# Food Allergy Training Guide for College and University Food Services 



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#### Abstract

The National Association of College \& University Food Services ("NACUFS") is a non-profit organization the primary purpose of which is to provide education and services to enhance the professionalism of college and university food services. The individuals listed above who provided editorial assistance to FAAN did so as volunteers. NACUFS does not provide any legal, medical or regulatory advice. NACUFS is not an author of the FAAN book Food Allergy Training Guide for College and University Food Services or accompanying materials, and does not assume any legal responsibility for an organization's use or application of the FAAN book and accompanying materials, or any outcomes of such use or application. The FAAN book and materials provide a set of voluntary and nonbinding guidelines; see FAAN's "To the Reader" note on page 2 . The decision of an organization to use or apply any principles or practices provided in the FAAN book and materials is entirely voluntary and the responsibility of the organization that decides to do so.


# Food Allergy Training Guide for College and University Food Services 

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## Introduction

The following section provides direction for how to use this guide and what to consider when creating your food service's food allergy policy.

## Introduction

Scientists estimate that approximately 11 million Americans suffer from true food allergies. At the present time, there is no cure for food allergy. Avoidance is the only way to prevent an allergic reaction.


Food allergy-induced reactions are often unexpected and move swiftly throughout the body causing a range of symptoms that can include swelling of the lips, tongue, and throat; difficulty breathing; hives; abdominal cramps; vomiting; and diarrhea.

Potentially life-threatening allergic reactions, called anaphylaxis, may also include a drop in blood pressure and loss of consciousness. Food allergy-related reactions account for an estimated 30,000 emergency room visits and between 150 and 200 deaths each year.

When food-allergic individuals go to college, they must rely on food service staff to provide them with accurate information about ingredients so they can make an informed decision about what to order. Incorrect or incomplete information puts these individuals at risk for an allergic reaction.

Education, cooperation, and teamwork are the keys to safely serving a guest who has food allergy. All food service staff-from the front of the house staff to the back of the house staff to management staffmust become familiar with the issues surrounding food allergies as well as the proper way to answer guests' questions. Further, they must know what to do if an allergic reaction occurs.

Surveys of the Food Allergy \& Anaphylaxis Network (a national nonprofit organization) members indicate that a patient's restricted diet influences the shopping and dining out habits of their entire family and many of their close friends. When these families find a product or a place to dine that they like and trust, they become loyal customers and encourage others to use these services, too. Therefore, while food allergy affects as many as 11 million Americans, its impact on college and university patronage affects a much larger number, in addition to the needs of serving the student several times a day.

## How to Use This Guide

This guide provides general information about food allergy and anaphylaxis, a potentially life-threatening allergic reaction. Several sections contain information for various staff members in a college and university food service establishment and strategies for handling situations they may face.

Some college and university food service establishments are quick service, while others include many levels of staff. Take the information presented here and adapt it to your establishment's needs. Be sure to update information as menu items change, and make staff training and retraining a top priority.

Share appropriate sections, such as the Front of the House and the Back of the House sections, with your staff. Ask all employees to complete the quizzes at the end of each section to gauge their level of understanding about how an order placed by a diner who has a food allergy should be handled.

Use the reproducible handouts in the Appendix to educate your guests and to show them you care.

Finally, remember that you and the guest who has food allergies are both working toward the same goal-preventing an allergic reaction in your establishment.

## Managing food allergies in a college and university food service establishment can be done. It requires a partnership between the guest and the staff. Working together, you will prevent an allergic reaction.

## Education, <br> cooperation, and <br> teamwork are the <br> keys to safely <br> serving a guest <br> who has food <br> allergy.

## Creating a Policy for Your Campus Dining Services

The best way to minimize risks to you and to your guests is to create a written procedure for handling food allergies for all staff members to follow.

When creating your plan, consider the following:

- Who will answer the food-allergic diner's questions regarding menu selection? (a manager, a dietitian, an administrator)
- Who will be responsible for checking the ingredients used? (the customer, the cook staff, a manager)
- What should the kitchen staff be aware of in order to avoid crosscontact?
- What should the staff do if an allergic reaction occurs?

It only takes a few extra minutes to handle the special request or answer questions from a guest who has a food allergy. This is time well spent, as it may prevent an allergic reaction that could potentially cause serious health problems for an individual, requiring an ambulance arriving during peak time, or result in a lawsuit.

## Get organized in advance

- Post emergency numbers at all telephones in the event emergency services are needed. Make sure the street address and telephone number for your food service establishment are posted, too. An example is provided in the Appendix.

- Plan to take the time throughout the day to ensure kitchen and preparation areas are properly organized.
- Take a close look at the day-to-day operations of your food service establishment and pinpoint ways to reduce the risk of a mistake when preparing a special meal.


## College and University Plans for Residential Food Allergy Customers

Creating a plan for serving a student who dines with you several meals a day, every day of the week may seem rather time-intensive and complicated in the beginning. However, once a plan and policies are established for the dining services, and the employees are trained and working with the student who has food allergies, it is a rewarding experience for everyone involved.

The section on Policy Development will help give you ideas for writing a plan and policies for the institution.

## College and University Retail Outlet Plans for Food Allergy Customers

Many colleges and universities have various retail outlets on their campus. Some of these outlets are branded venues (i.e. Burger King®, Pizza Hut ${ }^{\circledR}$ ) while other venues are self-branded, meaning the college or university has developed the name, menu, and other processes for that area.

For those venues that are self-branded, a food allergy plan can be built similar to the residential dining areas for handling customers with food allergies.

For the branded venues, work with the representative from that corporation regarding information they have available for customers with food allergies. If the corporation does not have any information available, then develop a plan for how to get ingredient information of

products to customers with food allergies to let them know what they are able to consume.

For both types of retail outlets, there may be stricter standards that must be adhered to regarding timeliness of service. A cook or server that feels rushed may be more likely to take a shortcut. Let employees know when preparing food for a food-allergic individual, it may take a bit more time to ensure a mistake is not made, but extra time is acceptable in this situation.

## College and University C-Store Plans for Food Allergies Customers

Most of the foods in a college or university convenience store will already be labeled from the manufacturer. A customer with food allergies probably already knows which brand and types of foods will work for them.

Some C-stores will offer foods made in their campus bakery or other areas where there may not be labels with ingredient statements for the product. Other examples of foods not labeled may include items on hot dog rollers, deli sandwich made to order, and sushi made to order. Staff must be aware that anyone asking questions related to food allergies should speak with a manager. This way, the manager can speak with the customer about their food allergies and even show them specific labels of products used if needed.

## College and University Plans for Catering Food Allergy Customers <br> Quite often there will be guests at catered events who are allergic to various foods. When developing and implementing catering policies for food-allergic catering guests, it is important to include the following individuals.

The person who sets up the catered event and order, and who is dealing with the customer hosting the event. It is important that this person ask if there are any guests who will be attending who have food allergies. This should be done for each event.

The food production manager or chef. This person will need to make sure the kitchen and production areas are in compliance with the policy to help ensure proper products are being used, and there are no chances of cross-contact.

The catering or banquet manager. This person will need to ensure the servers are handling the food and serving it correctly so there are no chances of cross-contact. This would include using fresh gloves
while delivering the product and serving allergy-free foods separately from other plates.

When a customer identifies himself/herself as having a food allergy at a catering event and nothing has been prepared for them in advance, the servers need to provide accurate information to that customer regarding ingredients and preparation methods. If the server is not able to answer the questions, the manager should speak with the customer or let the customer know that there is uncertainty of the ingredients or preparation methods. The customer would appreciate you admitting that you do not know the answer rather than getting incorrect information that could cause a reaction.

It is helpful to have a template you can use for guests who attend catering events. There is an example of such a template in the Appendix.

## Practice Makes Perfect

Food allergy training is a process that requires regular review. Include what to do in the event of an allergic emergency. Be sure new employees understand the food allergy policy.

## Peanut and tree nut allergic reactions in food service establishments

A study* of peanut and/or tree nut allergic reactions in restaurants and food establishments showed that half of the reactions occurred because food was "hidden" in sauces, dressings, or in egg rolls. Desserts accounted for $43 \%$ of the reactions, followed by entrées (35\%), appetizers (13\%), and other (9\%).

Reactions were caused by eating the food in all but five reports; two were from nut shells on the floor, two from contact with residual food on a table, and one from being within two feet of the food being cooked. Reactions occurred in a variety of sit down and quick service establishments, however, there was a higher representation of Asian restaurants, ice cream shops, and bakery or donut shops.

The majority of the patients did not mention their food allergy to the establishment's employees, rather they relied on the menu to provide ingredient information. Consider adding a note to the bottom of your menu, or posting a sign, that prompts guests with food allergies to notify the manager for ingredient information.

