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# **Participant's Workbook**



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Time: 4 hours

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Key Area: 2

Code: 2600 (Food Safety and HACCP)

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# Introduction

According to the Centers for Disease Control and Prevention (CDC) *Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs*, food allergies are a growing food safety and public health concern. The Food Allergy Research & Education (FARE) organization estimates that food allergies affect about 1 in every 13 children in the United States. The CDC also estimates that 16%–18% of children with food allergies experience a reaction at school from accidentally eating food allergens. Sicherer et al. found that 25% of the severe and potentially life-threatening reactions (anaphylaxis) reported at schools happened in children with no previous food allergy diagnosis.

Section 112 of the Food and Drug Administration (FDA) *Food Safety Modernization Act* (FSMA), Food Allergy and Anaphylaxis Management, provides guidance on voluntary food allergy and anaphylaxis management for schools and early childhood education programs. The CDC published the *Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs* in 2013 to respond to FSMA expectations.

As explained in USDA's *Accommodating Children with Disabilities in the School Meals Programs*, school nutrition programs are required to have a school food safety program based on HACCP principles to reduce or eliminate risks of food safety hazards; food allergens are considered a safety hazard. The school food safety program applies to all settings in the school where food is stored, prepared, and served as part of USDA's child nutrition programs, including the cafeteria, classrooms, and other settings.

According to the USDA's guidance, any food allergy or intolerance could be considered a disability. Schools are required by Federal law to make meal modifications for a disability diagnosis made in writing by a State licensed healthcare professional.

Allergic reactions can be life-threatening and have far-reaching effects on students and their fam ilies, as well as on the schools they attend. School staff should follow plans to prevent an allergic reaction and respond to a food allergy emergency.

# Competencies, Knowledge, and Skills

**Competency 2.1:** Maintains sanitation, safety, and security practices in compliance with local, State, and Federal policies, procedures, and regulations.

**Competency 2.2:** Maintains sanitation, safety, and security practices to protect the health and well-being of students, customers, and employees.

Source: Institute of Child Nutrition. (2018). *Competencies, Knowledge, and Skills for School Nutrition Managers*. https://theicn.org/icn-resources-a-z/ckssnmanagers21

# **Professional Standards**

### FOOD SAFETY AND HACCP TRAINING - 2600

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

2620 - Practice general food safety procedures.

2630 – Practice Federal, State, and local food safety regulations and guidance.

2640 – Promote a culture of food safety behaviors in the school community (includes training on food allergens).

### Key Area: 2 – Operations

# **Training Objectives**

- 1. Evaluate the impact that an allergic reaction incident may have on a school.
- 2. Describe a food allergy, its symptoms, and treatment methods.
- 3. Identify the nine major food allergens.
- 4. Distinguish between food allergy and food intolerance.
- 5. Demonstrate how to find the nine major food allergens in the ingredient statement on the food label.
- 6. Describe how to find allergens in the ingredient statement on the food label that are not among the nine major, are in bulk items, or are in USDA Foods.
- 7. Describe the procedures for reading ingredient statements.
- 8. Define cross-contact.
- 9. Examine how cross-contact may occur in a school nutrition program.
- 10. Develop strategies for preventing cross-contact.
- 11. Describe methods for accommodating and supporting students with food allergies.
- 12. Determine strategies to manage food prepared and served outside of the cafeteria.

# Key Terms

Key Terms	Definition
504 Plan	A written document that contains the services to be provided to a student with a disability to comply with provisions in Section 504 of the <i>Rehabilitation Act</i> (1973)
Allergen	Usually harmless food protein that can trigger an immune response in a person and cause an allergic reaction
Allergic reaction	Immune system reacts abnormally to a usually harmless substance
<i>Americans with Disabilities Act</i> (1990) (ADA)	Prohibits discrimination and ensures equal opportunity for Americans with disabilities
Anaphylaxis	A serious allergic reaction with rapid onset that may cause difficulty breathing and death
Celiac disease	An autoimmune disorder that affects the small intestine that is triggered by eating gluten and managed with a strict gluten-free diet
Cross-contact	Occurs when an allergen is accidentally transferred from a food containing an allergen to a food or surface that does not contain an allergen
Cross-contamination	Occurs when microorganisms from different sources contaminate food during preparation or storage
Epinephrine	Medicine (adrenaline) used to treat a serious allergic reaction
Family Educational Rights and Privacy Act (1974) (FERPA)	Federal program that protects the privacy of information entered into a student's record
Food Allergy Safety, Treatment, Education, and Research Act (2021)(FASTER)	Federal law establishing sesame as the ninth major food allergen in the United States. Law requires that sesame be listed on food label in plain language like the other major allergens. Law became effective on January 1, 2023.
<i>Food Allergen Labeling and Consumer Protection Act</i> (2004) (FALCPA)	Labeling law that mandates labels of foods containing the eight major allergens disclose of the allergen in plain language
Food allergy	An immune-mediated adverse reaction to a food protein that could cause a life-threatening response
Food allergy management plan	A school-wide plan designed to reduce the risk of exposure to food allergens and procedures for food allergy emergencies

Key Terms	Definition
Food intolerance	An abnormal response to eating a certain food; not life- threatening and does not involve the body's immune system
Gluten	Protein found primarily in wheat, barley, and rye; can sometimes be found in oats from cross-pollination
Gluten intolerance	A form of food intolerance that can cause digestive problems after eating gluten
Health Insurance Portability and Accountability Act (1996) (HIPAA)	Federal program that requires all medical records in any form to be kept confidential
Individualized Education Plan (IEP)	A written document that contains the program of special education provided to a student with a disability; to comply with provisions found in Part B of the <i>Individuals with Disabilities Education Act</i> 2006 (IDEA)
Individualized Healthcare Plan (IHP)	A written document that outlines the requirements of student healthcare services; developed by the school nurse
Individuals with Disabilities Education Act (IDEA) (1975, 2006)	Federal law that requires a free and appropriate public education be provided for students with disabilities
Lactose intolerance	Food intolerance that causes digestive problems after eating or drinking lactose; individuals with lactose intolerance do not produce enough lactase enzymes in the small intestines
Phenylketonuria (PKU)	A rare condition in which a person cannot properly break down the amino acid phenylalanine
Rehabilitation Act of 1973	Federal law that prohibits discrimination against qualified persons with disabilities
State licensed healthcare professional	Individual who is authorized to write medical prescriptions under State law; examples include doctor, nurse practitioner, or physician's assistant

# Lesson 1: All about Food Allergies

### **Objectives:**

- 1. Evaluate the impact that an allergic reaction incident may have on a school.
- 2. Describe a food allergy, its symptoms, and treatment methods.
- 3. Identify the nine major food allergens.
- 4. Distinguish between food allergy and food intolerance.

# **Reflection and Impact**

Instructi	ons: Take 1 minute to reflect on the Caitlin Remembered video.
FEEL	How do I feel about what I just watched?
THINK	What are the most important ideas I have heard from the group reflections?
DO	How can I use this reflection knowledge? What will I do differently in the future?

# **Food Allergy Fact Sheet**

### What is a food allergy?

A food allergy is when the body mistakenly reacts to the protein of a food or ingredient as if it were harmful. The food protein that causes the reaction is called an allergen.

### What are the symptoms of an allergic reaction?

Knowing the symptoms of an allergic reaction can save a student's life. One or more allergic symptoms can occur and can be mild to severe. Symptoms can happen within a few minutes or up to a few hours after consuming the allergen. Students can display different symptoms, even if they have the same allergy (e.g., one student with a peanut allergy may have trouble breathing when exposed to peanuts, while another student with a peanut allergy gets hives after consuming it). Each time a student has a reaction, the symptoms may be different.

