## About Food Allergies

While an estimated 40 to 50 million Americans have allergies,
only one to two percent of all adults are allergic to foods or food additives. Eight percent of children under six have adverse reactions to ingested foods; only two to five percent have confirmed food allergies! The following information addressed commonly asked questions regarding food allergy.

## What are symptoms of food allergy?

Allergic reactions to foods typically begin withing minutes to a few hours after eating the offending food. The frequency and severity of symptoms vary widely from one person to another. Mildly allergic persons may only suffer a runny nose with sneezing, while allergic persons may experience severe and life-threatening reactions, such as upper airway swelling of the tongue, lips and throat.
The most common symptoms of food allergy involve the skin and intestines. Skin rashes include hives and eczema. Intestinal symptoms typically include vomiting, nausea, stomach cramps, indigestion and diarrhea. Other symptoms can be asthma, with cough or wheezing; rhinitis, often including itchy, stuffy, runny nose and sneezing; and rarely, anaphylaxis, a severe allergic reaction that may be life-threatening.
Because these symptoms can be caused by a number of different diseases other than food allergy, your allergist-immunologist may want to examine you to rule them out as the source of your problem.

## What causes my symptoms?

A food allergy is the result of your body's immune system over-reacting to food proteins called allergens. Normally, your immune system and defense mechanisms keep you healthy by fighting off infections and inactivating proteins such as food allergens, which could potentially cause allergic reactions. Therefore, the majority of people develop a tolerance to a wide variety of different foods in their diet.
In the individual with food allergy, the immune system produces increased amounts of immunoglobulin E antibody, or IgE. When these antibodies battle with food allergens, antihistamines and other chemicals are released as part of the body's immune reaction to these substances. These chemicals can cause blood vessels to widen, smooth muscles to contract and affected areas to become red, itchy and swollen. These IgE antibodies can be found in different body tissues- skin, intestines, and lungs - where specific allergy symptoms such as hives, vomiting, diarrhea and wheezing are observed.
Not all adverse reactions to foods are due to allergy. Some reactions to cow's milk, for example, are released to a deficiency of an enzyme (lactase) which normally breaks down a sugar in milk (lactose). When individuals with lactase deficiency drink cow's milk or eat other dairy products, they may experience intestinal symptoms including stomach cramping, gas and diarrhea. This is sometimes misinterpreted as a food allergy.

## Why me? Why have I developed food allergy?

Heredity seems to be the prime reason some people have allergies and others don't. If both your parents have allergies, you have an approximately 75 percent chance of being allergic. If one parent is allergic, or you have relatives on one side with allergies, you have a 30-40 percent chance of developing some form of allergy. If neither parent has apparent allergy, the chance is 10-15 percent.


Although food allergy occurs most often in infants and children, it can appear at any
age and can be caused by foods that had been previously eaten without any problems. Finally, excessive exposure to a particular food may affect the overall rate of allergy to that food, as testified to by the high prevalence of fish allergy among Scandinavians and of rice allergy among the Japanese.

## Which foods are most likely to cause allergy?

Eggs, cow's milk, peanuts, soy, wheat, tree nuts, fish, shellfish and sesame seed are the most common foods causing allergic reactions, but most any food has the potential to trigger an allergy. Foods most likely to cause anaphylaxis are peanuts, tree nuts and shellfish. Keep in mind that, if you are allergic to a particular food, you might be allergic to related foods. For example, a person allergic to walnuts may also be allergic to pecans and persons allergic to shrimp may not tolerate crab and lobster. Likewise, a person allergic to peanuts may not tolerate one or two of the members of the legume family such as soy, peas or certain beans. Clinical research of individuals with food allergy, however, has demonstrated that the overwhelming majority of patients with food allergy are only allergic to one or two different foods. Complete restriction of all foods in one botanical family based on an allergy to one of its members is rarely necessary. Discuss these issues with your allergist.

## How do allergists determine which foods make me sick?

Some people know exactly what food causes their allergic symptoms. They eat peanuts or a peanut-containing product and immediately break out with hives. Other individuals need their allergist's help in determining the "culprit", especially when the specific food cannot be identified or when the symptoms show up hours after ingesting an offending food.
Your allergist-immunologist will typically begin by taking a comprehensive medical history. Specifically, you'll be asked about the symptoms you experience following the food ingestion, how long after the food ingestion they occurred, how much of the offending food was ingested, how often the reaction has occurred and what type of medical treatment, if any, was required. Moreover, you will be asked about your overall diet, your family's medical history and your home environment.
These questions are necessary because your allergist wants to eliminate the possibility that another problem or allergic condition may be causing or adding to your symptoms. For example, a patient's allergy to an inhalant pollen such as ragweed may be related to allergic symptoms in the mouth and throat following the ingestion of certain melons, such as watermelon, cantaloupe or honeydew.

## What is allergy testing?

You may be asked to undergo some allergy testing. Your allergistimmunologist may employ skin testing, in which a diluted amount of the appropriate food extract is placed on the skin and then punctured or
 scratched. This procedure is safe and generally not painful. Within 15-20
minutes, a positive reaction typically appears as a raised bump surrounded by redness, similar to a mosquito bite, and indicates the presence of allergic, or IgE, antibodies to the particular food. In some cases, a blood test known as radioallergosorbent test (RAST) can be used to provide similar information to that obtained by the skin test. The RAST is generally more expensive than skin testing and the results are usually not available for one to two weeks.
If properly performed and interpreted, skin tests and/or RAST to foods are reliable and good screening tests for food allergy.