# Overview of Food Allergy and Anaphylaxis 

- Food allergy is reported by $4 \%$ of the general population, or 11 million Americans.
- Milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat account for $90 \%$ of all food-allergic reactions.
- There is no cure for food allergy; strict avoidance of the allergy-causing food is the key to preventing reactions.
- Severe or life-threatening reactions are called anaphylaxis (ana-fil-axis).
- It is estimated that as many as 200 people die each year from food-allergic reactions.
- Only a tiny amount of an allergy-causing food is enough to cause an allergic reaction in some people.


# Overview of Food Allergy and Anaphylaxis 

Some experts
recommend that
patients who are allergic to peanuts avoid tree nuts and vice versa as an extra precaution.

A peanut is not a nut, it is a legume that grows underground.

Examples of nuts that grow on trees include walnuts, pecans, and almonds to name just a few.

## Individuals who

are diagnosed with Celiac disease, or Celiac sprue, suffer from a gluten intolerence.

## What is a food allergy?

A food allergy is an immune system response to a food that the body mistakenly believes is harmful. Once the immune system decides that a particular food is harmful, it creates specific antibodies to it.

The next time the individual eats that food, the immune system releases massive amounts of chemicals, including histamine, in order to protect the body. These chemicals trigger a cascade of allergic symptoms that can affect the respiratory system, gastrointestinal tract, skin, or cardiovascular system.

## What foods cause food allergies?

Although an individual could be allergic to any food such as fruits, vegetables, and meats, the following eight foods account for $90 \%$ of all food-allergic reactions:

| Peanuts | Fish |
| :--- | :--- |
| Tree nuts (walnuts, pecans, almonds | Shellfish |
| cashews, hazelnuts/filberts, | Milk |
| macadamia nuts, pistachio nuts, etc.) | Soy |
| Eggs | Wheat |

Peanuts are the leading cause of severe allergic reactions, followed by shellfish, fish, tree nuts, and eggs. For some people, just a trace amount of the offending food can cause an allergic reaction.

Additionally, some experts recommend that patients who are allergic to peanuts avoid tree nuts and vice versa as an extra precaution.

## What are the symptoms of an allergic reaction?

Typical symptoms of an allergic reaction can include:

Skin:
hives, eczema, swelling of the lips and face, itching

Respiratory Tract: swelling of the throat or mouth; difficulty breathing; stuffy nose; itchy, watery eyes; runny nose; wheezing and repetitive coughing

## Gastrointestinal Tract: abdominal cramps, vomiting, diarrhea

Symptoms can range from mild to severe. Reactions can occur within minutes up to two hours after eating an offending food.

## What is anaphylaxis?

Severe or life-threatening reactions are called anaphylaxis. Symptoms can include all of those previously noted, plus:

$$
\begin{array}{ll}
\text { Cardiovascular System: } & \begin{array}{l}
\text { drop in blood pressure, loss of } \\
\text { consciousness, death }
\end{array}
\end{array}
$$

It is estimated that 150 to 200 people die each year from food-allergic reactions. Many of these deaths occur as a result of severe swelling in the mouth and throat.

## Treatment of a reaction

Mild reactions are usually treated with antihistamine. The medication of choice for controlling a severe or anaphylactic reaction is epinephrine, also called adrenaline. It is available by prescription in an auto injector, called EpiPen® (pictured on right), and should be administered promptly.

If a diner in your food service establishment is having an anaphylactic
 reaction, notify your manager and get help immediately! Call the rescue squad (or 911) and tell them that someone is having a severe allergic reaction.

## Who is at risk?

An estimated 11 million Americans, or $4 \%$ of the general population, suffer from food allergy. Recent studies show that $2.3 \%$ of Americans report having a fish or shellfish allergy; $1.1 \%$, or close to 3 million Americans, are believed to be allergic to peanuts or tree nuts (pecans, walnuts, almonds, etc.).

## How can an allergic reaction be avoided?

Strict avoidance of the allergy-causing food is the only way to avoid a reaction. Reading ingredient labels for all foods is the key to maintaining control over the allergy.

## What is cross-contact?

Cross-contact occurs when the proteins from two or more foods mixfor example, during cooking or while serving the foods. The protein is the part of the food that causes the food allergy. A tiny amount of an allergenic food is enough to cause an allergic reaction in some people. Therefore, precautions must be taken to avoid cross-contact from foods to which a guest is allergic.

## What do individuals with food allergies need from you?

Individuals with food allergies need food service staff to provide them with accurate information about ingredients so they can make an informed decision about what to order from the menu. Incorrect or incomplete information puts these guests at risk for an allergic reaction.

A shrimp-allergic girl had a reaction to a grilled cheese sandwich. She later learned it had been made on the same grill where shrimp had been cooked.

Common foods made from a variety of ingredients may contain allergens. For example, mayonnaise and meringue contain eggs; yogurt, and many brands of "non-dairy"-labeled products contain milk; marzipan is a paste made with almonds.

Common foods often have scientific and technical terms. For example, "globulin" is derived from egg and "whey" is derived from milk. These ingredients must be avoided by egg- and milk-allergic individuals, respectively. See the "How to Read a Label Sheet" in the Appendix for a list of other scientific and technical names for common allergycausing foods.

> A peanut-allergic student suffered a fatal allergic reaction after eating a sandwich she made. It was later learned that the knife she used had previously been used to prepare a peanut butter sandwich and was only wiped clean. Although this example is rare, it shows how little it can take for some people to have an allergic reaction.

> "If I am attending a catered event, I contact the caterer to discuss the menu and possible alternatives beforehand. If all else fails, I attend the event, but eat before I go or take something with me that is safe for me to eat."
> -Carol M., Soquel, CA

## Are cooking oils safe for guests who have a food allergy?

Studies have shown that highly refined peanut oil and soy oil have been safely ingested by individuals who are allergic to those foods.
However, if that oil has previously been used to fry allergen-containing food-peanuts or shellfish, for example-it may cause an allergic reaction in a peanut- or shellfish-allergic individual. This occurs because during cooking, protein, which is the part of the food that causes the allergy, is released into the oil, and can then be transferred to other foods.

Cold-pressed, expelled, or extruded oils (sometimes represented as gourmet oils) from foods such as peanuts, sesame, or walnuts contain protein and, therefore, are not safe for someone with an allergy to those foods.

Some physicians instruct patients who are allergic to peanuts and soy to avoid all oils made with these ingredients as an extra precaution.

## Food Allergy and Anaphylaxis Quiz

1. Food-allergic reactions occur within what time period after ingestion?
(a) within seconds
(b) from two minutes to 12 hours
(c) from within minutes to two hours
(d) within 2 days
2. Food-allergic reactions are responsible for how many emergency room visits per year?
(a) 30,000
(b) 3,000
(c) 12,000
(d) 300
3. What body systems can be affected by a food-allergic reaction?
(a) gastrointestinal tract
(b) respiratory system
(c) cardiovascular system
(d) skin
(e) all of the above
4. Eight foods-peanuts, tree nuts, fish, shellfish, milk, egg, soy, and wheat-are responsible for what percentage of food-allergic reactions?
(a) $50 \%$
(b) $75 \%$
(c) $100 \%$
(d) $90 \%$
5. What component of a food is responsible for an allergic reaction?
(a) fat
(b) protein
(c) carbohydrate
(d) trans-fatty acids
6. What medication is used to control a severe allergic reaction?
(a) antihistamine
(b) pseudoephedrine
(c) Sudafed $^{\text {TM }}$
(d) epinephrine
7. Those with food allergies can safely consume the foods that cause allergies:
(a) if they only eat a small amount
(b) if they take antihistamine first
(c) never
(d) if they eat the food with a large meal to dilute it
8. Fried foods can be dangerous for those with food allergies because:
(a) high fat content makes allergic reactions worse
(b) frying changes the chemical structure of foods
(c) cross-contact with other food protein can occur if that oil has been used to cook other foods

## True or False

9. Food-allergic reactions are a response of the immune system.
10. Close to three million Americans suffer from peanut or tree nut allergy.

See page 19 for the Answer Key.

# Answer Key for Food Allergy and Anaphylaxis Ouiz 

1. C, from within minutes, up until two hours
2. A, 30,000
3. E, all of the above
4. D, $90 \%$
5. B, protein
6. D, epinephrine
7. C, never
8. C, cross-contact with other foods can occur
9. True
10. True

## Risk Management

- Understanding the basics of food allergy is key to reducing liability.
- The food service establishment must reveal, upon request, ingredients that contain allergens.
- It is important that every staff member be taught how to handle questions and requests from guests who have food allergies.
- When a guest identifies him- or herself as having a food allergy, activate your food service establishment's policy for handling the special order.
- If a customer is having an allergic reaction, get medical help immediately!


## Risk Management

Allergens are a liability risk. Understanding the basics of food allergy, and how a reaction can be avoided, is key to reducing liability.

The college or university food service establishment must reveal, upon request, ingredients that contain allergens even if the ingredient is considered part of the "secret recipe." The failure to disclose this information would expose the food service establishment to potential liability if a consumer who has a food allergy eats the food and has an adverse reaction. Indeed, there are numerous reports of lawsuits that have been filed against the restaurants when customers were given misinformation, or incomplete information about ingredients used in a dish.

