

Food Safety Spotlight:

Food Allergies

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Code: 2600 Food Safety and HACCP

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Institute of Child Nutrition

The University of Mississippi

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Improve the operation of child nutrition programs through research, education and training, and information dissemination.

VISION

Lead the nation in providing research, education, and resources to promote excellence in child nutrition programs.

MISSION

Provide relevant research-based information and services that advance the continuous improvement of child nutrition programs.

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PROFESSIONAL STANDARDS

FOOD SAFETY AND HACCP TRAINING – 2600

Employee will be able to effectively utilize all food safety program guidelines and health department regulations to ensure optimal food safety.

2620 – Food Safety – General

2630 – Federal, State, and Local Food Safety Regulations

2640 – Food Safety Culture

Key Area: 2 Operations

INTRODUCTION

Food Safety Spotlight: Food Allergies is eight micro-trainings designed for directors/managers to use in training their staff. Each micro-training is roughly 15 minutes. This resource is part of a continuous set of training resources designed to give directors/managers an easy-to-use lesson plan for training staff on various food safety topics. *Food Safety Spotlight: Food Allergies* provides a method for training using many of the Institute of Child Nutrition's food safety resources. Every lesson plan contains the following pieces:

- Learning objective
- Statement explaining the importance of the topic
- List of needed materials
- Instructions for training
- Questions to ask staff
- Additional resources to strengthen or refresh the knowledge of the director/manager

All materials can be found on the ICN website (www.theicn.org/foodsafety).

Landing pages for materials listed in *Food Safety Spotlight*:

- CDC Food Allergy resources: <https://www.cdc.gov/healthyschools/foodallergies/>
- Food Allergy Research & Education: <https://www.foodallergy.org/>
- HACCP-based Standard Operating Procedures: www.theicn.org/foodsafety
- ICN Food Allergies resources: www.theicn.org/foodsafety
- USDA Food Allergy resources: <https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs>

FOOD ALLERGIES AND FOOD INTOLERANCES

Objective: Describe food allergies and food intolerances.

Why it is important: School nutrition employees need to understand food allergies and food intolerances because they are food-related disabilities. Schools must make safe meal modifications, such as meal substitutions and safe eating environments, for children with food-related disabilities.

Materials:

- Food Allergy and Food Intolerance fact sheet
- Case Study: Hamburger Supply Change

Instructions:

Review the Food Allergy and Food Intolerance fact sheet. Use the fact sheet to discuss the difference between a food allergy and food intolerance. Ask staff provided questions.

Walk staff through the Hamburger Supply Change case study, pausing after each question to give staff a chance to answer. Possible answers are provided. Discuss any changes your staff may need to make to safely prepare food for food-related disabilities. Answer all staff questions when done.

Questions for the staff:

- What is a food allergy?
 - **A food allergy is when the body mistakenly reacts to the protein of a certain food or ingredient as if it were harmful. The food protein that causes the reaction is called an allergen.**
- What is a food intolerance?
 - **A food intolerance is an abnormal response to a food that usually involves the gastrointestinal system but not the immune system.**
- What are some food allergies or intolerances you have heard of?
 - **Food allergies: eggs, fish, milk, peanuts, sesame, shellfish, soy, tree nuts, wheat, etc.**
 - **Food intolerances: gluten, monosodium glutamate (MSG), lactose, etc.**
- Are food allergies and food intolerances considered disabilities?
 - **Yes. Food allergies and food intolerances are considered disabilities under the 1990 *Americans with Disabilities Act (ADA)* and the 2008 Amendment.**

Additional Resources

Centers for Disease Control and Prevention. (2022, February 24). *Food allergies*. <https://www.cdc.gov/healthyschools/foodallergies>

Institute of Child Nutrition. (2020, June 23). *Food allergy fact sheet*. www.theicn.org/foodsafety

- *Overview of Food Allergies*
- *Common Questions School Nutrition Directors*
- *Common Questions School Nutrition Staff*

FOOD ALLERGY AND FOOD INTOLERANCE

What is a food allergy?

A food allergy is when the body mistakenly reacts to the protein of a certain food or ingredient as if it were harmful. The food protein that causes the reaction is called an allergen. Every time that person consumes that allergen, it triggers various allergic symptoms. Even a bite of food can result in an allergic reaction.

What are the major food allergens in the United States?