Knowing the symptoms of an allergic reaction is vital, as a student may have a reaction but not have a known allergy. As shown in the following chart, Food Allergy Research and Education (FARE) details how various symptoms can appear in the body.

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

### What are the treatment methods for an allergic reaction?

Treatment for an allergic reaction for a student will be determined by the State licensed healthcare professional and written in the emergency care section of the student's food allergy plan. Include specific State rules and licensing regulations about how school nutrition professionals can administer medicines in the food allergy plan. Follow the student's individual food allergy emergency care plan when responding to an allergic reaction. School nutrition staff cannot provide treatment outside of what is written in the plan. Treatments for an allergic reaction may include:

- Epinephrine (administered by an epinephrine auto-injector)
- Antihistamine
- Inhaler (bronchodilator)

### How might a student 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 (throat).
- There's something stuck in my throat (or a 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.

### What are some nonverbal signs of an allergic reaction?

- Putting their hands in their mouths
- Pulling or scratching at their tongues
- Slurring their words
- Their voices may change (e.g., become hoarse or squeaky)

### 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 (e.g., pale, weak pulse, confusion, dizziness, fainting, weakness, loss of consciousness)
- Feeling of doom
- · Gastrointestinal symptoms (e.g., abdominal pain, nausea, vomiting, diarrhea, cramping)
- Rapid pulse, cardiac arrest
- Shock (i.e., drop in blood pressure and narrowing of airways)
- Skin symptoms (e.g., hives, swelling)
- Swollen lips

### How to avoid an allergic reaction?

Total avoidance of allergen food protein

### Sources:

- Centers for Disease Control and Prevention. (2020). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. www.cdc.gov/healthyyouth/ foodallergies/
- Food Allergy Research and Education. (n.d.). *Anaphylaxi*s. https://www.foodallergy.org/resources/ anaphylaxis
- Food Allergy Research and Education. (n.d.). *Food allergy 101*. https://www.foodallergy.org/livingfood-allergies/food-allergy-essentials/food-allergy-101
- Food Allergy Research & Education. (n.d.). *Food allergy diagnosis and testing*. https://www. foodallergy.org/research-innovation/accelerating-innovation/food-allergy-diagnosis
- Food Allergy Research and Education. (n.d.). *How to read food labels*. https://www.foodallergy. org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels
- Food Allergy Research and Education. (n.d.). *Recognizing and treating reaction symptoms*. https://www.foodallergy.org/resources/recognizing-and-treating-reaction-symptoms
- Food Allergy Research and Education. (2017). *Recognizing and responding to a reaction*. https://www.foodallergy.org/resources/recognizing-and-responding-reaction
- Food Allergy Research and Education. (2020, May). *Food allergy and anaphylaxis emergency care plan*. https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan
- Mayo Clinic. (2019, November 2). *Food allergy*. https://www.mayoclinic.org/diseases-conditions/ food-allergy/symptoms-causes/syc-20355095
- U.S. Department of Health and Human Services, National Institutes of Health. (2018, October 29). *Food allergy*. https://www.niaid.nih.gov/diseases-conditions/food-allergy
- U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Allergy and Infectious Diseases. (2018, October 24). *Guidelines for clinicians and patients for diagnosis and management of food allergy in the United States*. https://www.niaid.nih.gov/diseases-conditions/guidelines-clinicians-and-patients-food-allergy
- U.S. Food and Drug Administration. (2022, February 17). *Food allergies*. https://www.fda.gov/ food/food-labeling-nutrition/food-allergies

# Food Allergy Emergency

**Instructions:** Answer the questions for your school's food allergy management plan. If you do not know the answer, check "Research" to remind yourself to find out the answer when you get back to your school.

Questions	Answers	Research
Emergency Reaction		
A student has a reaction in the cafeteria, what do you do first?		
Who do you contact?		
Who can administer epinephrine?		
Do you need to be trained to administer an auto-injector?		
Who is trained in your school?		
Epinephrine Auto-Injector		
What is the policy for a student with a known life- threatening food allergy for carrying an auto-injector?		
Is the student's auto-injector in the nurse's office or somewhere else?		
Is the auto-injector available if the nurse is not in their office?		
What if the student has a first-time allergic reaction and no prescription auto-injector is available?		
Who do you contact?		
Responding to an Emergency		
Is all staff trained on how to respond to an emergency?		
Do substitutes know how to respond?		
Part-time staff?		
Volunteers?		
Do the phones near you get an outside line to call 911?		
Will local EMS have epinephrine available for use when they arrive?		

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# **Nine Major Allergens**



### Sources:

- U.S. Food and Drug Administration. (2022, March 7). *Food allergen labeling and consumer* protection act of 2004 (FALCPA). https://www.fda.gov/Food/GuidanceRegulation/ GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm
- U.S. Library of Congress. (2021, April 23). *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

# Food Allergies and Food Intolerances



Institute of Child Nutrition

# **Lesson 2: Reading Labels for Allergens**

### Objectives:

- 1. Demonstrate how to find the nine major food allergens in the ingredient statement on the food label.
- 2. Describe how to find allergens in the ingredient statement on the food label that are not among the nine major, are in bulk items, or are in USDA Foods.
- 3. Describe the procedures for reading ingredient statements.

# **Reading Ingredient Statements for Food Allergens**

### Food Allergen Labeling

Although 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 Act* (FASTER) was passed into law. This law added sesame to the list of major allergens in the U.S. This law took effect in January 2023 and required food manufacturers to list sesame in the ingredient statement like the other major allergens.

	Nine Major Allergens	
Crustacean shellfish*	Milk	Soy
Egg	Peanuts	Tree nuts
Fish	Sesame	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.

- 1. Written as the **common or usual name** of the major food allergen
  - Example: "wheat flour"
- 2. In parenthesis, following the ingredient that is not the common name
  - Example: "cream (milk)"
- 3. Listed after the ingredient statement in a "Contains" statement
  - · Example: "Contains: wheat and soy"



INGREDIENTS: CHICKEN STOCK, WATER, MODIFIED FOCD STARCH, WHEAT FLOUR, CHICKEN (FAT, CREAM (MILK), CONTAINS LESS THAN 2% OF: VEGETABLE UIL, 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 INOSINATE, SOY PROTEIN ISOLATE, MIXED TRIGLYCERIDES, LACTIC ACID, CELERY EXTRACT, DEHYDRATED CHICKEN, ONION EXTRACT.



### **Advisory Statements**

Advisory statements are NOT covered in the *Food Allergen Labeling and Consumer Protection Act*, so the wording 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"

· 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. Carefully check all labels every time. Do not rely on specifications, fact sheets, or the last shipment. Read the label each time the product is received. Contact the food manufacturer if you have any questions or are uncertain about the food item.

### **Holding Labels**

The Centers for Disease Control and Prevention (CDC) recommends keeping all food labels of all served food products 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 the food will be served as leftovers or reused in another recipe, keep the label until all product is either consumed or disposed of. Some ideas for managing food labels include keeping a label library, keeping the actual label, and scanning or taking 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*. https://www.cdc.gov/ healthyyouth/foodallergies/
- Food Allergy Research and Education. (n.d.). *How to read food labels*. https://www.foodallergy. org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels
- U.S. Food and Drug Administration. (2022, March 7). *Food allergen labeling and consumer* protection act of 2004 (FALCPA). https://www.fda.gov/Food/GuidanceRegulation/ GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm
- U.S. Library of Congress. (2021, April 23). *Summary: S.578 FASTER Act of 2021*. https://www.congress.gov/bill/117th-congress/senate-

Ingredients: Sunflower Seed, Sugar, Mono-Diglycerides to prevent separation, Salt, and Natural Mixed Tocopherols to preserve freshness. Made on equipment that processes soybeans. Processed in a peanut and tree nut free facility.