In some cases, food service establishments have also been held responsible for cross-contact after the staff had been notified of the food allergy. In one such example, a family explained that their child had an allergy to shellfish. The restaurant served the child french fries that had been prepared in the same oil used to fry shellfish. The child had an allergic reaction and the family sued the restaurant.

In addition to compensatory damages (i.e., medical expenses and pain and suffering), any food service establishment could also be held liable for punitive damages if their actions are viewed as reckless disregard for the customer's safety. When punitive damages are awarded, they frequently exceed compensatory damages.

## Food allergy cited in suit over death

By Natalie P. McNeal

Therefore, it is important that every staff member-from the manager to the chef or cook-be taught how to handle questions and requests from guests who have food allergies. Doing so will minimize risks both for the food service establishment and the guest and will create a win-win situation.

When a customer identifies himself or herself as having a food allergy, the staff member should notify the manager. The manager should answer any questions the guest may have about the menu items and ensure that the proper procedure is followed for this

## N.H. family claims secret pesto sauce killed mom

 special meal. A designated staff member, such as the chef, should be responsible for discussing ingredient information with the guest. Information about label reading can be found on the enclosed "How to Read a Label Sheet" in the Appendix.Although the customer will rely on the staff for ingredient information
and preparation methods, he or she will have the final say in what their menu selection will be.

How the staff reacts in the event of an allergic emergency is equally important.
If a customer notifies the staff that he or she is having an allergic reaction, the staff should immediately summon medical help. The staff should not delay medical treatment by denying the reaction is occurring.

## Summary of how a food allergy order may travel through the restaurant or college or university residential dining establishment



## Policy Development

- Campus dining services should develop a policy outlining how accommodations for students with food allergies can be made.
- A food allergy program establishes a positive rapport with the student and his/her parents regarding food allergy management.
- It is important that every staff member be taught how to handle questions and requests from guests who have food allergies.
- Develop written instructions for handling an allergic reaction.
- Having plans in place before they are needed will ensure that the staff handles any allergic emergencies appropriately and quickly.


## Policy Development

In a college and university food service setting, there are often many levels of staff that need to be involved in successfully administering meals for a student with food allergies.

## Developing a Policy

Campus dining services should develop a policy outlining how to accommodate students with food allergies. Current policies that some colleges and universities have include the following:

- Items with nuts must be labeled.
- Ingredients for all food items are available through labels at the point of service and a website.
- Students with food allergies are granted access to storage areas to look at and read food labels to determine what they are able to eat.
- The dining services provides updated ingredient lists to the students and develops a food plan together with the customers for their meals.
- Students with special needs are encouraged to contact the university or college's staff dietitian for assistance with dietary requirements due to illness, doctor's orders, or religious reasons. The college or university may ask the student to provide medical documentation.
- Students with life-threatening allergies may be exempt from meal plans.

Your policy will need to be published so customers who have food allergies are able to find this information. Publications and events to market this food allergy program include:

- Student housing handbooks
- Meal plan contract
- During orientation (with parents and students)
- Menus, table tents, brochures
- Dining service website
- Admission booklets
- Health services booklets



## Setting up a Program

The goal of setting up a food allergy program on your campus is to assist students with food allergies to make safe and healthy choices while dining on campus. Additionally, by having a food allergy program, the number of meal plan exemptions due to food allergies should be reduced and these students will remain in the on-campus dining program.

The best benefit to having a food allergy program is establishing a positive rapport with the student and his/her parents regarding food allergy management. Furthermore, the staff who work with food allergy students are able to see how they are making a difference in this person's life.

When establishing a program, identify the people involved in administering your food allergy program. Should health services be involved? Does your food service operation or your school have a staff dietitian who can assist in this process? Is there a nutrition and hospitality program on campus that would be able to offer assistance in helping to get a program set up for class credit?

Typically, if the campus has a dietitian, this person has the background needed to work with individuals who have food allergies. You will want to involve someone who has skills to train all levels of staff, from students to management about serving individuals with food allergies. Involve students who have food allergies to see what they feel their needs are or have a focus group of students with food allergies to help identify services.

Next, after involving these individuals, conduct a needs assessment of services that need to be offered. Find out what is currently being offered to help students with food allergies. Additionally speak to other colleges and universities that currently have food allergy programs and find out what they are doing.

While determining the services to offer, take into consideration availability of food, staffing to handle the food, and processes within the food establishment that are already in place. For example, if there is only one oven to bake cookies, for cross-contact reasons strongly encourage someone allergic to peanuts or tree nuts not to consume any type of cookie baked in this oven.

Some issues to think about in developing a food allergy program:

- Should the student provide a list of foods they can eat?
- Who will be responsible for purchasing special dietary foods for the food allergy customer?
- Where will the customer be able to find these special items?
- Does the customer need to contact a staff member and ask every time?
- Is there a special cooler/refrigerator the students will have access to?
- If you provide special foods and the students do not use this option, will you charge them extra for these foods?
- Will you purchase food and allow students to take the special food back to their rooms?

Written instruction for handling an allergic reaction must be developed. Having these plans in place before they are needed will ensure that the staff handles any allergic emergencies appropriately and quickly. See the Appendix for a sample Food Allergy Action plan.

## Training

Once the policies and programs are established, training staff is the next step. Think about who will have contact with the food allergy customer. Quite often all areas of staff in food service will need training, including your student employees.

For example, extensive training with management many need to be done, as they will often have questions directed towards them regarding food items. It is critical that cook staff know the importance of ensuring that cross-contact of products is not occurring throughout the preparation of food for students with food allergies. This will entail a different type of training from what the manager receives, as it is geared more towards the cooking and handling of food.

For staff in the front of the house receiving questions about the food, it is important for them to realize if they don't know the answer to find a member of the cook staff or management staff who can answer the customer's questions.

Once training has been established, the training must be reviewed periodically to be sure everyone knows what to do. New employees should receive food-allergy training before they have contact with any guests.

## Other Helpful Hints in Developing

a Program

- Depending on what the student's needs are, involve the food distributors to help obtain ingredient information on the foods you are using.
- Check with the college or university lawyer to see if there are any liability issues or any type of written agreements that should be done.
- If food is being prepared in different locations from where is it served, for example, items made in a centralized bakery to be consumed in a dining unit, it may be helpful to have a form for the bakery to inform the units receiving the items if the bakery products contain common food allergens.


## The Manager

- The manager should be the point person for food allergy questions.
- The manager should set up food allergy production and serving procedures for the staff.
- Procedures should clearly define how to handle menu selection, meal preparation, and serving methods.
- Written instructions for handling an allergic reaction must be developed.
- Food allergy training must be reviewed periodically.

Simply prepared
dishes minimize
risks. For
example,
recommend that
the diner select
broiled chicken
instead of chicken
in a sauce or
pastry covering,
baked potato
instead of french fries.

## The Manager

Ideally, the manager should be the point person for all food allergy questions from guests and kitchen staff.

Depending on how the food allergy program is set up, the manager may want to be involved in menu selection, meal preparation, and serving methods to be used for a food-allergic individual.

Food allergy training must be reviewed periodically to be sure everyone knows what to do. A manager may want to include food to be made for food allergy customers in production meetings so all staff are aware of precautions and measures being taken to ensure the customer's safety.

## High-Risk Menu Choices

Fried foods are high-risk foods because the cooking oil is often used for many foods. Unless there is a designated fryer, steer guests who have food allergies away from fried foods.

Desserts have caused a number of allergic reactions because ingredients such as nuts often appear in unexpected places. Individuals who have food allergies generally are safest avoiding desserts and selecting fresh fruit instead.

Sauces can be used in entrées or desserts. Unless you are absolutely sure about the ingredients used, recommend that guests who have food allergies avoid foods with sauces.

Entrées encased in a pastry covering prevent the individual from making a visual inspection of the food he or she is about to eat, a precaution that is important for anyone with a food allergy.

Combination foods, such as stews or pot pies, contain many ingredients, some of which can be difficult to see. To be on the safe side, steer guests who have food allergies away from these types of dishes.

Buffet tables are considered high-risk for those with food allergies, due to the likelihood of cross-contact. Often, serving utensils are used for several dishes, or small bits of food from one dish wind up in another. For example, shredded cheese placed next to a milk-free food may wind up in the milk-free food. Additionally, it is not uncommon for labels on the buffet to become mixed up.

If there is a particular selection on the buffet that is not offered on the menu, ask the kitchen staff to specially prepare the same dish for the guest who has a food allergy

## Food Allergy Friendly Menu Reading

Review the current menu. Provide as much information as possible about ingredients directly on the menu. Following are some examples.

## Instead of

Apple Cake
Blue Cheese Dressing
Monterey Pasta Salad

Chicken Stir-Fry
Asian Noodles
Pasta with Pesto Sauce

## Describe as

Apple-Walnut Cake
Blue Cheese and Walnut
Dressing
Monterey Pasta Salad With
Almonds
Chicken Cashew Stir-Fry
Asian Noodles with Peanuts
Pasta with Pesto Sauce (contains pine nuts)

If a food does
not have a label,
or if you are
unsure about the
ingredients, do
not guess.
Suggest another
menu selection
for which you
have ingredient information.