- Eggs
- Fish
- Milk
- Peanuts
- Sesame
- Soy
- Crustacean shellfish (e.g., shrimp, lobster, and crab)
- Tree nuts (e.g., walnuts, almonds, cashews, pistachios, and pecans)
- Wheat

What is a food intolerance?

A food intolerance is an abnormal response to a food that usually involves the gastrointestinal system but not the immune system. Eliminating the food will eliminate the symptoms. Food intolerances do not cause immediate life-threatening reactions; however, schools may still have to make meal modifications to school meals. Some children may be able to ingest some food related to their food intolerance, such as yogurt for a milk intolerance, but it is up to the State licensed healthcare professional to prescribe such allowances.

What are common food intolerances?

- Gluten
- Monosodium Glutamate (MSG)
- Lactose (milk intolerance)

What is celiac disease?

Celiac disease is an inherited, or genetic, autoimmune disorder characterized by an intolerance to the protein gluten. The immune system of a person with celiac disease incorrectly perceives gluten as harmful and, as a result, damages tissues of the small intestine when the gluten protein is eaten. There is no cure for celiac disease, so a strict gluten-free diet is followed to manage the symptoms and promote intestinal health. Gluten is a protein found in wheat, barley, and rye. Oats do not naturally contain gluten but can sometimes be unsafe due to cross-contact or cross-pollination.

Are food allergies and food intolerances considered disabilities?

Yes. Both food allergies and food intolerances are considered disabilities under the *Americans with Disabilities Act (ADA) 1990 and 2008 Amendments*. Schools must make safe meal modifications, such as meal substitutions and safe eating environments, for children with food-related disabilities. A State licensed healthcare professional, such as a general practice physician, registered nurse, or allergist, can diagnose food allergies and food intolerances by using a variety of tests. The treatment for the food-related disability is determined between the State licensed healthcare professional and the patient.

References

- Institute of Child Nutrition. (2021, June 23). *Adult day care food allergy fact sheet: Overview of food allergies*. www.theicn.org/foodsafety
- Institute of Child Nutrition. (2020, June 23). *Food allergy fact sheet: Wheat allergies*. www.theicn.org/foodsafety

CASE STUDY:

HAMBURGER SUPPLY CHANGE

Sophia has celiac disease. The distributor has substituted a hamburger patty due to supply chain issues. The replacement burger contains wheat as a filler. The head cook, Helen, prepares a bun-less hamburger for Sophia without noticing the product is different. Another employee, James, breaks down the burgers' boxes and notices the burgers contain wheat. He informs Helen immediately.

Is this a food intolerance or food allergy?

Food intolerance; Celiac disease is an autoimmune disorder characterized by an intolerance to the protein gluten.

What should Helen do in this scenario?

Possible answer: Helen should immediately go to the serving line and see if Sophia has come through the line. If Sophia has not, Helen should immediately remove the meal and replace it with a celiac-appropriate meal. If Sophia has already picked up her meal and eaten the hamburger, Helen should respond according to Sophia's emergency care plan.

What can Helen, James, and the other school employees do to prevent this from happening again?

They should carefully read all food labels for allergens every time a product is delivered. If a product contains an allergen it did not previously have, they should follow the chain of communication to make sure everyone is aware of the new allergen.

MAJOR ALLERGENS

Objective: Recognize the major allergens and possible food sources of them.

Why it is important: School nutrition employees should be familiar with major food allergens so they can be aware of them on food labels. These allergies cause roughly 90% of all food allergic reactions in the United States.

Materials:

- Food Allergy Fact Sheets for schools: www.theicn.org/foodsafety
 - Egg Allergies
 - Fish Allergies
 - Milk Allergies
 - Peanut Allergies
 - Shellfish Allergies
 - Soy Allergies
 - Tree Nut Allergies
 - Wheat Allergies

Instructions:

Pass out the food allergy fact sheets to staff. Have staff look at the “What foods contain [Allergen]?” and “Common Menu Items that May Contain [Allergen]” sections of the fact sheet. Have staff read through the list of the handout they received and report one to two food sources of the allergen they were previously unaware of.

Ask the staff to add food sources for each allergen before moving to the next food allergen. Ask provided questions and refer staff to the food allergy fact sheets to help answer. Answer all staff questions.