# **Hide and Seek Label Reading**

**Instructions:** Read the assigned label ingredient statement on the wall and the FARE "Tips for Avoiding Your Allergen" handout. With your group, answer the activity questions for that label. Discuss the answers and your observations on label reading within your group. We will also discuss the answers as a class.

QUESTIONS FOR LABEL A	Answers
Which allergens are listed in Label A?	
Does the product label meet the allergen requirements of the labeling law?	

Label A
INGREDIENTS: CULTURED
PASTEURIZED SKIM MILK,
MILK, WHEY PROTEIN
CONCENTRATE, SALT, WHEY,
NATURAL FLAVOR, XANTHAN
GUM, LOCUST BEAN GUM,
GUAR GUM, VITAMIN A
PALMITATE, SORBIC ACID
AND CARBON DIOXIDE (TO
MAINTAIN FRESHNESS).
CONTAINS: MILK

<b>QUESTIONS FOR LABEL B</b>	Answers
Which ingredients in the statement cause the manufacturer to label the product: CONTAINS MILK?	
Can a student known to have a wheat allergy have this product?	

Label B

INGREDIENTS: SALT, MONOSODIUM GLUTAMATE, MALTODEXTRIN, GARLIC, ONION, PARSLEY, SPICE, CARRAGEENAN, CALCIUM STEAROYL LACTYLATE, PARTIALLY HYDROGENATED CANOLA OIL, BUTTERMILK PRODUCT, TURMERIC (COLOR). CONTAINS: MILK

QUESTIONS FOR LABEL C	Answers
Would you prepare and serve this product to a student with an egg allergy?	
Does this statement meet the requirements of the labeling law for wheat?	

Label C
Ingredients: Durum flour &
semolina blend, fiber, niacin,
iron (ferrous sulfate), thiamin
mononitrate, riboflavin, folic acid.
Allergy Information: has flour
ingredients and is manufactured

in a facility that uses eggs.

## **Hide and Seek Label Reading**

QUESTIONS FOR LABEL D	Answers
Can this product be served to a student with a known peanut allergy?	
Can this product be served to a student with known egg, wheat, and soy allergies?	

### Label D

Ingredients: Sunflower Seed, Sugar, Mono-Diglycerides to prevent separation, Salt, and Natural Mixed Tocopherols to preserve freshness. Made on equipment that processes soybeans. Processed in a peanut and tree nut free facility.

<b>QUESTIONS FOR LABEL E</b>	Answers
How many of the nine (9) major allergens are in this product? List the allergens.	
Can this product be served to a student with shellfish allergies?	

### Label E

INGREDIENTS: WATER, DISTILLED VINEGAR, VEGETABLE OIL (SOYBEAN AND/OR CANOLA), CIDER VINEGAR, ROMANO CHEESE (CULTURED MILK, SALT, ENZYMES), SUGAR, GARLIC\*, SESAME SEEDS, EXTRA VIRGIN OLIVE OIL, CONTAINS LESS THAN 2% OF: OMEGA 3 [FISH OIL AND FISH GELATIN (CONTAINS TILAPIA, SARDINE, AND ANCHOVY)], ANCHOVY (FISH), LEMON JUICE CONCENTRATE, SPICE, SALT, FERMENTED WHEAT PROTEIN, YEAST EXTRACT, MALTODEXTRIN, XANTHAN GUM, PROPYLENE GLYCOL ALGINATE, POTASSIUM SORBATE, SODIUM BENZOATE AND CALCIUM DISODIUM EDTA AS PRESERVATIVES. \*DRIED.

QUESTIONS FOR LABEL F	Answers
Which allergen is listed in the ingredient statement but not in the "Contains" statement?	
Would the missing information in the "Contains" statement be enough for the product to be recalled?	

### Label F

BEEF, WATER, TEXTURED TOFU, EGGS, DEHYDRATED ONION, GARLIC, SPICES, BREAD CRUMBS, WHEY

CONTAINS: EGGS, MILK, AND WHEAT
### Serving Safe Food to Students With Food Allergies

(Sample SOP)

**PURPOSE:** To serve safe and nutritious meals to students with food allergies.

**SCOPE:** This procedure applies to child nutrition employees involved in preparing and serving food to students with food allergies.

KEY WORDS: Allergies, Cleaning, Cross-Contact, Handwashing

### **INSTRUCTIONS:**

1. Follow the policies and procedures of your child nutrition operation and school district.

- 2. Use your receiving procedures.
  - Check all ingredient labels each time a food is purchased.
  - Date each food item when received.
- 3. Store food items that contain allergens in a separate location from the non-allergenic items.
- 4. Keep ingredient labels for a minimum of 24 hours after serving the product.
- 5. Prevent cross-contact during food preparation.
  - Wash hands before preparing food.
  - Wear single-use gloves.
  - Use a clean apron when preparing allergen-free food.
  - Wash, rinse, and sanitize all cookware before and after each use.
  - Wash, rinse, and sanitize food contact surfaces.
  - Designate an allergy-free zone in the kitchen. When working with multiple food allergies, set up procedures to prevent cross-contact within the allergy-free zone.
  - Prepare food items that do not contain allergens first. Label and store the allergen-free items separately.
  - Use a clean, sanitized cutting board when preparing food.
  - Use clean potholders and oven mitts for allergen-free foods to prevent cross-contact.
- 6. Prevent cross-contact during meal service.
  - Set aside food for students with food allergies from self-service food areas, such as salad bars, before the food is set out.
  - Use dedicated serving utensils and gloves for allergen-free foods.
  - Label items on the serving line correctly and clearly, so that items containing food allergens are easily recognizable.
  - Ensure that tables and chairs are cleaned and sanitized before and after each meal and when needed.
- 7. Follow your school's procedures for identifying students with food allergies.

# Serving Safe Food to Students With Food Allergies, continued

(Sample SOP)

### MONITORING:

A child nutrition employee continually monitors receiving, preparation, and serving areas to assess whether food allergy procedures are being followed.

### **CORRECTIVE ACTION:**

- 1. Retrain any child nutrition employee found not following the procedures in this SOP.
- 2. Refrain from serving any food to a student with a food allergy if there is any question as to whether or not an allergen might be present in that particular food.
- 3. Activate the emergency action plan immediately if a student with the potential for anaphylaxis consumes a food allergen.

### VERIFICATION AND RECORD KEEPING:

The child nutrition manager will observe child nutrition staff to ensure they are following these procedures and taking all necessary corrective actions. Keep a list of corrective actions taken.

DATE IMPLEMENTED: \_\_\_\_\_\_BY: \_\_\_\_\_BY: \_\_\_\_BY: \_\_\_\_\_BY: \_\_\_\_BY: \_\_\_\_\_BY: \_\_\_\_BY: \_\_\_\_\_BY: \_\_\_\_BY: \_\_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY: \_\_\_BY

DATE REVIEWED: \_\_\_\_\_\_ BY: \_\_\_\_\_

DATE REVISED: \_\_\_\_\_\_ BY: \_\_\_\_\_

Adapted from: Institute of Child Nutrition. (2016). *Serving safe food to students with food allergies*. University, MS: Author.

