

The University of North Texas
Dining Services
White Paper: Food Allergy

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What is a Food Allergy?

A food allergy is when your immune system responds to a substance in a food by producing an antibody against it, often IgE (Immunoglobulin E). The next time you ingest that substance (allergen), your body will react to it, usually causing symptoms ranging from mild to severe (1).

Many people may think they have a food allergy, when in fact they do not. Cianferoni and Spergel found that as much as 25 percent of Americans believe that they have a food allergy although rates confirmed by history and challenges are much lower (2). According to the American Academy of Allergy, Asthma, & Immunology, “food allergies affect approximately 6% of young children and 3 to 4% of adults in the US population” (3). The most common food allergies are from:

- Milk
- Eggs
- Peanuts
- Tree nuts
- Fish
- Shellfish
- Soy
- Wheat (3)

In 2006, Congress passed the Food Allergen Labeling and Consumer Protection Act of 2004 that requires food labels to clearly identify the source of the ingredient that contains any of these eight common food allergens. Although there are over 160 foods that can cause an allergic reaction in people, these eight foods make up 90 percent of food allergic reactions (4).

Symptoms of a Food Allergy

Symptoms from a food allergen may occur within a few minutes to about an hour after ingestion (1). They also range in severity and may include:

- Itchy mouth
- Itchy, watery eyes
- Runny, stuffy, or itchy nose

- Sneezing
- Vomiting
- Diarrhea
- Gastrointestinal (GI) pain
- Hives or eczema
- Throat and/or chest tightness
- Wheezing
- Trouble breathing (1, 5)

The last three symptoms affecting the respiratory system are known as anaphylaxis, a serious and life-threatening allergic reaction. 911 should be notified immediately if anaphylaxis occurs (5).

Diagnosing a Food Allergy

It can be very difficult to diagnose a food allergy. Typically, compiling a thorough medical and diet history is the first step in diagnosis. This history may not be very accurate as patients may have a difficult time recollecting certain details or timing of symptoms. It is then good to rule out other causes such as another illness. If nothing else is suspected, one can try an elimination diet where you exclude all suspected foods. If symptoms improve, the food (or one food at a time if there are many) is reintroduced to see if symptoms reappear. This should be done under the supervision of a physician in case of a severe reaction. For IgE-mediated allergies, two tests can be performed: the skin prick test and serum testing. Neither is 100 percent reliable, therefore a combination of diagnostic methods may be used to determine an allergy (6).

Treatment of a Food Allergy

Avoiding the foods that cause the allergic reaction is the only true way to “treat” a food allergy. This can be quite complicated as the food may be hidden in other foods as an ingredient or from cross-contamination. Learning to read ingredient labels and asking restaurants for ingredient information can help you avoid accidental ingestion of the allergen. Sometimes though, the “safe” food may have been prepared with the same utensils or on the same surface as a food containing the allergen. This is what is known as cross-contamination (7, 8). Some people with very serious food allergies can have reactions through cross-contamination that are just as serious as if they ingested the food allergen in its whole form.

There are claims that putting a small amount of the allergen in your mouth before ingesting a food will help prevent a reaction. This, however, has been disproved by some clinical research (8).

Food allergy shots contain small amounts of the substance you are allergic to in an attempt to get your body used to the allergen. Although another form of allergy shots may help with seasonal allergies, they have not been proven to help with food allergies (8).

Currently, the only proven treatment of food allergies is avoidance. However, many therapies are being studied as alternatives to avoidance. Hopes are that these studies may eventually lead to a cure of food allergies (2, 10). Since avoidance is the best treatment, you will need to educate yourself on how to accomplish this. If you need help, ask your immunologist or consult a registered dietitian.

What is Food Intolerance?

Food intolerances do not result from an immune response, but rather a digestion problem (7). The National Institute of Allergy and Infectious Diseases recognizes several types of food intolerances that may cause symptoms similar to food allergy.

- Food poisoning - caused by food contaminated with bacteria, parasites, viruses or toxins.
- Histamine toxicity - a reaction to high levels of histamine in a food.
- Lactose intolerance - the body does not make enough lactase to digest lactose.
- Food additives - ingredients such as sulfites and MSG that may also cause adverse reactions.
- Psychological causes - such as associating a food with a bad childhood experience may cause unpleasant feelings and induce symptoms.
- Other - include cancers and ulcers (9).

Gluten intolerance is often called celiac disease or gluten-sensitivity. Because it involves an immune response, some consider it a food allergy. The National Institute of Allergy and Infectious Diseases, however, listed it among the food intolerances because it does not involve the IgE antibody like other food allergies (9).

Symptoms of Food Intolerance

Food Intolerances can cause a wide variety of symptoms such as:

- Abdominal cramping
- Gas
- Bloating
- Diarrhea
- Headache
- Warm sensation
- Flushing
- Chest discomfort
- Vomiting (1, 7, 9)

Symptoms from a food intolerance may take only hours or even days to appear. This makes diagnosing food intolerance much more difficult. It can also be difficult to determine a food allergy from food intolerance because many of the symptoms are the same (11).

Treatment of Food Intolerance

Treatment of food intolerance will depend on the type of food intolerance you are experiencing. To determine the type of intolerance, consult your doctor. If the cause is gluten intolerance, lactose intolerance, or food additives, you may benefit from consulting a registered dietitian. If there are psychological causes, you may benefit from consulting a psychiatrist (9).

What to do while at UNT

If you have a food allergy, please contact the main dining office at 940-565-2462 to discuss your options.

For those of you who have a food intolerance or a food allergy that is not life-threatening, it is important to make your special dietary needs known to the dining hall manager on duty. Self-reporting insures that all parties have access to the information necessary to keep you healthy and safe. It is also the responsibility of each student to check with their dining hall managers concerning ingredients if any question exists. For further information, please speak with a member of the dining hall management.

Allergen information is also available on the dining website (www.dining.unt.edu) Under the Nutrition tab, select Resources, scroll down to click on Nutrition Booklet, then download. The Nutrition Booklet lists all the food items we serve. Allergy information, including the allergens key, is located on page 8 with the list of menu items commencing on page 10. Choose the category you wish to view, and then choose the specific food item. Common allergens that the food may contain are listed under "Item Type."

Please note that these methods are not 100 percent accurate. In the dining halls, we make every attempt to identify foods containing milk, eggs, wheat, soy, fish, shellfish, peanuts and tree nuts, however, an ingredient may have changed during preparation of the food or by the manufacturer of the food.

For those with food allergies that cause severe illness or the possibility of death, we highly recommend that you look into living off campus and avoid eating in the cafeterias or the Union. Although we pride ourselves in the food that we serve, there are too many opportunities for food to be contaminated by allergens. At any point, your food may have come in contact with an allergen at the manufacturer, distributor, kitchen, or on the serving line. If your life is on the line because of a severe food allergy, please do not risk it.

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