Questions for the staff:

- Can egg substitutes be used to prepare foods for children with egg allergies?
 - **No. Typically, egg substitutes are made from egg whites, which are highly allergenic for children with egg allergies.**
- Can a child with a fish allergy eat Worcestershire sauce?
 - **No, it contains anchovies which are fish.**
- If a product is labeled “dairy-free” or “non-dairy,” is it safe for a person with milk allergies?
 - **No. The term “dairy-free” does not have a Food Drug Administration (FDA) regulated definition, so there is no assurance that the product does not contain milk proteins. The FDA definition of “non-dairy” states that the product can include milk proteins. Ingredient labels should always be checked for the presence of milk, even if one of these terms is used on the packaging.**

- For a field trip, what is a good shelf-stable alternative to a peanut butter sandwich?
 - **One option may be to substitute the peanut butter with soy or sunflower seed butters. Other options include a cheese sandwich, hummus or bean dip and chips, or a pre-cooked meal carried in a cooler with temperature control.**
- What does crustacean shellfish mean?
 - **There are two types of shellfish: crustaceans (crab, lobster, and shrimp) and mollusks (clams, mussels, and oysters). Crustacean shellfish are considered the most allergenic.**
- Can soy be found in meat products?
 - **Yes, it can be used as a filler in processed meat such as chicken nuggets, hamburgers, and hotdogs.**
- What are some examples of tree nuts?
 - **Common: almonds, Brazil nuts, cashews, chestnuts, filberts, hazelnuts, macadamia nuts, pecans, pine nuts, pistachios, and walnuts**
 - **Less common: beechnut, butternut, chinquapin, coconut, ginkgo, hickory, lychee nut, pili nut, and shea nut**
- Is gluten-free the same thing as wheat-free?
 - **Gluten-free diets are not the same as wheat-free diets. Gluten is found in wheat, barley, and rye.**

Additional Resources

Food Allergy Research Education. (2020, November). *Tips for avoiding your allergen*. <https://www.foodallergy.org/resources/tips-avoiding-your-allergens-pdf>

RECOGNIZING AND REACTING TO AN ALLERGIC REACTION

Objective: Recognize the symptoms of an allergic reaction, and describe how to properly respond as detailed in the school nutrition program's food allergy management plan.

Why it is important: School nutrition employees need to be able to identify the symptoms of an allergic reaction. This includes both physical symptoms as well as what a child describes they are feeling. School nutrition employees need to know how to respond to an allergic reaction emergency.

Materials:

- Food Allergy Symptoms fact sheet
- School's food allergy management plan

Instructions:

Review the Food Allergy Symptoms fact sheet. Explain the symptoms of an allergic reaction and how a child might describe it. Review and explain the school's food allergy management policy on what to do during an allergic reaction. Ensure the staff are able to call 911 if needed. Ask provided questions and answer all staff questions when done.

The Food Allergy Research & Education (FARE) organization has the *Recognize and Respond to Anaphylaxis* poster, which can be posted in the kitchen to help staff remember food allergy symptoms. The poster can be found here: <https://www.foodallergy.org/resources/recognizing-and-responding-reaction>

Questions for the staff:

- How are food allergies diagnosed?
 - **By a State licensed healthcare professional**
- What are the symptoms of an allergic reaction?
 - **See “Symptoms of a Food Allergic Reaction” section on the Food Allergy Symptoms fact sheet.**
- What is an anaphylactic reaction?
 - **A severe allergic reaction with a rapid onset that may cause difficulty breathing and death**
- How are food allergies treated?
 - **Whatever the State licensed healthcare professional prescribes**
 - **Epinephrine**
 - **Antihistamine**
 - **Inhaler**

- Who can administer epinephrine?
 - **Personnel trained in administering epinephrine, for example, a school nurse**
- Where is epinephrine stored in our schools?
 - **Refer to the school's food allergy management plan.**
- When should you call 911?
 - **A serious food allergic reaction is an EMERGENCY. Call 911. Do not hesitate when anaphylaxis is suspected. Notify the emergency medical service that anaphylaxis is suspected so that they will bring epinephrine.**
- What role would you play while encountering an allergic reaction?
 - **Refer to the school's food allergy management plan.**
- What role would your co-workers play in the situation?
 - **Refer to the school's food allergy management plan.**

Additional Resources

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. <https://www.cdc.gov/healthyschools/foodallergies/>

Food Allergy Research Education. (2017). *Recognize and respond to anaphylaxis*. <https://www.foodallergy.org/resources/recognizing-and-responding-reaction>

Food Allergy Research Education. (2020, May). *Food allergy & anaphylaxis emergency care plan*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan>