### Handling a Food Recall

(Sample SOP)

**PURPOSE:** To prevent foodborne illness in the event of a product recall.

**SCOPE:** This procedure applies to school nutrition employees who prepare or serve food.

KEY WORDS: Food Recalls

### **INSTRUCTIONS:**

- 1. Train school nutrition employees on using the procedures in this SOP.
- 2. Follow State or local health department requirements.
- 3. Review the food recall notice and specific instructions identified in the notice.
- 4. Communicate the food recall notice to feeding sites.
- 5. Hold the recalled product using the following steps:
  - Physically separate the product, including any open containers, leftover product, and food items in current production that contain the recalled product.
  - If an item is suspected of containing the recalled product, but label information is unavailable, follow the district's procedure for disposal.
- 6. Mark recalled products "Do Not Use" and "Do Not Discard." Inform the entire staff not to use the product.
- 7. Do not destroy any USDA Foods without official written notification from the State Distributing Agency, USDA Food Safety Inspection Services (FSIS), or State or local health department.
- 8. Inform the school district's public relations coordinator of the recalled product.
- Identify and record whether any of the product was received in the district, locate the food recall product by feeding site, and verify that the food items bear the product identification code(s) and production date(s) listed in the recall notice.
- 10. Obtain accurate inventory counts of the recalled products from every feeding site, including the amount in inventory and the amount used.
- 11. Account for all recalled products by verifying inventory counts against records of food received at the feeding site.

### **MONITORING:**

School nutrition employees and the school nutrition manager will visually observe that school sites have segregated and secured all recalled products.

### Handling a Food Recall, continued

(Sample SOP)

### **CORRECTIVE ACTION:**

- 1. Retrain any school nutrition employee found not following the procedures in this SOP.
- 2. Determine if the recalled product is to be returned and to whom, or destroyed and by whom.
- 3. Notify feeding site staff of procedures, dates, and other specific directions to be followed for collecting or destroying the recalled product.
- 4. Consolidate the recalled product as quickly as possible, but no later than 30 days after the recall notification.
- 5. Conform to the recall notice using the following steps:
  - a. Report quantity and site where the product is located to the manufacturer, distributor, or State agency for collection. The quantity and location of the affected USDA Foods must be submitted to the State Distributing Agency within 10 calendar days of the recall.
  - b. Obtain the necessary documents from the State Distributing Agency for USDA Foods. Submit necessary documentation for reimbursement of food costs.
  - c. Complete and maintain all required documentation related to the recall, including:
    - Recall notice
    - · Records of how food product was returned or destroyed
    - Reimbursable costs
    - Public notice and media communications
    - · Correspondence to and from the public health department and State agency

### VERIFICATION AND RECORD KEEPING

School nutrition employees will record the name of the contaminated food, date, time, and the reason why the food was discarded on the Damaged or Discarded Product Log. The school nutrition manager will verify that appropriate corrective actions are being taken by reviewing, initialing, and dating the Damaged or Discarded Product Log each day. Maintain the Damaged or Discarded Product Logs for a minimum of 1 year.

DATE IMPLEMENTED:	BY:	
DATE REVIEWED:	BY:	

DATE REVISED: \_\_\_\_\_\_ BY: \_\_\_\_\_

Adapted from: Institute of Child Nutrition. (2016). *Responding to a food recall*. University, MS: Author.

### Tips for Recognizing Food Allergies in Bulk Items and USDA Foods

- Obtain the ingredient statement for the bulk product and identify known allergens; retain the labeling on bulk packages.
- Use your Standard Operating Procedure for how bulk products will be handled.
  - Determine the number of bulk lots mixed in one storage container.
  - Ensure that the food product added has the same ingredient statement.
  - Prevent cross-contact from utensils and scoops. (For example, do not use the flour scoop to scoop sugar.)
  - Clean the bulk storage container thoroughly to remove allergen residue before using the container for a different product.
- If there is any doubt about the bulk product ingredients, contact the manufacturer.
- Always read USDA Foods product labels for allergens; product brands may change throughout the school year. Do not rely on USDA Foods Fact Sheets.
- Build time in the work schedule to read food labels.

### Source:

Institute of Child Nutrition. (2017). Food safety fact sheets: Cleaning and sanitizing food contact surfaces. www.theicn.org/foodsafety

### **Reading Food Labels**

**Instructions:** Answer the questions for your school's food allergy management plan. If you do not know the answer, check "Research" to remind yourself to find out the answer when you get back to your school.

Questions	Answers	Research	
Procedures for Reading Food Labels			
Who reads labels for food allergens?			
If that person is out, who takes on that responsibility?			
Could substitutes read the labels?			
How often do you read labels for allergens?			
Storing Food L	abels		
Do you keep food labels?			
How long?			
What do you do if you cannot find the food label?			
How do you find ingredient information for food items where the labels are printed on the case, which is thrown away after stocking the shelves?			
Where are food labels stored?			
Procedures for Changes	in Food Labels		
What would you do if a substitute product contains a food allergen, the product recipe has changed to contain an allergen, or the product now has an advisory statement?			
What is your chain of command for communicating that a food label now contains a food allergen?			
Who do you tell if you realize that you made a mistake reading a food label and it actually does contain a food allergen?			
Communicating Food Allergy Information			
How does your school district share food allergy information about menu items?			
How do you communicate with a parent or guardian requesting additional food allergy information?			
How do you communicate with other school employees, such as the school nurse, principal, or teacher, requesting additional food allergy information?			
If you cannot answer the question, who do you tell that person to contact?			

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### **Tips for Managing Food Labels**

### **Reading Food Labels**

- Check all labels carefully every time.
  - Read the label each time the product is received.
  - Suppliers may make product substitutions.
  - Formulas may change.
  - Vendors could change.
  - Read labels before preparing food.
- Build time into the schedule for this procedure.
- Do not rely on specifications, fact sheets, or the last shipment.

### **Storing Food Labels**

- The CDC's Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs recommends keeping all labels for 24 hours for all food products served.
  - This is a precaution, so the label is available if 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 of.
- Methods for maintaining the label:
  - Keep a label library.
  - Keep the actual label in a designated spot for service that day.
  - Scan or photograph the label.

### **Changes in Food Labels**

- Knowing the chain of command for communicating that a food product now contains a food allergen can prevent an allergic reaction.
- Every school district should have a food allergy management plan.
  - Clearly outline the chain of command.
  - Detail what actions employees should take if a food label is misread and contains a food allergen.
  - Contact your director.
  - Do not serve the food to the student with the allergy.
- Train employees on the plan.

### **Communicating Food Allergies**

- Methods for communicating:
  - Electronic records can help share information on the district's website.
  - Prepare handouts.
  - Provide training for your staff, parents, or guardians.
- If you communicate the school's food allergy management plan, families will understand what is being done to protect their children.
  - It is an important priority of the school nutrition department.
  - Precautions are being taken to keep students safe.
  - You have an emergency action plan if something unexpected occurs.

#### 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 and Education. (n.d.). *How to read food labels*. https://www.foodallergy.org/life-with-food-allergies/living-well-everyday/how-to-read-food-labels
- U.S. Department of Agriculture, Food and Nutrition Service. (2017, July 25). Accommodating children with disabilities in the school meal programs Guidance for school food service professionals. https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs

### Lesson 3: Avoiding Cross-Contact

### **Objectives:**

- 1. Define cross-contact.
- 2. Examine how cross-contact may occur in a school nutrition program.
- 3. Develop strategies for preventing cross-contact.

### **Cleaning and Sanitizing Fact Sheet**

### Introduction

Cleaning and sanitizing is a crucial prerequisite program for food safety in any school nutrition program. School nutrition employees who follow proper cleaning and sanitizing practices reduce the risk of cross-contamination, which can lead to foodborne illness, and cross-contact, which can contribute to an allergic reaction.