## It's Okay to Say "I Don't Know"

If you are not $100 \%$ sure about the ingredients in a menu item, say so.
The guest will appreciate your honesty. Guide them to other choices on the menu or point them to a person who does know the answer to their question.

## What Others Have Done

To encourage guests who have food allergies to work with the staff, some food service operations have a printed note at the bottom of their menus or on their website. Examples of such notes include:

* "Food-allergic guests, please see manager."
" "For those who have food allergies, please inform the cook staff. They will be happy to make any changes to the food as necessary."
- "Please alert the food service staff to any food allergies prior to ordering."

Some food establishments designate a few menu items as "safe" dishes for food-allergic individuals and recommend those dishes. For example, there may be one or two items on the menu, including desserts, which are peanut- or nut-free.

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## Additional Considerations

Post ingredient information on your website. Many people look to a company's website for information before visiting the establishment. Consider posting information about ingredients and your procedures for handling food allergies. Make sure the website is kept up-to-date.

Guest education. See the Appendix for reproducible educational materials. These can be customized to include your logo, and printed using your company design and colors. Just be sure to include FAAN's name on the materials, and to allow FAAN to review any editorial changes you make before using the materials.

Some campus food services use
"secret shoppers" or "diners" to provide honest feedback about service. Consider having one place an allergy-free order so you can evaluate your food allergy plan in action.
"I was on the meal plan at college and ate at the college cafeteria almost daily. The cafeteria had a sandwich station and wedged between the bread and the bowls of mayonnaise and mustard was a large vat of peanut butter. Inevitably, the knife in the peanut butter bowl ended up stuck in the mayonnaise or mustard, or the peanut butter would dribble on the counter and spill onto the bread. On several occasions, my lips would swell up or I would experience stomach cramps because of the crosscontact."
-Anne R., Falls Church, VA

## Handling a Complaint

If a guest notifies you of an incident that has caused an allergic reaction, listen carefully. Stay focused on and committed to getting all the facts-not denying the reaction or defending the people who made the food.

View any reported allergic reaction as an opportunity to reevaluate your food allergy management plan and pinpoint areas that need work.

One woman who was allergic to eggs had a severe reaction to egg whites that were added to a bar drink, even though she had notified the waiter of her allergy. When she reported the incident to the manager, he told her that since it was a small amount she had ingested, she probably didn't get very sick.

This is clearly inappropriate. Take all reports regarding a food-allergic reaction very seriously, and work toward resolving the situation.

## Front of the House

- Food allergies are allergic disorders, not food preferences. Be understanding, listen carefully, and answer questions thoughtfully.
- Guests who have food allergies depend on the front of the house staff to notify other key staff members of their dietary restrictions.
- Improper garnishing or handling of a dish can contaminate an otherwise safe meal.
- If a mistake occurs with the special order, the only acceptable method for correcting the situation is to have the kitchen remake the order.

Did You Know?
Some bar drinks contain millk, egg, or nut extracts. Eggs are sometimes used to create the foam for milk topping on specialty coffee drinks.

## Front of the House

Titles of positions will vary from campus to campus. Depending on the services regularly offered, the front of the house staff may be the staff plating food for customers.

If working in a marketplace concept, front of the house staff may be defined as anyone who works in a venue in front of the customer. If this staff is cooking at these venues, they may also need to be trained on the "Back of House" information provided in this manual.

Catering staff doing table service may also be considered front of the house staff. This information can be applied to all of these staffing groups.

## First Contact with Food Allergy Customer

The first person the food allergy customer will generally see needs to know how to handle questions regarding food allergies and be responsible for notifying the designated staff members about the food allergy as soon as it is made known. The designated person should be able to answer the guest's questions and assist with menu selection.

## Servers

Servers must keep in mind that food allergies are allergic disorders, not food preferences. For some people, they can be quite serious. Servers should be understanding, listen carefully, and answer questions thoughtfully. They should show concern but not be intrusive. Most diners who have food allergies prefer not to draw a lot of attention to their allergy.

In a college food service operation, once the student begins dining in the establishment on a regular basis, it becomes natural for the servers to identify this customer, therefore drawing less attention to their food allergy needs.

The designated staff member (again, ideally the manager) should inform the kitchen staff of the special needs of the diner who has a food allergy. Once this customer has eaten in the establishment, contact this person to see how everything went. Offer to make plans in advance to help everyone better prepare food allergy safe meals in the future.

## Serving the food

Depending on the facility, there are several ways the food can be served. It may be convenient to wrap the meal for the student in plastic wrap and have an area designated where the student can pick up their meal. A designated staff member may be assigned to deliver the person their food upon arrival.

Once the appropriate garnishes are added, the food should be carried on a clean tray, or hand-carried directly to the guest. The server should ensure that nothing is inadvertently spill or brushed against the special meal.

## If a mistake is made in meal preparation

Mistakes are bound to occur. If, despite everyone's best efforts, a mistake is made on an order for a diner who has a food allergy, the only acceptable correction is to remake the order. Do not merely remove the offending ingredient, such as scraping nuts off the top of a sundae or cheese off a burger. There may be a trace amount of protein remaining, which may be enough to cause an allergic reaction.

If necessary, inform the diner that it will take a few extra minutes to ensure that his or her meal is prepared properly. Afterward, review what went wrong and determine what steps can be taken to avoid similar mistakes in the future. The diner who has a food allergy will appreciate the special care taken.

## Cross-contact while serving the meal

There are a number of ways in which cross-contact can occur while serving food. The following are the most common examples.

Unclean hands or gloves. Something as simple as picking up a nutcontaining muffin, setting it down, and then picking up a nut-free muffin may be enough to cause cross-contact. Wash hands thoroughly and put on a fresh pair of gloves before preparing an allergen-free meal.

Splashed or spilled food. It is very easy for cross-contact to occur with a guest's food, drinks, or utensils when carrying them on a tray with other items. Ingredients from other foods can splash or spill onto something that is otherwise "allergen-free." For example, milk or cream can spill, or butter can brush against something that is otherwise milk-free. Use a small plate or saucer when carrying cream or butter, to catch any spills. Ideally, the allergen-free meal should be carried by itself directly from the kitchen.

Trays. As an extra precaution, trays used to carry allergen-free meals should first be cleaned thoroughly with hot, soapy water, not just wiped down.

Garnishes. Only the chef, manager, or other designated staff member should garnish the plate, in order to minimize the chance for mistakes. Ingredients on the line can easily be spilled into containers of other ingredients. For example, shredded cheese, croutons, or nuts can become mixed with prepped vegetables, garnishes, herbs, or other ingredients. If this occurs, do not simply pick the allergen out-go to the backup supply and get new ingredients.

## Front of the House Quiz

1. If a guest identifies him or herself as having a food allergy, what steps should be taken to ensure that the diner will not come into contact with any leftover food.
(a) direct the guest to tables that are not used often
(b) be sure a clean placemat and/or other table settings are used
(c) thoroughly clean the table and chairs
(d) suggest the guest sit at a table near the kitchen
2. When a guest identifies himself or herself as having a food allergy, which staff member should you notify immediately?
(a) manager
(b) cook
(c) chef
(d) food runner
3. Which of the following items are risky for guests who have food allergies?
(a) fried foods
(b) desserts
(c) foods served with sauces
(d) complex dishes with many ingredients
(e) all of the above
4. Which items are the safest for guests who have food allergies?
(a) any items that don't list the allergen in the menu descriptions
(b) anything on the menu, as long as you tell the kitchen staff to be sure to remove the allergen
(c) all items that you're pretty sure are safe
(d) the most simply prepared foods with the fewest ingredients (plain broiled or grilled items, no sauces, etc.)
5. Which of the following are possible sources of cross-contact?
(a) not washing your hands or using a fresh pair of gloves before serving the special order
(b) carrying the special order on a tray with other food items
(c) garnishing other orders near the special order item
(d) using the same napkin or towel (for hot-plate service) with other plates prior to using it to serve a special order
(e) all of the above
6. When a guest who has a food allergy asks about ingredients and preparation methods, the appropriate answer is:
(a) "I'm almost positive that the item doesn't contain the allergen."
(b) "I'm sure we can leave it out of the dish if you'd likeI'll just make a note on the ticket."
(c) "I don't think it's in there."
(d) "I don't know. Let me get the manager/chef to be sure."
7. If a mistake occurs-for example, the kitchen staff has added cheese to an order for a guest who has a milk allergy, or you forget to use a separate serving tray and food from another order comes into contact with the special order-what is the acceptable method for correcting the situation?
(a) remove the top layer of food that the allergen came in contact with, and add a little more of an acceptable food
(b) if it's just a little, and it's something that can be removed completely, remove the allergen and carefully inspect the dish to be sure you've removed it all
(c) have the kitchen staff remake the order from scratch

## True or False

8. Buffets are good choices for diners who have food allergies because they offer a variety of foods.
9. Improper garnishing or handling of a dish can contaminate an otherwise safe meal.
10. Once the food has been properly prepared, there is no longer any risk for the guest who has a food allergy.
11. If a guest tells you he or she is experiencing an allergic reaction, the first thing you should do is find out how it could have happened.