Institute of Child Nutrition. (2020, June 23). *Food allergy fact sheet*. www.theicn.org/foodsafety

- *Overview of Food Allergies*
- *Managing Food Allergies: School Nutrition Director*
- *Managing Food Allergies School Nutrition Staff*

FOOD ALLERGY SYMPTOMS

Symptoms of a Food Allergic Reaction

One or more symptoms can occur and can be MILD to SEVERE. According to the Food Allergy Research & Education (FARE) organization, symptoms may include:

Mild Symptoms	Severe Symptoms
Gut: mild nausea or discomfort (stomach pain, abdominal cramping)	Body: lightheadedness, fainting or loss of consciousness, anaphylaxis
Mouth: itchy; odd taste; slight, dry cough	Gut: repetitive vomiting or severe diarrhea
Nose: itchy, runny nose; sneezing; congestion	Heart: pale, turning blue, faint, weak or “thready” pulse, dizziness, chest pain, drop in blood pressure
Skin: a few hives (reddish, swollen, itchy areas on the skin), mild itch (sometimes in the ear canal)	Lung: shortness of breath, wheezing, repetitive cough, difficulty breathing
	Mouth: significant swelling of the tongue or lips
	Psychological: feeling something bad is about to happen, sense of impending doom, anxiety, confusion, feeling weak
	Skin: many hives over the body, widespread redness, eczema
	Throat: tight, hoarse, trouble breathing/ swallowing, swelling

What is anaphylaxis?

Anaphylaxis is a severe allergic reaction with a rapid onset that may cause difficulty breathing and death. It may disrupt breathing and blood circulation. An anaphylactic reaction usually occurs within minutes of being exposed to an allergen, but in some rare instances, it can occur a couple of hours later. Symptoms of anaphylaxis include:

- Difficulty breathing, constriction of airways, tightness of the throat, hoarse voice
- Drop in blood pressure (such as pale, weak pulse, confusion, dizziness, fainting, weakness, loss of consciousness)
- Feeling of doom
- Gastrointestinal symptoms (such as abdominal pain, nausea, vomiting, diarrhea, cramping)
- Rapid pulse, cardiac arrest
- Shock (such as a drop in blood pressure and narrowing of airways)
- Skin symptoms (such as hives, swelling)
- Swollen lips

How might a child describe an allergic reaction?

- “This food is too spicy.”
- “My tongue or mouth is hot (or burning, tingling, itching, etc.).”
- “My tongue or mouth feels full (or heavy or funny).”
- “It feels like something is poking my tongue.”
- “My tongue feels like there is hair on it.”
- “It feels like there is a bump on the back of my tongue (or throat).”
- “There’s something stuck in my throat (or frog in my throat).”
- “My throat feels thick.”
- “My lips feel tight.”
- “It feels like there are bugs in there.” (to describe itchy ears)
- “My eyes are burning (or itchy).”
- “My skin feels itchy.”
- “My stomach (or tummy) hurts.”
- “My chest is tight.”
- “Something is wrong.”
- “Something bad is happening.”

A child may also show nonverbal signs of an allergic reaction, including:

- Putting their hands in their mouth
- Pulling or scratching at their tongue
- Slurring their words
- Their voice may change (for example, become hoarse or squeaky)

How are food allergies diagnosed?

A State licensed healthcare professional can diagnose food allergies by using a variety of tests.

What are the treatment methods?

- Reactions should be treated according to the student’s Food Allergy Action Plan/Emergency Care Plan.
- Epinephrine
- Antihistamine, if ordered by a healthcare professional
- Inhaler (bronchodilator), if ordered by a healthcare professional

How to avoid an allergic reaction?

The best way to avoid a reaction is to avoid the foods that cause the allergy.

References

- Food Allergy Research Education. (2020, May). *Food allergy & anaphylaxis emergency care plan*. <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan>
- Food Allergy Research Education. (n.d.). *How a child might describe a reaction*. <https://www.foodallergy.org/resources/how-child-might-describe-reaction>
- Food Allergy Research Education. (2017). *Recognize and respond to anaphylaxis*. <https://www.foodallergy.org/resources/recognizing-and-responding-reaction>
- Institute of Child Nutrition. (2020, June 23). *Family child care food allergy fact sheet: Responding to food allergy emergencies*. www.theicn.org/foodsafety
- Institute of Child Nutrition. (2020, June 23). *Food allergy fact sheet: Overview of food allergies*. www.theicn.org/foodsafety

READING FOOD LABELS FOR ALLERGENS

Objective: Demonstrate how to find allergens on an ingredient statement.

