoring patients who have been given epinephrine vary by hospital.

If you are uncertain whether a reaction warrants epinephrine, use it right away; the benefits of epinephrine far outweigh the risk that a dose may not have been necessary.

Common side effects of epinephrine may include anxiety, restlessness, dizziness and shakiness. In very rare instances, the medication can lead to abnormal heart rate or rhythm, heart attack, a sharp increase in blood pressure and fluid buildup in the lungs. If you have certain pre-existing conditions, such as heart disease or diabetes, you may be at a higher risk for adverse effects from epinephrine. Still, epinephrine is considered very safe and is the most effective medicine to treat severe allergic reactions.

Other medications may be prescribed to treat symptoms of a food allergy, but it is important to note that there is no substitute for epinephrine: It is the only medication that can reverse the life-threatening symptoms of anaphylaxis.

Food Allergies in Children

No parent wants to see their child suffer. Since fatal and near-fatal food allergy reactions can occur at school or other places outside the home, parents of a child with food allergies need to make sure that their child's school has a written emergency action plan. The plan should provide instructions on preventing, recognizing and managing food allergies and should be available in the school and during activities such as sporting events and field trips. If your child has been prescribed an auto-injector, be sure that you and those responsible for supervising your child understand how to use it.

In November 2013, President Barack Obama signed into law the School Access to Emergency Epinephrine Act (PL 113-48), which encourages states to adopt laws requiring schools to have epinephrine auto-injectors on hand. As of late 2014, dozens of states had passed laws that either require schools to have a supply of epinephrine auto-injectors for general use or allow school districts the option of providing a supply of epinephrine. Many of these laws are new, and it is uncertain how well they are being implemented. As a result, ACAAI still recommends that providers caring for food-allergic children in states with such laws maintain at least two units of epinephrine per allergic child attending the school.

FAQs

Can food allergies be prevented?

In 2013, the American Academy of Pediatrics published a study which supported research suggesting that feeding solid foods to very young babies could promote allergies. It recommends against introducing solid foods to babies younger than 17 weeks. It also suggests exclusively breast-feeding "for as long as possible," but stops short of endorsing earlier research supporting six months of exclusive breast-feeding.

Research on the benefits of feeding hypoallergenic formulas to high-risk children – those born into families with a strong history of allergic diseases – is mixed.

In the case of peanut allergy, the National Institute for Allergy and Infectious Disease (NIAID) issued new updated guidelines in 2017 in order to define high, moderate and low-risk infants for developing peanut allergy. The guidelines also address how to proceed with introduction based on risk.

The updated guidelines are a breakthrough for the prevention of peanut allergy. Peanut allergy has become much more prevalent in recent years, and there is now a roadmap to prevent many new cases.

According to the new guidelines, an infant at high risk of developing peanut allergy is one with severe eczema and/or egg allergy. The guidelines recommend introduction of peanut-containing foods as early as 4-6 months for high-risk infants who have already started solid foods, after determining that it is safe to do so. Parents should know that most infants are either moderate- or low-risk for developing peanut allergies, and most can have peanut-containing foods introduced at home. Whole peanuts should never be given to infants because they are a choking hazard.

Are there any treatments for food allergy?

Currently, for most food allergies, avoiding the food you are allergic to is the only way to protect against a reaction. There has been good news in the past few years however, regarding peanut allergy. In January of 2020, the FDA approved the first treatment for peanut allergy for children and teenagers between the ages of 4 and 17 years. The treatment is named Palforzia and is an oral therapy that must be taken every day. It works by modifying the immune system. By exposing the allergic child with small increasing amounts of a purified peanut protein, it makes the risk of an allergic reaction by accidental ingestion less likely to occur or to be less severe. Nevertheless, it is not a cure, and does not remove the peanut allergy. In addition, there is a skin patch for those with peanut allergies that is being reviewed by the FDA for approval. The patch places a small amount of a peanut allergen onto the skin daily, to make you less sensitive to peanuts. Existing research is looking at ways to make you less sensitive to food allergies, and there is a lot of hope for therapies that will manage food allergies in the future.

Do food allergens remain on objects? Can an allergic reaction occur from touching food allergens that remain on things like board games or computer keys?