#### Here Are the Facts

Research conducted by the U.S. Food and Drug Administration shows that contaminated equipment is a risk factor for food safety in retail foodservice establishments, which include schools, hospitals, nursing homes, and restaurants. Cleaning and sanitizing is an area where many food service operations did not follow appropriate practices.

#### Application

## Clean and sanitize work surfaces, equipment, and other food contact surfaces using proper procedures.

- Follow State and local health department requirements.
- Follow the manufacturer's instructions regarding the use and cleaning of equipment.
- Follow the manufacturer's instructions regarding using chemicals for cleaning and sanitizing food contact surfaces.
- Refer to the Safety Data Sheet (SDS) provided by the manufacturer if you have questions about using specific chemicals.
- Wash, rinse, and sanitize food contact surfaces of sinks, tables, utensils, thermometers, carts, and equipment:
  - Before each use
  - Between uses when preparing different types of raw animal foods such as eggs, fish, meat, and poultry
  - Between uses when preparing ready-to-eat foods and raw animal foods such as eggs, fish, meat, and poultry
  - Any time contamination occurs or is suspected
  - After food with a food allergen has been prepared and before preparing an allergen-free food
- Wash, rinse, and sanitize food contact surfaces using the following procedures:
  - Wash the surface with a detergent solution to clean it.
  - Rinse the surface with clean water to remove debris and detergent.
  - Sanitize the surface using a sanitizing solution mixed at the concentration specified on the manufacturer's label.
  - Allow items to air-dry.

### Take corrective action to make sure that cleaning and sanitizing are properly done.

- Wash, rinse, and sanitize dirty food contact surfaces.
- Sanitize food contact surfaces if it cannot be determined if they have been sanitized properly.
- Discard food that comes into contact with food contact surfaces that have not been cleaned and sanitized correctly.

### Remember, follow State or local health department requirements.

#### Source:

Institute of Child Nutrition. (2017). Food safety fact sheets: Cleaning and sanitizing food contact surfaces. www.theicn.org/foodsafety

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### **Methods for Avoiding Cross-Contact**

**Cross-contact** occurs when an allergen is accidentally transferred from a food containing an allergen to a food or surface that does not have the allergen.

### **Example of Cross-Contact**

Using a knife to spread peanut butter for peanut butter and jelly sandwiches, and then using the same knife to cut a turkey sandwich without cleaning and sanitizing between uses

### **Potential Sources of Cross-Contact**

- The food mixes during handling and preparation.
- Insufficient handwashing allows allergens to remain on hands.
- Insufficient cleaning allows allergens to remain on food contact surfaces such as food preparation tables.
- Shared equipment, utensils, cutting boards, and counters are not properly cleaned between uses.
- · Cooking food splatters into an allergen-free food.
- Steam from cooking foods like shellfish and fish gets into an allergen-free food.
- Utensils on salad bars, buffets, and serving stations are used for multiple foods.

### How to Avoid Cross-Contact

Storage

• Have shelves in the dry storage, refrigerator, and freezer that are only for allergen-free foods. A 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

- Follow SOPs for handwashing, cleaning, and sanitizing.
- Wash hands before preparing allergy-free foods.
- Wear single-use gloves.
- Use a clean apron, potholders, and oven mitts when preparing allergy-free foods to prevent cross-contact.
- Wash, rinse, and sanitize all utensils, equipment, and food contact surfaces before and after each use.
- Use color-coded or designated utensils, equipment, etc., that are for specific allergen-free foods if possible.
- Prepare food items that do not contain allergens first.
- Cover, label, and store the allergy-free items separately. Sticker or color-code-wrapped food to make all staff aware that the food is allergen-free.
- 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

- Encourage students to wash their hands before and after each meal.
- Designate an allergen-free cafeteria table. Ensure the seats and countertop are washed, rinsed, and sanitized between lunch services. Also, students with food allergies cannot be forced to eat at this table.
- Take extra care with serving utensils and serving containers to prevent cross-contact. Replace any utensils and food suspected of cross-contact on a self-serve or serving line.

### **Examples for Avoiding Cross-Contact**

Problem	Solution
A knife used to spread peanut butter may also be dipped in the jelly jar, tainting the jelly with peanut protein.	<ul> <li>Keep a separate jelly jar for the student with allergies. Use a clean spoon to put jelly on the bread.</li> <li>Put jelly on first using a separate spoon.</li> </ul>
You prepare an allergen (e.g., chopping walnuts on a cutting board) and then another food (e.g., slicing tomatoes) without proper cleaning.	<ul> <li>Make allergen-free food first—wash, rinse, sanitize, and air-dry the foodservice equipment, including the cooking area.</li> <li>Use color-coded cutting boards designated for specific food items.</li> </ul>
Ingredients from an allergenic food may splatter, splash, or spill into the allergy-free food when making a catering platter.	Prepare the allergen-free foods first; cover and remove them from the preparation area before preparing other foods.
You know that a student has a severe peanut allergy. You observe that another student in the dining room has a hand full of peanuts and is laughing with friends and pointing at the boy with the allergy.	Go to the student with the peanut allergy and escort him from the dining room. Make sure you know where his epinephrine auto- injector is located. Tell the principal about the situation, and sit in on the meeting with the students.
Allergy-free foods may come in contact with an allergen in storage, such as the refrigerator or dry storage.	Designate a separate shelf in the refrigerator and dry storage area for allergen-free foods. This shelf should be above the shelf that may store foods with potential allergens. Consider using stickers to identify "safe" foods. Discard anything suspected of cross-contact, or do not use it for a student with allergies.
Kitchens may slice various meats and cheeses on shared equipment. Meats could contain allergenic ingredients such as milk, soy, wheat, or nuts.	<ul> <li>Make sure staff are following Standard Operating Procedures to clean equipment.</li> <li>Slice allergen-free food first.</li> </ul>
Cafeteria lines and buffets may have a greater risk of cross-contact due to shared utensils and spills.	Have the school nutrition manager keep the allergen-free food separate to prevent cross-contact.

### Sources:

Food Allergy Research & Education. (2020). *Prevent cross-contact*. https://www.foodallergy.org/ resources/cross-contact-poster-set-eng

- Institute of Child Nutrition. (2017). *Serving safe food to students with food allergies (Sample SOP*). www.theicn.org/foodsafety
- Institute of Child Nutrition. (2022). *Family child care food allergy fact sheet Avoiding crosscontact.* www.theicn.org/foodsafety

### **Preventing Cross-Contact Plan**

**Instructions:** For your school kitchen, write situations where cross-contact can occur during the flow of food process. Then, write what procedures your district uses to prevent that situation of cross-contact. If you have any questions you need to research, write at the bottom.

	Cross-Contact Occurs	Procedure for Avoiding It
Receive		
Store		
Prepare		
Cook		
Hold		
Serve		
Store		

Research:

### **Best Practice for Cross-Contact Scenarios**

**Instructions:** Read the scenario assigned by the trainer. From the scenario, identify the hazard, discuss how your school addresses this hazard, and create a best practice to share with the class for preventing this hazard.

Scenario name (receiving, storing, etc):

What are the hazard(s) in this scenario (physical, chemical, bacteria, radiological)?

How does your school nutrition program address this hazard?

What are some best practices for preventing this situation of cross-contact?

### Lesson 4: Accommodating Students With Food Allergies

### **Objectives:**

- 1. Describe methods for accommodating and supporting students with food allergies.
- 2. Determine strategies to manage food prepared and served outside of the cafeteria.