Why it is important: School nutrition employees need to be able to identify possible food allergens in the ingredient list to prevent them from being served to children with food allergies.

Materials:

- Assortment of food items from the kitchen with ingredient statements
- Reading Ingredient Statements for Food Allergens fact sheet

Instructions:

Use the Reading Ingredient Statements for Food Allergens fact sheet to help explain mandatory labeling and advisory statements for allergens and how to read the ingredient statement for allergens. Use a variety of food items from the kitchen to show staff how to find allergens on ingredient statements. Have staff read different labels and discuss. Ask provided questions and answer all staff questions when done.

Questions for the staff:

- What allergens are required by law to be written in plain language in the ingredient list or in a “Contains” statement?
 - **Egg, fish, milk, peanuts, sesame, shellfish, soy, tree nuts, wheat**
- Can you serve food with an advisory statement to a child with food allergies?
 - **No, products labeled with an advisory statement are unsafe for people with known food allergies**
- What steps should be taken if the label is unclear?
 - **Contact the manufacturer for clarification.**
- How long does the CDC recommend that food labels be maintained after the food has been served?
 - **24 hours**
- How often should food ingredient statements be read?
 - **Whenever the product is received**
- You are checking the invoice for Italian tomato paste being delivered. You notice that the distributor has substituted it, and the label states that it contains wheat. What do you do?
 - **Document the allergen on the invoice.**
 - **Tell the director or manager immediately so it can be documented.**

Additional Resources

Food Allergy Research & Education. (n.d.). *How to read a food label*. <https://www.foodallergy.org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels>

READING INGREDIENT STATEMENTS FOR FOOD ALLERGENS

Food Allergen Labeling

Although the Centers for Disease Control and Prevention (CDC) states that there are over 170 foods that can cause food allergies, nine major food allergens account for 90% of all food-allergic reactions in the United States.

The *Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA)* is a Federal law that became effective in January 2006. It mandates that manufacturers identify any of the eight major food allergens in plain language on the food label.

In 2021, the *Food Allergy Safety, Treatment, Education, and Research (FASTER) Act* was passed into law and added sesame to the list of U.S. major allergens. This law will take effect in January 2023 and will require sesame to be written like the other with major allergens on the ingredient statement on food labels. Before this date, food manufacturers may begin incorporating sesame as a major allergen on their food labels. Contact the food manufacturer if there is any uncertainty about food containing sesame.

Nine Major Allergens

Crustacean shellfish*
Egg
Fish

Milk
Peanuts
Sesame

Soy
Tree nuts
Wheat

*Mollusk shellfish are not considered a major allergen by *FALCPA*, so all the ingredient information for mollusks may not be on the label.

FALCPA specifies where and how allergen information is presented in the ingredient list on the food label. The food ingredient **MUST** be written in one of three ways.

- ▶ Written as the common or usual name of the major food allergen
 - Example: “wheat flour”



- ▶ **In parenthesis**, following the ingredient that is not the common name
 - Example: “cream (milk)”

INGREDIENTS: CHICKEN STOCK, WATER, MODIFIED FOOD STARCH, WHEAT FLOUR, CHICKEN MEAT, CREAM (MILK), CONTAINS LESS THAN 2% OF: VEGETABLE OIL, CARROT JUICE CONCENTRATE, SALT, POTASSIUM CHLORIDE, FLAVORING, SOY PROTEIN CONCENTRATE, DEHYDRATED MECHANICALLY SEPARATED CHICKEN, YEAST EXTRACT, CHICKEN FAT, DISODIUM GUANYLATE, DISODIUM INOSINATE, SPICE, BETA CAROTENE FOR COLOR, SODIUM PHOSPHATE, SOY PROTEIN ISOLATE, MIXED TRIGLYCERIDES, LACTIC ACID, CELERY EXTRACT, DEHYDRATED CHICKEN, ONION EXTRACT.

- ▶ Listed after the ingredient statement in a **“Contains” statement**
 - Example: “Contains: wheat and soy”



Advisory Statement

An advisory statement is NOT covered in the *Food Allergen Labeling and Consumer Protection Act*, so it varies widely from manufacturer to manufacturer. Some common types of advisory statements are the “May Contain,” “Made on Equipment,” and “Processed in Facilities” statements. According to the Food Allergy Research & Education (FARE) organization, products labeled with an advisory statement are unsafe for people with known food allergies.