See page 35 for the Answer Key.

## Answer Key for Front of the House Quiz

1. C, thoroughly clean the table and chairs
2. A, manager
3. E, all of the above
4. D, the most simply prepared foods with the fewest ingredients (plain broiled or grilled items, no sauces, etc.)
5. E, all of the above
6. D, "I don't know. Let me get the manager/chef to be sure."
7. C , have the kitchen staff remake the order from scratch
8. False. Due to the likelihood of cross-contact, buffets are a high-risk choice for a guest who has a food allergy.
9. True
10. False. Cross-contact can occur on the serving tray, also. Take extra precautions when serving the dish to the allergic diner.
11. False. If a guest tells you he or she is experiencing an allergic reaction, the first thing you should do is get medical help immediately. Activate your restaurant's emergency plan.

## Case Reviews

The following case reviews are designed to help staff members pinpoint what could have gone wrong in the following situations and to discuss how similar situations can be prevented.

## Case Review \#1

Before eating an egg roll from a Chinese food venue, a server assured a peanut-allergic individual that peanut oil had not been used to fry his food. The customer took a few bites of the egg roll and quickly developed an allergic reaction. He died 90 minutes later.

## How did this happen?

The server didn't ask about the ingredients. The egg roll recipe had changed to include peanut butter, which was used to enhance the taste.

Peanut butter is also sometimes used to "glue down" the ends of egg rolls.

## How could you prevent this from happening?

Be sure to verify all ingredients of a meal for a customer who has a food allergy with the chef or cook.

## Case Review \#2

Shortly after finding a seat in The Commons dining room, a college student who was allergic to milk developed hives (a common symptom of a food-allergic reaction) on her wrist and on the undersides of her left arm.

## How did this happen?

The table not been thoroughly cleaned, and there was milk residue left on the surface from a previous diner. The girl experienced a contact reaction after resting her arms on the table.

How could you prevent this from happening?
Be sure table surfaces are cleaned with hot, soapy water and sanitizer.

## Back of the House

- Inform guests who have food allergies of any ingredients used in unexpected places.
- If a food does not have a label or if you are unsure about the ingredients, do not guess.
- Take precautions to avoid cross-contact.
- If a mistake is made on an order, make a new one.


## Back of the House

The back-of-the-house staff are some of the most important members of the food allergy team. The guest who has a food allergy depends on the chef or cook for answers about the ingredients in a meal and the cooking methods used. Based on this information, the guest will select a menu item. The server and manager will depend on the back-of-thehouse staff to prepare the meal as requested.

## Ingredients

The only way to avoid a reaction is to avoid the allergy-causing items. A diner who has a food allergy needs to know about the ingredients used in selected menu items. It is crucial to inform the diner if any ingredients are used in unexpected places, such as crushed nuts in a piecrust.

If a food does not have a label, or if you are unsure about the ingredients, do not guess. Suggest another menu selection for which

If a food does
not have a
label, or If you
are unsure
about the
ingredients, do
not guess.
Suggest another
menu selection for which you
have ingredient information.
you have ingredient information.

An uninformed diner may not be aware of ingredients that are sometimes added to foods during preparation-for example, peanut butter is sometimes used to "glue" down the ends of egg rolls. Be sure to consider ingredients in marinades, as well as ingredients that are added for flavor, such as butter on grilled foods or added to rice while cooking.

## Ingredients in unexpected places

Following are examples of why it is important to read all food labels very carefully.

Worcestershire sauce. This sauce contains anchovies and/or sardines; both are fish.

Barbecue sauce. At least one brand of barbecue sauce contains pecans, which are listed on the label.

Imitation butter flavor. This ingredient often contains milk protein. It could be listed on the ingredient statement as either artificial or natural butter flavor.

Sweet and sour sauce. Some brands of sweet and sour sauce contain wheat and soy.

Egg substitutes. Most brands of commercial egg substitutes contain egg white.

Canned tuna. Some brands contain casein (a milk protein) or soy protein as a natural flavoring.

## Cross-contact in the Kitchen

There are a number of ways in which cross-contact can occur in the kitchen. When preparing food for a patron who has a food allergy, the chef and/or line cook must take extra precautions to avoid crosscontact due to spilled or splattered food from other dishes.

The following are the most common examples of cross-contact.

Unclean hands or gloves. Picking up a nut-containing bread or roll, setting it down, and then picking up a nut-free muffin may result in cross-contact. Wash hands thoroughly or put on a fresh pair of gloves before preparing an allergen-free meal. Use clean utensils for each separate ingredient or food.

Shared equipment, utensils, grills, fryers, cooking areas, and counters. If a spatula and cookie sheet are used to prepare peanutcontaining cookies, and are only wiped clean and reused to prepare peanut-free cookies, then the utensil and pan will be crosscontaminated. In this example, someone with a peanut allergy may have an allergic reaction when they eat the peanut-free cookie.

Pots, pans, or woks that are used to prepare a dish that contains a common allergen, such as peanuts or shellfish, and then are merely wiped clean may cause a reaction too. In this case, the pan may contain enough protein to result in cross-contact with the next meal that is prepared in it. The pan should be thoroughly washed with soap and water.

A pot of water that is used to boil allergen-containing foods may contain enough protein to contaminate other foods boiled in the same water. For example, water used to boil cheese-filled pasta may contain enough milk protein to cause an allergic reaction in someone who has a milk allergy.

A griddle that is used to cook a variety of foods, such as fish, meat, or eggs, or which is coated with butter, may have enough protein on it to result in cross-contact with the other foods cooked on it.
"Chef cards" are becoming increasingly popular with individuals who have food allergies. Although the information on the cards may vary, the intent is to alert staff to the ingredients that need to be avoided. Here is a sample "chef card."

All equipment and utensils should be cleaned with hot, soapy water before being used to prepare a dish for a diner who has a food allergy. Be sure to keep the utensils (spatulas, knives, meat thermometers, tongs, spoons, blenders, sizzle platters, pans) to be used for the special order separate from utensils being used for other orders. If possible, have designated preparation areas for allergy-causing foods, such as shellfish.

Refilled serving containers. If a container that was originally filled with cashews is refilled with peanuts without being washed first, the peanuts could have enough cashew protein on them to cause an allergic reaction in someone with a cashew allergy. Wash all containers carefully before refilling them with new foods.

Garnishes. Ingredients on the line may spill into open containers of other ingredients used for garnish (shredded cheese, croutons, nuts, and so forth, can mix with prepped vegetables, garnishes, herbs, or other ingredients). To avoid a mistake, the chef, manager, or other designated staff member should be the one to apply garnishes, using ingredients from the backup supply, or keep garnishes that contain common allergy-causing foods, such as milk, peanut, and nuts, in covered containers. If a mistake is made, and the allergen accidentally gets into the allergy-free dish you are preparing, do not simply remove that ingredient - go to the backup supply and get new ingredients.

Splatter or steam from cooking foods. The splatter or steam from one food may spread to another. When preparing a meal for a diner who has a food allergy, don't cook an allergen-containing food next to it. Do not pass over the pan containing the special order with other
foods, plates, pans, or utensils, as it cooks. Just a drop of the allergycausing food is enough to cross-contact the special order and may put the guest at risk for an allergic reaction. Once the dish is made, clearly identify it to prevent the wrong plate from being served. Keep it away from all other food.

Deep fryers. Oil in deep fryers that has been used to cook many foods will contain protein from previously fried foods. If possible, designate a fryer for one type of food to prevent cross-contact.

## Handling Mistakes

If a mistake is made on an order, make a new one. Taking shortcuts, such as removing the nuts mistakenly added to a nut-free sundae, may land someone in the hospital.

One FAAN member reported that her child had an allergic reaction to sesame seeds afer eating a grilled cheese sandwich at a restaurant. After investigating, it was discovered that the chef used a sesame seed bun and cut off the top and bottom to make the slices of bread for the sandwich.