### Laws Related to Disabilities and Privacy

Federal Laws		
Law	How It Relates to School Nutrition	
Rehabilitation Act of 1973	Prohibits discrimination against qualified persons with disabilities in programs or activities of any agency of the Federal government's executive branch or any organization receiving Federal financial assistance: • National School Lunch Program • School Breakfast Program • Fresh Fruit & Vegetable Program • Afterschool Snack Program	
Individuals with Disabilities Education Act (IDEA)1975, Part B 2006	Requires a free and appropriate public education be provided for students with disabilities ages 3–21 IEP Plan derived from this law	
Americans with Disabilities Act (ADA) 1990 and 2008 Amendments	<ul> <li>Broadens and extends civil rights protection for approximately 50 million Americans with disabilities</li> <li>All food allergies and intolerances have the potential to be considered disabilities</li> <li>Major life activities examples include (but are not limited to) caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working</li> <li>Major bodily function examples include (but are not limited to) functions of the immune system; normal cell growth; and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions</li> </ul>	
The Health Insurance Portability & Accountability Act (HIPAA) 1996	Requires all medical records disclosed to be kept confidential Gives patients the right to control how health information is used	
Family Educational Rights and Privacy Act (FERPA) 1974	Protects the privacy of health information entered into a student's record	

### Source:

USDA. (2017). Accommodating children with disabilities in the school meal programs – Guidance for school food service professionals. https://www.fns.usda.gov/2017-editionaccommodating-children-disabilities-school-meal-programs

### **Roles of School Nutrition Staff in Food Allergy Management**

Some of the ways you do your part for the food allergy team are to:

- Create an environment where students 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 with potential food allergens by following food safety SOP.
- Follow the food allergy management plan set by the school district.
- Ensure a safe school environment by reporting any discrimination or bullying.
- Have a system in place 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.

### Source:

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/

### **Reduce the Risk Possible**

**Instructions:** For your assigned scenario, work in a group to determine how to safely provide food from an outside source to a student with known life-threatening food allergies. Record the actions you would take to provide for the student on the chart paper. Select a spokesperson from your group to share how you would provide for the student.

Group	Scenario	Actions to Provide
A	Xander has a wheat allergy. His eighth-grade class does Breakfast in the Classroom. Pre-made omelets with cheese sauce are on the menu. The cheese sauce contains wheat.	
В	Ashlee is going on a field trip with her fourth-grade class. The students will get lunch from a local fast-food restaurant that serves fried fish. Ashlee is allergic to fish.	
C	Chris, age 7, is allergic to wheat and soy. You are serving food from a local Mexican restaurant to celebrate Cinco de Mayo.	
D	Jasmine has a history of anaphylaxis in response to milk. Jasmine goes to the afterschool program, where snacks are prepared by the cafeteria staff and served by the program staff. Snacks from donations are served, too.	
E	Rachel, age 12, tells the cafeteria monitor, "My throat is sore." The teacher notices that Rachel is flushed and developing hives. Rachel has no history of a food allergy. The school nurse is at another school today.	

### **Food Allergy Resources**

### <u>Manuals</u>

- 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. (2020). *Your food allergy field guide*. https://www.foodallergy. org/resources/field-guide-english
- U.S. Department of Agriculture, Food and Nutrition Service. (2017, July 25). Accommodating children with disabilities in the school meal programs Guidance for school food service professionals. https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs

### Website Resources

#### **Centers for Disease Control and Prevention**

http://www.cdc.gov/healthyyouth/foodallergies/

### Food Allergy Research and Education (FARE)

http://www.foodallergy.org/

#### Institute of Child Nutrition

- Food Allergy Resources, including fact sheets and micro-trainings: www.theicn.org/foodsafety
- Food Allergies for School Nutrition online courses: www.theicn.org/elearning
- Food Safety Standard Operating Procedures: www.theicn.org/foodsafety

### United States Department of Agriculture, Food and Nutrition Service

https://www.fns.usda.gov/ofs/food-safety

### Appendix

### **Hide and Seek Label Reading Answers**

**Instructions:** Read the assigned label ingredient statement on the wall and the **FARE Tips for Avoiding Your Allergen** handout. With your group, answer the activity questions for that label. Discuss the answers and your observations on label reading within your group. We will also discuss the answers as a class.

QUESTIONS FOR LABEL A	Answers
Which allergens are listed in Label A?	Milk
Does the product label meet the allergen requirements of the labeling law?	Yes

#### Label A

INGREDIENTS: CULTURED PASTEURIZED SKIM MILK, MILK, WHEY PROTEIN CONCENTRATE, SALT, WHEY, NATURAL FLAVOR, XANTHAN GUM, LOCUST BEAN GUM, GUAR GUM, VITAMIN A PALMITATE, SORBIC ACID AND CARBON DIOXIDE (TO MAINTAIN FRESHNESS). CONTAINS: MILK

QUESTIONS FOR LABEL B	Answers
Which ingredients in the statement cause the manufacturer to label the product: CONTAINS MILK?	Buttermilk*
Can a student known to have a wheat allergy have this product?	
*Calcium stearoyl lactylate does not contain milk protein and is safe for those with milk allergies to consume. This shows the importance of looking up unknown ingredients.	

### Label B

INGREDIENTS: SALT, MONOSODIUM GLUTAMATE, MALTODEXTRIN, GARLIC, ONION, PARSLEY, SPICE, CARRAGEENAN, CALCIUM STEAROYL LACTYLATE, PARTIALLY HYDROGENATED CANOLA OIL, BUTTERMILK PRODUCT, TURMERIC (COLOR). CONTAINS: MILK

QUESTIONS FOR LABEL C	Answers
Would you prepare and serve this product to a student with an egg allergy?	No, there is a risk of cross-contact with eggs.
Does this statement meet the requirements of the labeling law for wheat?	No, durum and semolina are types of wheat, but the label only says flour. The wheat allergen should be declared in a "Contains" statement, in parenthesis, or by the usual name.

### Label C

Ingredients: Durum flour & semolina blend, fiber, niacin, iron (ferrous sulfate), thiamin mononitrate, riboflavin, folic acid. Allergy Information: has flour ingredients and is manufactured in a facility that uses eggs.

### **Hide and Seek Label Reading Answers**

QUESTIONS FOR LABEL D	Answers
Can this product be served to a student with a known peanut allergy?	Yes, it is stated that it is made in a peanut and tree nut-free facility.
Can this product be served to a student with known egg, wheat, and soy allergies?	No, there is a risk of cross-contact with soy.

#### Label D

Ingredients: Sunflower Seed, Sugar, Mono-Diglycerides to prevent separation, Salt, and Natural Mixed Tocopherols to preserve freshness. Made on equipment that processes soybeans. Processed in a peanut and tree nut free facility.

QUESTIONS FOR LABEL E	Answers
How many of the nine (9)	5: soy, milk, fish,
major allergens are in this	sesame, wheat
product? List the allergens.	
Can this product be served	Yes
to a student with shellfish	
allergies?	

#### Label E

INGREDIENTS: WATER, DISTILLED VINEGAR, VEGETABLE OIL (SOYBEAN AND/OR CANOLA), CIDER VINEGAR, ROMANO CHEESE (CULTURED MILK, SALT, ENZYMES), SUGAR, GARLIC\*, SESAME SEEDS, EXTRA VIRGIN OLIVE OIL, CONTAINS LESS THAN 2% OF: OMEGA 3 [FISH OIL AND FISH GELATIN (CONTAINS TILAPIA, SARDINE, AND ANCHOVY)], ANCHOVY (FISH), LEMON JUICE CONCENTRATE, SPICE, SALT, FERMENTED WHEAT PROTEIN, YEAST EXTRACT, MALTODEXTRIN, XANTHAN GUM, PROPYLENE GLYCOL ALGINATE, POTASSIUM SORBATE, SODIUM BENZOATE AND CALCIUM DISODIUM EDTA AS PRESERVATIVES. \*DRIED.