“May Contain” statement

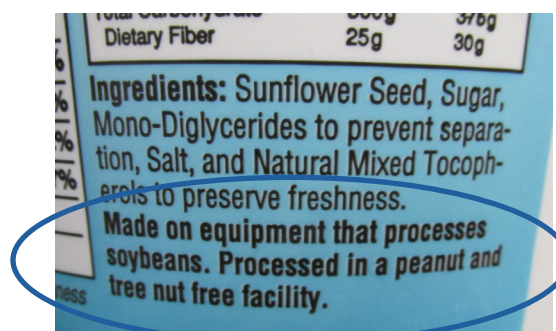
Example: “May contain traces of peanuts”

“Made on Equipment”

Example: “Made on equipment that makes products containing eggs and tree nuts”

“Processed in Facilities”

Example: “Processed in facilities that also process wheat”



Reading Ingredient Statements

Ingredient statements should be read when the product is received since suppliers may make product substitutions, formulas may change, or vendors could change. Check all labels carefully every time. Do not rely on specifications, fact sheets, or the last shipment. Read the label each time the product is received. For additional questions about a food label, contact your director or, if necessary, the food manufacturer.

Holding Labels

The CDC recommends that labels of all products served to be kept for 24 hours as a precaution, so the label is available in case someone has an allergic reaction. Unlike a foodborne illness outbreak, where the outbreak can occur days after a food is served, an allergic reaction will happen on the day of service. If food will be served as leftovers or reused in another recipe, the label should be kept until all product is either consumed or disposed. Keeping a label library is a common practice; some keep the actual label; some sites scan or take a picture of the label.

Sources

- Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. www.cdc.gov/healthyyouth/foodallergies/
- Food Allergy Research & Education. (n.d.). *How to read a food label*. <https://www.foodallergy.org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels>
- U.S. Food and Drug Administration. (2018, July 16). *Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA)*. <https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocuments-RegulatoryInformation/Allergens/ucm106187.htm>
- U.S. Library of Congress. (2021). *Summary: S.578 — FASTER Act of 2021*. <https://www.congress.gov/bill/117th-congress/senate-bill/578?q=%7B%22search%22%3A%5B%22S.+578%22%5D%7D&s=1&r=1>

AVOIDING CROSS-CONTACT

Objective: Demonstrate methods for avoiding cross-contact.

Why it is important: School nutrition employees can accidentally cause cross-contact or the unintentional transfer of allergens to a food or surface without allergens. Because of cross-contact, a child with food allergies can accidentally be exposed to the allergen they are avoiding.

Materials:

- Preparing Allergen-Free Food Safely fact sheet
- School kitchen

Instructions:

Use the Preparing Allergen-Free Food Safely fact sheet to explain cross-contact and how to prevent it. Emphasize how cross-contact can occur if employees do not use procedures to avoid it. Walk through the kitchen and discuss methods for how employees can avoid cross-contact throughout the foodservice process, from receiving to serving.

Ask provided questions and answer all staff questions when done.

Questions for the staff:

- How is cross-contact different from cross-contamination?
 - **See chart on Preparing Allergen-Free Food Safely fact sheet.**
- What are some potential sources of cross-contact?
 - **Food mixing during food preparation and serving**
 - **Insufficient handwashing**
 - **Insufficient cleaning**
 - **Shared equipment, utensils, cutting boards, and counters**
 - **Splatter or steam from cooking**
 - **Salad bars, buffets, serving stations**
- What methods help avoid cross-contact on equipment used to prepare food for both allergic and non-allergic students?
 - **Follow proper handwashing procedures, and wash hands before preparing allergen-free foods.**
 - **Wash, rinse, and sanitize all utensils, equipment, and food contact surfaces before and after each use.**
 - **Prepare allergen-free foods first.**
- What are some other methods for avoiding cross-contact?
 - **Isolate ingredients containing allergens.**
 - **Use a clean apron, potholders, and oven mitts when preparing allergy-free foods.**
 - **Wrap and label prepared allergen-free food (name, color code, or stickers). Place food on a designated (preferably top) storage shelf until service.**

- How often are our tables being cleaned with soap, water, and friction?
- You are serving on the line. Today's menu includes macaroni and cheese and green beans. You notice that a student, Lucy, uses the spoon for the macaroni to scoop out some green beans. Amos, a child whom you know has a milk allergy, is coming down the line. What do you do?
 - **Change out the green beans with a fresh pan and inform your manager.**

Additional Resources

Institute of Child Nutrition. (2018, March 6). *HACCP-based standard operating procedures*. <http://www.theicn.org/ResourceOverview.aspx?ID=75>

- *Cleaning and Sanitizing Food Contact Surfaces (Sample SOP)*
- *Serving Safe Food to Students with Food Allergies (Sample SOP)*

PREPARING ALLERGEN-FREE FOOD SAFELY

When preparing food for a child with food allergies, it is important to do so safely so allergens do not accidentally get into the food—also known as cross-contact.