## Back of the House Quiz

1. Which of the following items are risky for guests who have food allergies?
(a) fried foods
(b) desserts
(c) foods served with sauces
(d) complex dishes with many ingredients
(e) all of the above
2. If a mistake occurs-for example, you accidentally sprinkle just a few nuts onto a sundae for a nut-allergic guest, or just a crouton or two onto a salad for a guest with a wheat allergy-how should you correct the situation?
(a) remove the top layer of food that the allergen came in contact with, and add a little more of an acceptable food
(b) if it's just a little, and it's something that can be removed completely, remove the allergen and carefully inspect the dish to be sure you've removed it all
(c) start over and remake the order from scratch
3. Which items are the safest for guests who have food allergies?
(a) any items that don't list the allergen on the ingredient labels
(b) anything on the menu, as long as you remove the allergen
(c) all items that you're pretty sure are safe
(d) the most simply prepared foods with the fewest ingredients (plain broiled or grilled items, no sauces, etc.)
4. Which of the following could cause cross-contact?
(a) using the same utensils for other foods as well as for the special order
(b) preparing the special order on a countertop that has not been thoroughly cleaned beforehand
(c) garnishing other orders near the special order item
(d) not washing your hands and using a fresh pair of gloves before handling the special order
(e) all of the above
5. If an ingredient statement on a product lists terms you are unfamiliar with, what should be done?
(a) don't serve that food; suggest another menu selection
(b) look at the food closely; if it looks safe, serve it
(c) ask the diner whether or not that ingredient is safe
6. Before preparing a meal for a guest who has a food allergy, what method should be used to clean all equipment and utensils?
(a) wipe surfaces of the equipment and utensils with a damp cloth
(b) thoroughly clean equipment and utensils with hot, soapy water
(c) mist water onto equipment and utensils and rub vigorously with a clean, dry towel.
7. When cooking or preparing a meal for a diner who has a food allergy, it is important to:
(a) not cook an allergen-containing food next to it
(b) not pass over the pan containing the special order with other foods, plates, pans, or utensils as it cooks
(c) clearly identify the dish once it is made
(d) all of the above

## True or False

8. When preparing a meal for a diner who has a food allergy, cooking an allergy-containing food next to it may result in cross-contact with the special order.
9. Oil in deep fryers used to cook many foods will contain protein from previously fried foods.
10. Most commercial brands of egg substitutes are safe to use when preparing a meal for a diner who has an egg allergy.
11. Thoroughly washing all utensils and preparation surfaces with hot, soapy water prior to use will help eliminate the risk of cross-contact.
12. Once a dish is made, it should be clearly identified to prevent the wrong plate from being served.

See page 43 for the Answer Key.

## Answer Key for Back of the House Quiz

1. E, all of the above
2. C, start over and remake the order from scratch
3. D, the most simply prepared foods with the fewest ingredients (plain broiled or grilled items, no sauces, etc.)
4. E, all of the above
5. A, don't serve that food; suggest another menu selection
6. B, thoroughly clean equipment and utensils with hot, soapy water
7. D, all of the above
8. True
9. True
10. False. Most commercial brands of egg substitutes contain egg white.
11. True
12. True

## Case Reviews

The following case reviews are designed to help staff members pinpoint what could have gone wrong in these situations and to discuss prevention methods.

## Case Review \#1

A peanut-allergic student ate a cannoli because the food label indicated that it contained chopped pistachio nuts. She had a reaction that required a trip to the emergency room.

## How did this happen?

It was later learned that the bakery that supplied the cannoli used peanut pieces that were dyed green, instead of pistachio nuts.

How could you prevent this from happening?
Be sure your suppliers give you complete ingredient information for all foods.

## Case Review \#2

A customer indentified himself as having peanut and milk allergies and asked questions about the ingredients of the food items. He ordered a plain hamburger, and when it was served, he lifted the bun to be sure it hadn't been buttered and that it did not contain cheese.

After it passed his inspection, the student began eating the hamburger. He soon noticed traces of cheese on the bottom of the meat and shortly after suffered an allergic reaction.

How did this happen?
Someone in the kitchen made a mistake with the order and, instead of making a new hamburger, peeled the cheese off.

How could you prevent this from happening?
If a mistake is made, remake the order.

## Handling an Allergic Emergency

Use the following checklist as a model for your food service establishment's policy for handling an allergic emergency. Copy the checklist onto brightly-colored paper and post it in a highly visible area.

## Handling an Allergic Emergency

## Checklist for Handling an Allergic Emergency

$\checkmark$ Accidents are never planned. Therefore, it is prudent to have a plan in place for handling an allergic emergency.
$\checkmark$ Designate key staff members to handle an allergic reaction, should one occur.
$\checkmark$ Post the number for emergency services near every phone, along with the food service establishment's address, and a reminder to state that someone is having a severe allergic reaction when calling regarding a food allergy emergency.
$\checkmark$ Just as you would do with a fire drill, have staff members practice the allergy emergency procedures. Afterward, discuss ways the plan could be improved and adjust it, if necessary.
$\checkmark$ If someone is having an allergic reaction, do not deny it, argue with the customer, or defend the staff who made the food-get medical help immediately!

## Glossary of Allergy Terms

In this section, you will find definitions for common allergy terms.

## Glossary of Allergy Terms

Acute Symptoms that begin suddenly and have a short and relatively severe course.

Adverse reaction Undesirable reaction.

Allergen
Allergic reaction

Anaphylaxis

Angio-edema or edema

Antibody

## Antigen

Antihistamine

Any substance that causes an allergic reaction.
An immune system response to a harmless substance that the body mistakenly interprets as harmful.

A sudden, severe allergic reaction that involves various areas of the body simultaneously or causes difficulty breathing and swelling of the throat and tongue. In extreme cases, it can cause death. This type of reaction is sometimes called a systemic, or general body, reaction or allergic shock.

Medical term used to describe swelling that may occur anywhere in the body.

A protein in the bloodstream or other body fluids that is produced during an immune response to foreign materials that enter the body; antibodies usually protect us from infection.

Any substance that provokes an immune response when introduced into the body.

A medication used to block the effects of histamine, a chemical that is released during an allergic reaction. Antihistamines are available via prescription and over the counter.

Asthma Airway disease that is very treatable. Common in children, it is often associated with allergies, including food allergy.
$\left.\begin{array}{ll}\text { Biphasic reaction } & \begin{array}{l}\text { An allergic reaction that has two stages. Often } \\ \text { the first "wave" of symptoms will be under } \\ \text { control; however, one to three hours later the } \\ \text { symptoms may return. It is recommended that } \\ \text { patients stay at a hospital under observation for } \\ \text { four to six hours to be sure medical assistance is } \\ \text { quickly available if needed. }\end{array} \\ \text { Chronic } & \begin{array}{l}\text { Occurring frequently or lasting a long time (i.e., } \\ \text { typically longer than six weeks). }\end{array} \\ \text { Cross-contact } & \begin{array}{l}\text { When one food comes in contact with another } \\ \text { food and their proteins mix. As a result, each } \\ \text { food then contains small amounts of the other } \\ \text { food, often invisible to us. Sometimes referred } \\ \text { to as cross-contamination. }\end{array} \\ \text { Eczema, also called } & \begin{array}{l}\text { Characterized by an itchy, red rash typically } \\ \text { found at the fold of the elbows and behind the } \\ \text { atopic dermatitis } \\ \text { knees. It can ooze and cause so much itching } \\ \text { that some individuals will scratch until the skin } \\ \text { bleeds. In young children, eczema is sometimes } \\ \text { caused by food allergy. }\end{array} \\ \text { Epinephrine } & \begin{array}{l}\text { Epinephrine is adrenaline. It is the medicine of } \\ \text { choice for controlling severe or anaphylactic }\end{array} \\ \text { reactions. It is available by prescription as }\end{array}\right\}$

Histamine

Hives

One of several chemicals released by the body during an allergic reaction. It is the cause of many of the symptoms of an allergic reaction.

Can appear anywhere on the body. They are mosquito bite-like bumps that are extremely itchy. Also called urticaria.

Lactose intolerance A reaction to a food that does not involve the immune system. Lactose-intolerant people lack an enzyme that is needed to digest milk sugar. When milk products are eaten, symptoms such as gas, bloating, and abdominal pain may occur. Lactose intolerance is more common in adults than in young children.

## Appendix

The following educational materials may be reproduced and customized using your college or university's logo, design, and colors. Please be sure to allow The Food Allergy \& Anaphylaxis Network (FAAN) to review any editorial changes
you make. FAAN should be credited as the source of this information.

## Food Allergy Basics

- Approximately 11 million Americans, or 2 to $4 \%$ of the general population, suffer from food allergy.
- 2.3\% fish and shellfish allergy, reported by Americans.
- $1.1 \%$ of the population or close to three million Americans are believed to be allergic to peanuts or tree nuts (pecans, walnuts, almonds, etc.).
- Eight foods account for $90 \%$ of allergic reactions: peanuts, tree nuts (walnuts, pecans, etc.), fish, shellfish, eggs, milk, soy, and wheat.
- Peanuts are the leading cause of severe allergic reactions, followed by shellfish, fish, tree nuts, and eggs.
- Individuals with food allergies and asthma appear to be at an increased risk for severe allergic reactions.
- Most individuals who have had a reaction ate a food that they thought was safe.
- Food allergy is the leading cause of anaphylaxis outside the hospital setting, accounting for an estimated 30,000 emergency room visits each year.
- It is estimated that as many as 150 to 200 people die each year from food allergic reactions.


## 1. What happens in the body during a food-allergic reaction?

The immune system mistakenly believes that a harmless substance, in this case a food item, is harmful. In its attempt to protect the body, it creates specific antibodies called IgE to that food. The next time the individual eats that food, the immune system releases massive amounts of chemicals and histamines in order to protect the body. These chemicals trigger a cascade of allergic symptoms that can affect the respiratory system, gastrointestinal tract, skin, or cardiovascular system.