QUESTIONS FOR LABEL F	Answers
Which allergen is listed in the ingredient statement but not in the "Contains" statement?	Tofu, which is soy
Would the missing information in the "Contains" statement be enough for the product to be recalled?	Yes, it is one of the major nine and is required to be declared.

Label F				
BEEF, WATER, TEXTURED TOFU,				
EGGS, DEHYDRATED ONION,				
GARLIC, SPICES, BREAD CRUMBS,				
WHEY				
CONTAINS: EGGS, MILK, AND				
WHEAT				

### **Avoiding Cross-Contact Scenarios Potential Answers**

### Receiving

- Scenario: When receiving dry goods, you notice flour all over the back of the truck. The driver explained that a bag had broken open. The flour is on everything, including the canned goods you just received.
- Hazard: Possibility of flour getting into foods in the truck.
- Best Practice:
  - Option 1: Have a procedure in place to refuse unsafe deliveries.
  - Option 2: Thoroughly wash cans with soap and water before using.

### Storing

- Scenario: The designated allergen-free food shelf has an allergen-containing food on it.
- Hazard: Chance of allergen getting into allergen-free food.
- Best practice: Check to ensure that the allergen-free items are in secure packaging. Discard any allergen-free foods that may have come in contact with the allergen.

### Preparing

- Scenario: The cans of fruit cocktail pulled for lunch are covered in flour.
- Hazard: Flour can get into the fruit cocktail when the can is opened.
- Best practice: Thoroughly wash cans with soap and water before using.

### Cooking

- Scenario: The pan used to bake fish sticks is used for baking skinless chicken breasts without cleaning in between.
- Hazard: Fish proteins may still be present on the pan and cross-contact with chicken.
- Best practice: Mark the chicken breasts in accordance with your school food allergy management plan that they are not safe to serve to students with fish allergies.

### Serving

- Scenario: While serving food on the line, you realize you have used the fish stick tongs to serve French fries.
- Hazard: Fish protein may be present on the tongs. The French fries may now have fish proteins in them.
- Best practice: Replace both tongs with washed, rinsed, and sanitized tongs. Replace French fries with a fresh batch.

### Holding

- Scenario: The remaining burgers are moved to the same pan to place in the hot-holding cabinet between lunches. Burgers containing soy are placed on one side of the pan, and soy-free burgers are on the other.
- Hazard: Cross-contact may have occurred between soy burgers and beef burgers.
- Best practice: Mark the burgers in accordance with your school food allergy management plan that they are not safe to serve to students with soy allergies.

### **Reduce the Risk Possible Answers**

**Instructions:** For your assigned scenario, work in a group to determine how to safely provide food from an outside source to a student with known life-threatening food allergies. Record the actions you would take to provide for the student on the chart paper. Select a spokesperson from your group to share how you would provide for the student.

Group	Scenario	Actions to Provide
A	Xander has a wheat allergy. His eighth-grade class does Breakfast in the Classroom. Pre-made omelets with cheese sauce are on the menu. The cheese sauce contains wheat.	Determine an appropriate substitute for Xander that does not contain wheat. Prepare the substitute so that cross-contact does not occur. Wrap, label, and separate Xander's food to prevent cross-contact.
В	Ashlee is going on a field trip with her fourth-grade class. The students will get lunch from a local fast-food restaurant that serves fried fish. Ashlee is allergic to fish.	Coordinate with the school staff to provide an appropriate substitution, such as a meal from the school nutrition program. Alternatively, review the fast food menu to identify the items that should be avoided.
С	Chris, age 7, is allergic to wheat and soy. You are serving food from a local Mexican restaurant to celebrate Cinco de Mayo.	Obtain a copy of the restaurant's menu and speak to the restaurant manager about what allergens are in the foods. Make some wheat and soy-free menu options. Assist the student in selecting wheat and soy-free menu choices. Have servers serve the food to prevent cross- contact from utensils, or if the risk is too great, make a plate for the student when the food arrives; keep food separate and in a warmer.
D	Jasmine has a history of anaphylaxis in response to milk. Jasmine goes to the afterschool program, where snacks are prepared by the cafeteria staff and served by the program staff. Snacks from donations are served, too.	Train afterschool staff to manage food allergies. Ensure donations come with ingredient statements to look for allergens. Train the students in the afterschool program on the importance of no food sharing. Be sure Jasmine's auto-injector is available during the afterschool program. Have SOP for managing food allergies for the afterschool program.
E	Rachel, age 12, tells the cafeteria monitor, "My throat is sore." The teacher notices that Rachel is flushed and developing hives. Rachel has no history of a food allergy. The school nurse is at another school today.	Follow the emergency food allergy action plan. Immediately call 911 for emergency medical services to come to the school; tell them an allergic reaction is suspected and to bring epinephrine. Notify parents or guardians. Notify the school nurse or district nurse of the situation.
## References

- American Academy of Asthma, Allergy, and Immunology. (n.d.). *Food intolerance defined*. https://www.aaaai.org/Tools-for-the-Public/Allergy,-Asthma-Immunology-Glossary/Food-Intolerance-Defined
- American Academy of Allergy Asthma and Immunology. (2020, August 12). *Anaphylaxis*. https://www.aaaai.org/conditions-and-treatments/library/allergy-library/anaphylaxis
- Boyce, J.A., Assa'ad, A., Burks, A.W., et al. (2010, December). Guidelines for the Diagnosis and Management of Food Allergy in the United States: Report of the NIAID-Sponsored Expert Panel. *Journal of Allergy and Clinical Immunology*. 126(6), S1-S58. https://doi. org/10.1016/j.jaci.2010.10.007
- Celiac Disease Foundation. (n.d.). What is celiac disease? https://celiac.org/about-celiac-disease/what-is-celiac-disease/
- 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 & Anaphylaxis Connection Team. (n.d.). *How to prevent cross-contact and accidental environmental exposure*. https://www.foodallergyawareness.org/food-allergy-and-anaphylaxis/cross-contact/cross-contact/
- Food Allergy Research & Education. (n.d.). *Anaphylaxis*. https://www.foodallergy.org/resources/ anaphylaxis
- Food Allergy Research & Education. (n.d.). *Cleaning methods*. https://www.foodallergy.org/ resources/cleaning-methods
- Food Allergy Research and Education. (n.d.). *Facts and statistics*. https://www.foodallergy.org/ resources/facts-and-statistics
- Food Allergy Research and Education. (n.d.). *Food allergy 101*. https://www.foodallergy.org/ living-food-allergies/food-allergy-essentials/food-allergy-101
- Food Allergy Research & Education. (n.d.). *Food allergy diagnosis and testing*. https://www. foodallergy.org/research-innovation/accelerating-innovation/food-allergy-diagnosis
- Food Allergy Research and 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
- Food Allergy Research & Education. (n.d.). *Other food allergens*. https://www.foodallergy.org/ living-food-allergies/food-allergy-essentials/common-allergens/other-food-allergens
- Food Allergy Research and Education. (n.d.). *Recognizing and treating reaction symptoms*. https://www.foodallergy.org/resources/recognizing-and-treating-reaction-symptoms