What is cross-contact?

Cross-contact is when an allergen is accidentally transferred from a food with an allergen to a food or surface that does not have an allergen. The term cross-contact is often used interchangeably with cross-contamination, but the terms mean different things. The following chart shows the difference between the two terms.

Cross-Contact	Cross-Contamination
Definition: Accidental transfer of <u>allergens</u> to a food or a surface	Definition: Accidental transfer of <u>microorganisms</u> to a food or surface
Cooking does not reduce or eliminate the allergen protein.	Cooking does reduce or eliminate the microorganism.
Removed from a surface by <u>soap, water, and friction</u> only	Removed from a surface by <u>washing, rinsing, and sanitizing</u>
Example: A knife is used to spread peanut butter on peanut butter and jelly sandwiches. Then, the same knife is used to cut a turkey sandwich without cleaning, rinsing, and sanitizing between uses.	Example: Raw meat is cut on a cutting board. Then, fresh vegetables for the salad bar are chopped on the same cutting board without cleaning, rinsing, and sanitizing the board between uses.

What are possible sources of cross-contact?

Cross-contact can happen during any part of handling food, from buying through serving. Care must be taken to keep allergen-free food away from foods that contain allergens. The following are some possible sources of cross-contact.

- Food mixing during preparation and serving
- Insufficient handwashing allows allergens to remain on hands
- Insufficient cleaning allows allergens to remain on food contact surfaces
- Shared equipment, utensils, and cutting boards are not being cleaned properly between uses
- Cooking food splattering into an allergen-free food
- Steam from cooking food getting into an allergen-free food
- Using utensils for salad bars, buffets, and serving stations to pick up multiple food items

What are ways to avoid cross-contact?

Storing, preparing, and serving food in a way that prevents cross-contact can reduce the risk of exposing a child to a food allergen. The following are ways school nutrition employees can prevent cross-contact.

Storage

- Have shelves in the dry storage, refrigerator, and freezer that are only for allergen-free foods. Best practice is to use the top shelf so nothing can fall on the food (e.g., wheat flour falling on brown rice flour).

Preparation

- Wash hands before preparing allergy-free foods.
- Wear single-use gloves.
- Use a clean apron, potholders, and oven mitts when preparing allergy-free foods.
- Wash all utensils, equipment, and food contact surfaces before and after each use with hot, soapy water making sure to scrub, then rinse and sanitize them.
- Prepare food items that do not contain allergens first. Cover, label, and store the allergy-free items separately.
- Designate an allergy-free zone in the kitchen if possible. When working with multiple food allergies, set up procedures to prevent cross-contact within the allergy-free zone.

Serving

- Have children wash their hands before and after each meal.
- Take extra care with serving utensils and serving containers to prevent cross-contact. For young children, an adult should be present during meals.
- Do not allow young children to share food or eating utensils.

Other than meals or snacks, are there ways that a child could be exposed to a food allergen?

Food allergens may be present in some household products like soap and lotions. It is important to read labels for allergens and prevent a child with allergies from being exposed to any products that contain allergens.

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FOOD ALLERGIES AND STUDENT PRIVACY

Objective: Discuss the importance of preserving the privacy and being respectful of students with food allergies.

Why it is important: According to Federal laws, children with food-related disabilities must be provided with a meal modification. Their privacy must also be respected in order to discourage any kind of discrimination by students and school staff.

Materials:

- Protecting Children with Food Allergies fact sheet
- Case Study: Fish Allergen in the Chicken

Instructions:

Review the Protecting Children with Food Allergies fact sheet. Explain how it is important to follow Federal law by respecting and maintaining the privacy of a student with a disability and help prevent bullying. Explain that students with food allergies should not be singled out. Also, discuss how children with food allergies can be bullied, teased, or harassed at school, not only by other children but sometimes by teachers and school staff.