Yes, food allergens can potentially remain on objects if they are not carefully cleaned. Simply touching an object that contains something you are allergic to would either do nothing, or at worst possibly cause a rash on your skin at the site of contact. Without swallowing any of the allergen, it's highly unlikely you would have any further reaction. If you did, it would be exceptionally rare to develop a severe allergic reaction. In most cases, simply washing the area will stop the rash, and it's like that no medication would be needed. It is a common myth that you can have a severe reaction from simply touching something without eating the food. Many studies have shown that if you wash your hands well with soap and water, as well as thoroughly clean the surface with detergent, you can effectively remove the allergen. Gel-based alcohol hand sanitizers will NOT remove allergens from your skin.

Can food allergies develop as an adult?

Although most food allergies develop when you are a child, they can, rarely, develop as an adult. The most common food allergies for adults are shellfish – both crustaceans and mollusks – as well as tree nuts, peanuts and fish. Most adults with food allergies have had their allergy since they were children. An allergic reaction to a food can sometimes be missed in an adult because symptoms such as vomiting or diarrhea can be mistaken for the flu or food poisoning. Adults don't always pay close attention to symptoms, which can be dangerous since crucial hints can be missed and place the adult at risk if they continue to eat the food.

Oral allergy syndrome is something that can develop in adulthood. Also known as pollen-food syndrome, it is caused by cross-reacting allergens found in both pollen and raw fruits, vegetables, and some tree nuts. This is not a food allergy, though the symptoms occur from food, which can be confusing. This is a pollen allergy. The symptoms of oral allergy syndrome are an itchy mouth or tongue, or swelling of the lips or tongue. Symptoms are generally short-lived because the cross-reacting allergens are quickly digested, and do not involve any other part of the body. These symptoms can help distinguish oral allergy from a true food allergy.

Can you outgrow food allergies?

Yes. This is an important point to emphasize. Children generally, but not always, outgrow allergies to milk, egg, soy and wheat. New research indicates that up to 25 percent of children may outgrow their peanut allergy, with slightly fewer expected to outgrow a tree nut allergy. There is no need to assume your child's food allergy will be lifelong, though for many, this may be the case. If a food allergy develops as an adult, chances are much lower you will outgrow it. Food allergies in adults tend to be lifelong, though there has not been a lot of research in this area.

What are the chances of having a severe reaction to airborne allergens?

Virtually none. No study has ever conclusively proven that allergens become airborne and cause symptoms to develop. Outside of a few case reports involving symptoms from fish

allergy appearing when someone cooked fish, those with food allergies only have severe reactions after eating the allergic food. Many people with peanut allergy also worry about the dust from peanuts, particularly on airplanes. Most reactions probably happen after touching peanut dust that may be on tray tables or other surfaces. A recent study showed that wiping the surfaces to remove any dust resulted in fewer people reporting reactions during a flight.

How much does it cost to get tested for food allergies?

Like most medical procedures, there isn't a uniform cost for food allergy testing, and insurance coverage varies. Allergy testing is very often not necessary and cannot be used to screen for food allergy. Food allergy testing confirms a diagnosis if you have a history of allergic reactions to a food, and you should only be tested if you have had a reaction. A positive test itself does not make a diagnosis. For this reason, broad panel testing of a lot

of different foods should not be performed. If testing is done, it should only be to the food you had a reaction to, and not to other "common" foods. Allergists are specially trained to conduct food allergy testing, so see an allergist if you think you have a food allergy.

What is gluten? How common is gluten allergy?

Gluten is a protein found in grains, such as wheat, barley and rye. Some people are allergic to wheat, but that is not the same as a gluten allergy. Gluten allergy is a misleading term commonly confused with wheat allergy, or sometimes celiac disease. There is no such thing as a gluten allergy, but there is a condition called Celiac Disease. Celiac Disease is a digestive condition that is potentially serious if not diagnosed or treated. Symptoms of celiac disease include severe diarrhea after eating gluten-containing products, a rash, severe weight loss or failure to properly gain weight, and abdominal pain. In small children, you may only see poor weight gain and no pain, or other symptoms. Diagnosis of celiac disease can only be made by a board-certified gastroenterologist. It must also be made when the person is eating foods with gluten, as gluten avoidance is the active treatment.

A gluten intolerance is not an allergy, and there are currently no tests for accurate diagnosis. People with certain symptoms might need to be tested for celiac disease, but few people with gluten intolerance have celiac disease. Gluten intolerance is not an indication for allergy testing and is not a condition where an allergist could offer help. There are many people who label themselves as "allergic" to gluten, and unfortunately limit their diet without having seen a specialist. People with gluten intolerance should be seen by their primary care provider or referred to a gastroenterologist if there is concern about celiac disease.