## 2. What are the common symptoms of a reaction?

Symptoms range from mild to severe. Severe or life-threatening reactions are called anaphylaxis. Symptoms can include a tingling sensation in the mouth, swelling of the tongue and the throat, difficulty breathing, hives, vomiting, abdominal cramps, diarrhea, a drop in blood pressure, and loss of consciousness. In rare cases, death can
occur. Symptoms typically appear within minutes up until two hours after the person has eaten the food to which he or she is allergic.

## 3. What is the best treatment for food allergy?

Strict avoidance of the allergy-causing food is the only way to avoid a reaction. Reading ingredient labels for all foods is the key to maintaining control over the allergy. If a product doesn't have a label, allergic individuals should not eat that food. If the label contains unfamiliar terms, staff must call the manufacturer and ask for a definition or avoid serving that food.

## 4. What is the best treatment for a food allergy reaction?

Epinephrine, also called adrenaline, is the medication of choice for controlling a severe allergic reaction. It is available by prescription in an auto injector, called EpiPen®, and should be administered promptly. Patrons with food allergies should have information from their doctors for treating their reaction.

## Masqueraders of Food Allergy

An adverse food reaction is any type of problem a person may have as a result of something he or she ate. It can be caused by food allergy, food intolerance, food poisoning, or a psychological response to a food that is associated with bad memories about that food.

Keep in mind that choking or heart attacks may sometimes look as if an allergic reaction is occurring. If an individual is choking, apply the Heimlich maneuver. In any event, summon emergency help.

## Food allergy vs. food intolerance

Food allergy and food intolerance do not mean the same thing. A food intolerance is a reaction that generally does not involve the immune system but is caused by the lack of an enzyme in the gastrointestinal tract.

Lactose intolerance is the most common food intolerance. In this case, the individual lacks an enzyme that is needed to digest milk sugar. When the person eats milk products, symptoms such as gas, bloating, and abdominal pain may occur. However, if the individual eats only a small amount of the food, he or she may avoid symptoms. There are pills or drops that can be taken before eating dairy products that will replace the missing enzyme, thereby enabling the individual to enjoy dairy products.

## An individual may ask about ingredients for several medical purposes such as: diabetes <br> gallbladder problems <br> Celiac disease <br> food allergy

Gluten intolerance, or celiac sprue, is caused by the body's inability to break down gluten. Symptoms of gluten intolerance can include severe abdominal pain and diarrhea, and can occur 6 or more hours after the food is eaten. If not treated by modified diets, this can cause severe intestinal damage and loss of ability to absorb nutrients. It is often difficult to pinpoint the food that caused the reaction.


Individuals with gluten intolerance must avoid the following products: wheat, barley, rye, and oats.

A food allergy occurs when the immune system reacts to a certain food. The most common form of an immune system reaction occurs when the body creates immunoglobulin $\mathrm{E}(\mathrm{IgE})$ antibodies to a certain food. When these IgE antibodies react with the food, histamine and other chemicals are released from various cells within the body. This can cause symptoms of a reaction throughout the body in the skin, respiratory tract, gastrointestinal tract, or cardiovascular system.

## Food poisoning

Some adverse reactions, particularly ones that occur after eating fish and shellfish, are due to food poisoning. Foods frozen, thawed, and then refrozen or kept at refrigerator temperature for a long time before cooking can cause problems.

Typical symptoms of food poisoning include vomiting or diarrhea, which usually will manifest themselves several hours later, but also can occur days later. Individuals who contract food poisoning after eating fish or shellfish may mistakenly consider themselves allergic.

It is important to discuss adverse reactions to any food with a doctor, so that he or she can rule out, or diagnose, food allergy. A doctor will find it helpful for the individual to provide as much detailed information as possible, such as a diary of everything the patient ate or drank for several days, any symptoms that developed, the sequence in which symptoms appeared, and the quantity of food that was eaten before the reaction began.

It is very important not to make any changes to the diet without advice from a doctor.

## Food Allergy Action Plan

## ALLERGY TO:



## DOSAGE

Epinephrine: inject EpiPen intramuscularly (see reverse side for instructions)
Antihistamine: give $\qquad$
Other: give $\qquad$ medication/dose/route

- STEP 2: EMERGENCY CALLS

1. Call 911 (or Rescue Squad: $\qquad$ ). State that an allergic reaction has been treated, and additional epinephrine may be needed)
2. Dr. $\qquad$ at $\qquad$
3. Emergency contacts:
Name/Relationship
Phone Number(s)
a. $\qquad$
b. $\qquad$
1.) $\qquad$ 2.) $\qquad$
1.) $\qquad$
2.) $\qquad$
Signature $\qquad$
Date $\qquad$
Date $\qquad$
Doctor's Signature (Required)
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## EPIPEN® DIRECTIONS

- Pull off gray activation cap.

- Hold black tip near outer thigh (always apply to thigh).

- Swing and jab firmly into outer thigh until Auto-Injector mechanism functions. Hold in place and count to 10 . Remove the EpiPen® unit and massage the injection area for 10 seconds.
- Once EpiPen® is used, call the Rescue Squad. State additional epinephrine may be needed. Take the used unit with you to the Emergency Room. Plan to stay for observatic at the Emergency Room for at least 4 hours.

For multiple food allergies, consider providing separate Action Plans for different foods.

[^1]

## For Emergency, Call 911

Be ready to answer the following questions:

- Where is the emergency? [insert address here]
- What is the emergency?
- When did this happen?
- Who is involved in the emergency?
- Why did the emergency happen?
- Your name and phone number

We serve the following customers with these food allergies:
[List customer name/Food Allergy]

## HOW TO READ A LABEL

for a MILK-FREE DIET
Avoid foods that contain milk or any of these ingredients:
artificial butter flavor butter, butter fat, butter oil
buttermilk
casein (casein hydrolysate)
caseinates (in all forms)
cheese
cream
cottage cheese
curds
custard
ghee
half \& half
lactalbumin, lactalbumin
phosphate
lactoferrin
lactulose
milk (in all forms including
condensed, derivative, dry,
evaporated, goat's milk and milk
from other animals, low-fat,
malted, milkfat, non-fat, powder,
protein, skimmed, solids, whole)
nisin
nougat
pudding
rennet casein
sour cream, sour cream solids sour milk solids
whey (in all forms)
yogurt

May indicate the presence of milk protein:
caramel candies
chocolate
flavorings (including natural and
artificial)
high protein flour
lactic acid starter culture
lactose
luncheon meat, hotdogs, sausages
margarine
non-dairy products


11781 Lee Jackson Hwy. Suite 160
Fairfax, VA 22033-3309
Phone: 703-691-3179
Fax: 703-691-2713
website: http://www.foodallergy.org e-mail: faan@foodallergy.org

| HOW TO READ A LABEL for |  |
| :--- | :--- |
| an EGG-FREE DIET | May indicate the presence of egg |
| Avoid foods that contain eggs or | protein: |
| any of these ingredients: | flavoring |
|  | (including natural and artificial) |
| albumin (also spelled as albumen) | lecithin |
| egg (dried, powdered, solids, white, | macaroni |
| yolk) | marzipan |
| eggnog | marshmallows |
| lysozyme | nougat |
| mayonnaise | pasta |
| meringue (meringue powder) |  |
| surimi |  |


| HOW TO READ A LABEL for <br> a PEANUT-FREE DIET | May indicate the presence of peanut <br> Avoid foods that contain peanuts <br> or any of these ingredients: |
| :--- | :--- |
|  | protein: |
|  | African, Asian (especially Chinese, |
| artificial nuts | Indian, Indonesian, Thai, and |
| beer nuts | Vietnamese), and Mexican dishes |
| cold pressed, expelled, or extruded | baked goods (pastries, cookies, etc.) |
| peanut oil | candy (including chocolate candy) |
| goobers | chili |
| ground nuts | egg rolls |
| mandelonas | enchilada sauce |
| mixed nuts | flavoring |
| monkey nuts | (including natural and artificial) |
| nutmeat | marzipan |
| nut pieces | nougat |
| peanut |  |
| peanut butter |  |
| peanut flour |  |

- Studies show that most allergic individuals can safely eat peanut oil (not cold pressed, expelled, or extruded peanut oil).
- Arachis oil is peanut oil.
- Experts advise patients allergic to peanuts to avoid tree nuts as well.
- A study showed that unlike other legumes, there is a strong possibility of cross reaction between peanuts and lupine.
- Sunflower seeds are often produced on equipment shared with peanuts.