Walk staff through Case Study: Fish Allergens in the Chicken. Ask provided questions and answer all staff questions when done.

Questions for the staff:

- Are children with allergies required to always use a designated allergy-safe zone if one is available?
 - **No, children with allergies should not be forced to use allergy-safe zones.**
- How can we respect the privacy of children with food allergies?
 - **Make sure they are not singled out.**
 - **Do not identify their allergen to anyone.**
- What should we do if we see bullying of a child with food allergies?
 - **Enforce the disciplinary actions outlined in the school's food allergy policy.**

Additional Resources

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. Washington, DC: US Department of Health and Human Services. <https://www.cdc.gov/healthyschools/foodallergies/index.htm>

U.S. Department of Agriculture, Food and Nutrition Service. (2017, July 25). *2017 edition: Accommodating children with disabilities in the school meal programs –Guidance for school food service professionals*. <https://www.fns.usda.gov/cn/2017-edition-accommodating-children-disabilities-school-meal-programs>

PROTECTING CHILDREN WITH FOOD ALLERGIES

Food-Related Disabilities and Federal Law

Along with ensuring that the food school nutrition professionals serve to children is safe, respecting and protecting the children's privacy with food allergies is important. Civil rights and privacy laws apply to all of us. When food allergies or intolerances are considered a disability, schools are required by Federal laws and regulations to make a meal modification. The following laws affect how schools accommodate children with food-related disabilities.

Law	How it Relates to School Nutrition
Rehabilitation Act of 1973	Prohibits discrimination against qualified children with disabilities in programs or activities for schools receiving federal financial assistance. 504 Plan derived from this law
Individuals with Disabilities Education Act (IDEA) 1975, Part B 2006	Requires free and appropriate public education be provided for children with disabilities aged 3-21. IEP Plan is derived from this law.
Americans with Disabilities Act (ADA) 1990 and 2008 Amendments	Broadens and extends civil rights protections for children with disabilities. All food allergies and intolerances can be considered disabilities.
The Health Insurance Portability & Accountability Act (HIPPA) 1996	Requires all medical records disclosed to be kept properly confidential.
Family Educational Rights and Privacy Act (FERPA) 1974	Protects the privacy of health information entered into a student's record.

There is no way to provide 100% confidence that an allergen will not be introduced at schools. The CDC's *Voluntary Guidelines to Managing Food Allergies in Schools and Early Care and Education Programs* recommends providing Allergy Safe Zones coupled with education and training, especially for younger children. However, children with allergies should never be forced to use these zones and should never be singled out.

Bullying and Food Allergies

Research performed by Food Allergy Research & Education (FARE) shows that children with food allergies may be bullied, teased, or harassed at school, not only by other children but sometimes by teachers and school staff. Verbal abuse appears to be the most common offense. In reported cases, children describe being physically threatened by having the allergen thrown at or dangled in front of them or being smeared with their allergen. Know what steps to take when you catch someone bullying a child with food allergies. Always encourage them to notify an adult if they are being harassed or threatened by other students or adults as it relates to their food allergy.

Roles of School Nutrition Staff in Food Allergy Management

Here are some ways staff can be part of the food allergy team.

- Create an environment where children with food allergies will be safe.
- Read food labels carefully.
- Communicate and share the ingredient statement information with school staff, parents or guardians, and students.
- Prevent cross-contact of potential food allergens by following food safety Standard Operating Procedures (SOP).
- Follow food allergy management plan set by the school district.
- Ensure a safe school environment by reporting any discrimination or bullying.
- Have in place a system to identify students with food allergies without compromising privacy or confidentiality rights.
- Make meal modifications for students with food allergies according to their individual allergy plans.
- Know the emergency response protocol to respond to an allergic reaction incident.
- Train all your staff, including substitutes, on food allergies.
- Attend professional development on food allergies.

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Case Study: Fish Allergens in the Chicken

Annie, a student with a fish allergy, is coming through the serving line. She goes to pick up some teriyaki chicken. Linda, the server on the line, knows that the teriyaki contains anchovies.

How could Linda let Annie know that this food contains fish?

Possible solution: Linda could let Annie and all the students around Annie know that the chicken contains a potential fish allergen. This way, Annie is not the only child receiving the information and is not singled out.

How can this situation be prevented in the future?

Possible future prevention method: Have a designated allergen sign or sticker for each food item that tells which allergens are present in a food.

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