- Food Allergy Research and Education. (2017). *Recognizing and responding to a reaction*. https://www.foodallergy.org/resources/recognizing-and-responding-reaction
- Food Allergy Research and Education. (2019). *Food allergy facts and statistics for the U.S.* https://www.foodallergy.org/resources/food-allergy-facts-and-statistics-us
- Food Allergy Research and Education. (2019). *How a child might describe a reaction*. https:// www.foodallergy.org/resources/how-child-might-describe-reaction
- Food Allergy Research and 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. (2020). *Prevent cross-contact*. https://www.foodallergy.org/ resources/cross-contact-poster-set-eng
- Food Allergy Research and Education. (2020, November). *Tips for avoiding your allergen*. https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/common-allergens/tips-avoiding-your-allergen
- Food Allergy Research & Education. (2020). *Your guide to food allergy*. https://www.foodallergy. org/resources/field-guide-english
- Food Safety Magazine. (2020, March 17). *A look back at 2019 food recalls*. https://www.food-safety.com/articles/6487-a-look-back-at-2019-food-recalls
- Gupta, R.S., Warren, C.M., Smith, B.M., et al. (2019, January 4). Prevalence and Severity of Food Allergies Among US Adults. *JAMA Network Open*. 2(1), e185630. doi:10.1001/ jamanetworkopen.2018.5630
- Institute of Child Nutrition. (2016). *Cleaning and sanitizing food contact surface* [sample SOP]. https://www.theicn.org/foodsafety
- Institute of Child Nutrition. (2017). Food safety fact sheets: Cleaning and sanitizing food contact surfaces. https://www.theicn.org/foodsafety
- Institute of Child Nutrition. (2017). *Serving safe food to students with food allergies*. https://www.theicn.org/foodsafety
- Institute of Child Nutrition. (2019, October 22). *Food allergies for school nutrition managers and staff*. https://www.theicn.org/foodsafety
- Institute of Child Nutrition. (2019). Food allergies in school nutrition programs General food allergies [online course]. https://theicn.org/elearning
- Institute of Child Nutrition. (2020). Food allergies in school nutrition programs Accommodating food allergies in school nutrition programs [online course]. https://theicn.org/elearning
- Institute of Child Nutrition. (2020). Food allergies in school nutrition programs Avoiding crosscontact [online course]. https://www.theicn.org/elearning

- Institute of Child Nutrition. (2020). Food allergies in school nutrition programs Reading food labels [online course]. https://www.theicn.org/elearning
- Kristen D. Jackson, LaJeana D. Howie, and Lara J. Akinbami. (2013, May). *Trends in allergic conditions among children: United States, 1997–2011*. http://www.cdc.gov/nchs/data/databriefs/db121.pdf
- Mayo Clinic. (2019, November 2). *Food allergy*. https://www.mayoclinic.org/diseasesconditions/food-allergy/symptoms-causes/syc-20355095
- Mayo Clinic. (2022, April 21). Food allergy vs. food intolerance: What's the difference? https:// www.mayoclinic.org/diseases-conditions/food-allergy/expert-answers/food-allergy/faq-20058538
- Michelsen-Huisman, A.D., van Os-Medendorp, H., Blom, W.M., et al. (2018, July 13). Accidental allergic reactions in food allergy: Causes related to products and patient's management. *Allergy* (Copenhagen). 73(12), 2377-2381. https://doi.org/10.1111/ all.13560
- National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Food and Nutrition Board; Committee on Food Allergies: Global Burden, Causes, Treatment, Prevention, and Public Policy; Oria MP, Stallings VA, editors. (2016). Managing food allergies in retail, food service, schools, higher education, and travel settings. Finding a path to safety in food allergy: Assessment of the global burden, causes, prevention, management, and public policy. https://www.ncbi.nlm.nih.gov/ books/NBK435953/
- National Institute of Allergy and Infectious Diseases. (2022, September 14). *Food allergy*. https://www.niaid.nih.gov/diseases-conditions/food-allergy
- Perry, T.T., Conover-Walker, M.K., Pomés, A., Chapman, M.D., & Wood RA. (2004, May 1). Distribution of peanut allergen in the environment. *Journal of Allergy and Clinical Immunology*. 113 (5). 976-976. https://doi.org/10.1016/j.jaci.2004.02.035
- Sauer, K. & Center of Excellence for Food Safety Research in Child Nutrition Programs (Producers). (2017). *Caitlin Remembered* [video file]. http://cnsafefood.k-state.edu/ resources/videos.html
- Sicherer S.H., Furlong T.J., DeSimone J., and Sampson H.A. (2001, April). The US peanut and tree nut allergy registry: Characteristics of reactions in schools and day care. *Journal of Pediatrics*. 138(4), 560-565. https://doi.org/10.1067/mpd.2001.111821
- Sicherer, S.H., & Sampson, H.A. (2018, January). Food allergy: A review and update on epidemiology, pathogenesis, diagnosis, prevention, and management. *Journal of Allergy and Clinical Immunology.* 141(1), 41-58. https://doi.org/10.1016/j. jaci.2017.11.003
- Tang, M.L.K., & Mullins, R.J. (2017, March 5). Food allergy: is prevalence increasing?: *Internal Medicine Journal*. 47(3):256-261. https://doi.org/10.1111/imj.13362

- U.S. Department of Agriculture, Food and Nutrition Service. (2017, July 25). Accommodating children with disabilities in the school meal programs Guidance for school food service professionals. https://www.fns.usda.gov/2017-edition-accommodating-children-disabilities-school-meal-programs
- U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Allergy and Infectious Diseases. (2011, May). *Guidelines for the diagnosis and management of food allergy in the United States: Summary for patients, families, and caregivers.* https://www.niaid.nih.gov/sites/default/files/faguidelinespatient.pdf
- U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Allergy and Infectious Diseases. (2018, October 24). *Guidelines for clinicians and patients for diagnosis and management of food allergy in the United States*. https://www.niaid.nih.gov/diseases-conditions/guidelines-clinicians-and-patients-food-allergy
- U.S. Department of Health and Human Services, National Institutes of Health. (2018, October 29). *Food allergy*. https://www.niaid.nih.gov/diseases-conditions/food-allergy
- U.S. Food and Drug Administration. (2009). FDA report on the occurrence of foodborne illness risk factors in selected institutional foodservice, restaurant, and retail food store facility types. http://www.foodprotect.org/issues/packets/2012Packet/attachments/I\_024\_b.pdf
- U.S. Food and Drug Administration. (2022, January 31). *FASTER Act video for food industry and other stakeholders*. https://www.fda.gov/food/cfsan-constituent-updates/faster-act-video-food-industry-and-other-stakeholders
- U.S. Food and Drug Administration. (2022, February 17). *Food allergies*. https://www.fda.gov/ food/food-labeling-nutrition/food-allergies
- U.S. Food and Drug Administration. (2022, December 28). 2022 Food code. https://www.fda.gov/ food/fda-food-code/food-code-2022
- U.S. Food and Drug Administration. (2022, March 7). *Food allergen labeling and consumer* protection act of 2004 (FALCPA). https://www.fda.gov/Food/GuidanceRegulation/ GuidanceDocumentsRegulatoryInformation/Allergens/ucm106187.htm
- U.S. Food and Drug Administration. (2022, June 9). *FDA Food Safety Modernization Act (FSMA)*. https://www.fda.gov/food/guidanceregulation/fsma/
- U.S. Food and Drug Administration. (2022, June 23). *Food allergies: What you need to know.* https://www.fda.gov/food/buy-store-serve-safe-food/food-allergies-what-you-need-know
- U.S. Library of Congress. (2021, April 23). 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
- Venter, C. (2012, November 11). Food hypersensitivity: Diagnosing and managing food allergies and intolerances. *Journal of Allergy*. 576017. https://doi.org/10.1155/2012/576017



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