| HOW TO READ A LABEL for a | pasta |
| :--- | :--- |
| WHEAT-FREE DIET | seitan |
| Avoid foods that contain wheat or any | semolina |
| of these ingredients: | spelt |
| bran | vital gluten |
| bread crumbs | wheat (bran, germ, gluten, |
| bulgur | malt, sprouts) |
| couscous | wheat grass |
| cracker meal | whole wheat berries |
| durum | May indicate the presence of |
| farina | wheat protein: |
| flour (all purpose, bread, durum, cake, | flavoring (including natural |
| enriched, graham, high gluten, high | and artificial) |
| protein, instant, pastry, self-rising, | hydrolyzed protein |
| soft wheat, steel ground, stone | soy sauce |
| ground, whole wheat) | starch (gelatinized starch, |
| gluten | modified starch, modified |
| kamut | food starch, vegetable starch, |
| matzoh, matzoh meal (also spelled as | wheat starch) |
| matzo) | surimi |
| HOW TO READ A LABEL for a |  |
| SOY-FREE DIET |  |
| Avoid foods that contain soy or any of | May indicate the presence of soy |
| these ingredients: | protein: |
| edamame | Asian cuisine |
| hydrolyzed soy protein | flavoring (including natural and |
| miso | artificial) |
| natto | vegetable broth |
| shoyu sauce | vegetable gum |
| soy (soy albumin, soy fiber, soy flour, soy | vegetable starch |
| grits, soy milk, soy nuts, soy sprouts) |  |
| soya |  |
| soybean (curd, granules) | Studies show most individuals |
| soy protein (concentrate, isolate) | allergic to soy may safely eat soy |
| soy sauce |  |
| Tamari |  |
| Tempeh |  |
| textured vegetable protein (TVP) |  |
| tofu |  |
|  |  |


| HOW TO READ A LABEL for a |  |
| :--- | :--- |
| TREE NUT-FREE DIET |  |
| Avoid foods that contain nuts or any of | nut meal |
| these ingredients: | nutmeat |
|  | nut oil |
| almonds | nut paste (i.e., almond paste) |
| artificial nuts | nut pieces |
| Brazil nuts | pecans (Mashuga Nuts®) |
| caponata | pesto |
| cashews | pine nuts (also referred to as Indian, |
| chestnuts | piñon, pinyon, pignoli, pigñolia, and |
| filbert/hazelnuts | pignon nuts) |
| gianduja (a nut mixture found in some | pistachios |
| chocolate) | pralines |
| hickory nuts | walnuts |
| macadamia nuts |  |
| mandelonas | • Mortadella may contain pistachios. |
| marzipan/almond paste | • Natural and artificial flavoring may |
| nan-gai nuts | contain tree nuts. |
| natural nut extract (i.e., almond, | • Experts advise patients allergic to tree |
| walnut) | nuts to avoid peanuts as well. |
| nougat | •Talk to your doctor if you find other |
| nut butters (i.e., cashew butter) | nuts not listed here. |

## HOW TO READ A LABEL for a SHELLFISH-FREE DIET

Avoid foods that contain shellfish or any of these ingredients:
abalone
clams (cherrystone, littleneck, pismo, quahog)
cockle (periwinkle, sea urchin)
crab
crawfish (crayfish, ecrevisse)
lobster (langouste, langoustine,
scampo, coral, tomalley)
mollusks
mussels
octopus
oysters
prawns
scallops
shrimp (crevette)
snails (escargot)
squid (calamari)
May indicate the presence of shellfish protein:
bouillabaisse
cuttlefish ink
fish stock
flavoring (including natural and artificial)
seafood flavoring (such as crab or clam extract)
surimi
Keep the following in mind:

- Any food served in a seafood restaurant may be cross contaminated with fish or shellfish.
- For some individuals, a reaction may occur from cooking odors or from handling fish or shellfish.
- Always carry medications and use them as soon as symptoms develop.


## Catering Event Allergy Request

Date of Event:
Name of Event:
Location of Event:

Type of Allergy:
Name of Person with Allergy:

Notes for Staff (please share with preparation and serving staff):
Acceptable Menu Items:

Modifiable Menu Item:

NOT ACCEPTABLE Menu Items:

Please contact [name] at [phone number] if you have any questions about this information


## COLLEGE \& UNIVERSITY GUIDELINES FOR MANAGING STUDENTS WITH FOOD ALLERGIES

Food allergies can be life threatening. ${ }^{1}$ It is estimated that food allergy reactions account for 30,000 hospital visits and 150-200 deaths each year. ${ }^{2}$ While most food allergies are outgrown, allergies to peanuts, tree nuts, fish, and shellfish are considered life long. ${ }^{3}$ Currently, there is no cure for food allergy, strict avoidance of the food is the only way to avoid a reaction. ${ }^{4}$

Once a reaction occurs, quick action, including administration of epinephrine can be the difference between life and death. ${ }^{5}$ Reactions in schools are not uncommon. ${ }^{6}$ The risk of accidental exposure to foods can be reduced on campuses if schools work with students and physicians to minimize risks and provide a safe environment for food-allergic students.

## Student's Responsibility

- Notify the college/university of his or her allergies.
- Work with the school to develop a plan that accommodates his or her needs.
- Provide written medical documentation, instructions, and medications as directed by a physician, using the Food Allergy Action Plan (available through FAAN) as a guide.
- Be proficient in the self-management of his or her food allergy including:
- avoidance of unsafe foods
- recognition of symptoms of allergic reactions
- how and when to tell someone they may be having an allergy-related problem
- knowledge of proper use of medications to treat an allergic reaction
- Review policies/procedures with the school staff and his or her physician after a reaction has occurred.
- Provide emergency contact information.
- Carry prescribed medications at all times.


## College/University's Responsibility

- Be knowledgeable about and follow applicable federal laws including the Americans with Disabilities Act, and any state laws that apply.
- Identify a core team of, but not limited to, staff in health services, dining services, residence living, and security to work with the student and to establish a food allergy management plan. Changes to the plan should be made with core team participation.
- College and university food service establishments reveal, upon request, ingredients that contain allergens even if the ingredients are considered part of a "secret recipe."
- Resident Assistants (RAs) of students with food allergy should be able to identify such students and know how to access emergency assistance quickly.
- Appropriate staff members, including RAs should be taught food allergy basics, including symptoms, instructions for administering medications, and instructions for emergency medical service procedures.
- Recognize who on your campus is properly trained to administer medications in case of an emergency.
- Review policies/prevention plan with the core team members, and student after a reaction has occurred.
- Follow federal/state/district laws and regulations regarding sharing medical information about the student.


# Other Sources of Information 

Use the following resources for additional information.

## Other Sources of Information

## For additional information about food allergies, contact:

The Food Allergy \& Anaphylaxis Network
11781 Lee Jackson Hwy., Suite 160
Fairfax, VA 22033
(800) 929-4040
www.foodallergy.org

Contact us for a listing of other resources that may be of interest to you, including our video, titled Food Allergy Training for Restaurants and Food Services (available in both English and Spanish), our Grocery Manufacturers Directory, How to Read a Label cards, and It Only Takes One Bite: Food Allergy and Anaphylaxis video.

Visit our website to sign up for free Special Allergy Alerts that contain notices of mislabeled or recalled food or pharmaceutical products, or advance notice of ingredient changes.

For a sample copy of the Food Allergy News newsletter, call our office, or send e-mail to faan@foodallergy.org.

International Food Information Council
1100 Connecticut Avenue N.W., Suite 430
Washington D.C. 20036
(202) 296-6540
www.ific.org
Provides science-based information about food safety and nutrition to consumers, professionals, governments, and organizations.

For information about celiac sprue, contact:
Celiac Disease Foundation
13251 Ventura Blvd., \#1
Studio City, CA 91604
(818) 990-2354
www.celiac.org

Celiac Sprue Association
P.O. Box 31700

Omaha, NE 68131-0700
(402) 558-0600
www.csaceliacs.org

## For a list of allergists in your community, contact:

The American Academy of Allergy, Asthma \& Immunology (800) 822-ASMA
www.aaaai.org
The American College of Allergy, Asthma \& Immunology (800) 842-7777
www.allergy.mcg.edu
For information about supporting food allergy research to find a cure, contact:

The Food Allergy \& Anaphylaxis Network
11781 Lee Jackson Hwy., Suite 160
Fairfax, VA 22033
(800) 929-4040
www.foodallergy.org
Food Allergy Initiative
237 Park Avenue, $21^{\text {st }}$ Floor
New York, NY 10017
(212) 527-5835
www.FoodAllergyInitiative.org

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Sicherer SH, Muñoz-Furlong A, Sampson HA. Prevalence of seafood allergy in the United States determined by a random telephone survey. J Allergy Clin Immunol 2004;114(1):159-65.

## Additional Resources

American Academy of Pediatrics. Guidelines for Emergency Medical Care in School (RE9954) Pediatrics 2001;107:435-6

American Academy of Allergy, Asthma \& Immunology Board of Directors. Position Statement 34:Anaphylaxis in schools and other child-care settings. August 1998.


[^0]:    A college student had a reaction from peanut dust found on pretzels that came from a peanut and pretzel mixture. All the peanuts had been removed and it was not obvious that peanuts were once contained in the mix.

[^1]:    **Medication checklist adapted from the Authorization of Emergency Treatment form developed
    by the Mount Sinai School of Medicine. Used with permission.

