FREQUENTLY ASKED QUESTIONS

These are questions that have come up during the screening of this video.

Why do so many people have allergies?

The number of people with allergies has been growing rapidly in recent years. There are theories why this is happening, but at this time we are still unsure. This is one mystery scientists and doctors are trying to figure out.

How do you get allergies?

No one really knows why some people get food allergies and other people do not. We do know that food allergies run in families, and food allergies are related to genetics. Most people with food allergies develop allergies when they are babies or kids, but some people get food allergies for the first time when they are adults. Someone can begin to have an allergy at any time in life, which is one reason why it is important to tell an adult if you do not feel well. Many people will never have allergies or food allergies.

How do some people grow out of food allergies?

For some people with food allergies, the immune system eventually recognizes that foods are not dangerous invaders and stops attacking them. People who outgrow their food allergies are then able to eat the foods without having a reaction. Allergies to certain foods are more likely to go away than others. For example, many babies and kids who are allergic to milk and eggs outgrow their allergies while they are still kids. On the other hand, many people who are allergic to peanuts never outgrow their allergies.

What is the difference between food allergy, and other conditions that make someone be unable to eat certain foods, such as lactose intolerance and celiac disease?

Each of these conditions are reasons why someone may not be able to eat a particular food, but they are not the same condition. An allergy to milk and lactose intolerance are two different reasons why someone may not be able to drink milk. An allergy to wheat and celiac disease are two different reasons why someone may not be able to eat grain products.

People who have food allergy experience an abnormal reaction when they eat or drink the food they are allergic to, which could be milk, wheat and/or another food. The reaction occurs because the body's immune system mistakes the food for something that will make the person sick, and so it tries to eliminate it from the body. Some symptoms of this type of reaction include hives, rashes, swelling, difficulty breathing, and vomiting. The symptoms can be severe and sometimes dangerous.

Lactose intolerance happens when the body is unable to digest lactose, one of the main components of milk and dairy products. As the undigested lactose moves through the intestines, it may cause stomach pain or cramping, bloating, gas, and diarrhea. Lactose intolerance can be uncomfortable, but it is not dangerous.

Celiac disease is a condition in which proteins found in many grain products, called gluten, if eaten, trigger the immune system to damage the intestines. This can commonly lead to stomach pain or cramping, bloating, gas, diarrhea, and weight loss, and can also cause other symptoms in various parts of the body. This condition is serious, uncomfortable and can be

life-threatening over time, but the reactions are not typically emergently life threatening, as they can be with food allergies.

There are also people who do not have one of the above conditions, who decide not to eat certain foods due to dieting, other health reasons, religion or preference. Some common reasons include vegetarianism, veganism and gluten-free dieting. These are not food allergies, so an immune-system reaction does not occur if the avoided foods are eaten.

How are environmental allergies different?

People who have environmental allergies experience abnormal reactions to things in the environment, such as dust, trees, grass, and animals. Like food allergies, these reactions occur because the body's immune system mistakes harmless things in the environment for dangerous invaders and tries to fight against them. Some symptoms of this type of reaction include itching eyes, watery eyes, sneezing, runny nose, stuffy nose, and cough. Some people with environmental allergies may need to take medicines to help with the symptoms because the symptoms can make them uncomfortable. Unlike food allergies, though, environmental allergies are not dangerous.

How are medication allergies different? What are their symptoms?

Medication allergies are just like food allergies, but they happen when people who are allergic to certain medications take those medications. The most common medications that people are allergic to are antibiotics, like penicillin and amoxicillin. Like food allergies, medication allergies can be severe.

How does an allergic reaction happen in the body?

An allergic reaction is an immune system response in which introduction of an allergen in the body triggers the release of chemicals that result in the dilation of small vessels, the constriction of large arteries, contraction of smooth muscle, such as the muscles in the lungs and gut, increased blood flow and white blood cell migration. This causes symptoms of allergy, such as swelling, redness, mucus secretion, sneezing, difficulty breathing, itching, intestinal spasms, and vomiting. In a severe form of this reaction, anaphylaxis, this immune response can be so large that it can lead to shock and potentially death.

How close to the food can you get without having a reaction?

People with food allergies have reactions when they eat or drink the food they are allergic to. They do not get a reaction just from being around the food or by breathing in the air around the food. However, people can get tiny particles of food in their mouths without realizing it – for example, if they touch the hand of a friend who was recently eating the food and then touch their mouth, or if someone who has recently eaten their allergen kisses them or spreads particles of their allergen to them through the droplets in a cough or in airborne saliva while talking. This is called *cross contact*. Even tiny amounts, too small to be seen by our eyes, can cause a reaction if someone has a food allergy. It's important for everyone to wash their hands AND wash any things that may have come into contact with food both before and after eating to prevent allergic reactions.

If an ingredient label says "may contain" or "made in a facility with" an allergen, does that mean that someone allergic to that allergen cannot eat the food?

Yes. Even a tiny particle of an allergen that touches a food during its production, such as on a factory counter, can cause someone to have an allergic reaction. This can happen even if the allergen was not put in the food as a direct ingredient. For this reason, if there is a chance that the allergen can be in the food, there is a chance that those with an allergy could have a serious reaction to it, and they should avoid this food.

How long does it take for a reaction to occur?

Allergic reactions to food generally happen very quickly after a person with a food allergy eats or drinks the food – the symptoms can develop within minutes. Most reactions happen within two hours of eating or drinking the food.

Are some food allergies more severe than others?

Every food allergen can cause equally severe reactions. In addition, every reaction is different. A person can have a deadly reaction after eating a food, even if all of their past reactions can be mild. For this reason, it is important to take all allergies very seriously.

What kind of treatments are there for food allergies?

A cure is a method to get rid of a disease. A treatment is a method to reduce symptoms or effects of a disease, but it does not get rid of the condition the person has. There is no cure for food allergies, and no medications can prevent reactions. A medication used for allergic reactions, called *injectable epinephrine*, usually stops a reaction within minutes once it's started. If someone has a severe allergic reaction to a food, they may need more than one dose of injectable epinephrine to get better. The most important way to help a person with a food allergy is to help them avoid a reaction in the first place.

How long does it take the medicine to work?

The medicine used for allergic reactions to food is called *injectable epinephrine*. It generally starts to work within a few minutes. If someone has a severe allergic reaction to a food, they may need more than one dose of injectable epinephrine to get better.

How does epinephrine work to stop an allergic reaction?

Epinephrine is also called adrenaline, which is a natural chemical made by the body. In an allergic reaction, blood moves from the larger vessels to smaller vessels, and away from being pumped by the heart, which can lead to shock and death. Epinephrine injections work against this process. It funnels the blood into the big vessels so that the heart can pump it around the body, which helps keep the person alive. In addition, epinephrine keeps the airways in the lungs open, so that the person can keep breathing, despite the constriction that can happen in an allergic reaction. Epinephrine also decreases the itching, swelling and hives caused by an allergic reaction.

Why do you have to go to the emergency room after taking epinephrine?

Epinephrine is a safe medication. The main reason to go to an emergency room after taking epinephrine is to have access to additional lifesaving measures and care providers in the case that the reaction should not fully improve with the epinephrine. Sometimes, an allergic reaction will resolve with epinephrine and later return, in what is called a *"biphasic"* reaction. For this reason, it is important to stay at the emergency room several hours after a reaction has improved, to ensure that care is available if life-threatening symptoms return.

What do you do if there are no medicines or resources near you?

Get an adult or call 911 immediately. Stay with the person who is having a reaction and do your best to support them. If they are uncomfortable or dizzy, they may feel better if you help them lie down.