Food Safety Spotlight:
Food Safety Basics

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Key Area: 2 – Operations

Codes: 2600 Food Safety and HACCP

2024

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Suggested Reference Citation:

Institute of Child Nutrition. (2024). *Food safety spotlight: Food safety basics.* University, MS: Author.

11/18/2024

TABLE OF CONTENTS

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 Safety Basics contains mini-trainings for directors/managers to train their frontline staff. Each lesson is roughly 15 minutes. This resource is part of a continuous series of training resources designed to give directors/managers an easy-to-use lesson plan for training frontline staff in various food safety topics. *Food Safety Spotlight: Food Safety Basics* provides a method for training with many of the Institute of Child Nutrition's (ICN) food safety resources. Every lesson plan contains the following:

- Learning objective
- Statement explaining the importance of the topic
- List of materials
- Training instructions for the content
- Activities with questions for frontline staff
- Additional resources to strengthen or refresh the knowledge of the director/manager

The training content is written in Ask, DO, and SAY format.

- **ASK:** Questions to ask the frontline staff. Possible answers are provided in italics for each question
- **DO:** Explanation of activities, demonstrations, or questions to ask
- **SAY:** Content to read to frontline staff

Several of the ICN food safety resources are available in English and Spanish. If resources are available in both languages, the symbol (E/S) is next to the name.

All materials are on the ICN website (www.theicn.org).

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

- Food Safety Fact Sheet
- Food Safety for Summer Meals
- Food Safety Mini-Posters
- HACCP-based Standard Operating Procedures

STANDARD OPERATING PROCEDURES

Objective: Discuss how the understand and follow a Standard Operating Procedure (SOP).

Why it is important: Standard Operating Procedures offer employees a step-by-step how-to guide for maintaining a clean and sanitized foodservice area and preparing and serving food safely.

Materials (print/locate materials before training):

- *Hot and Cold Holding for Time and Temperature Control for Safe Foods (Sample SOP)* (For the activity, frontline staff can work in groups. Not everyone will need a copy of the SOP.)
- SOP from your school site that would be frequently used (i.e., handwashing, glove use, cleaning, and sanitizing)

Training Instructions:

SAY: In school nutrition, we have directions for operating our kitchen called Standard Operation Procedures or SOPs. They provide step-by-step information on how to safely do tasks such as washing your hands, correctly using a three-compartment sink, etc. Knowing where to find and how to read an SOP is vital for all frontline staff to store, prepare, and serve meals safely.

DO: Provide the *Hot and Cold Holding for Time and Temperature Control for Safety Foods (Sample SOP).* Review the SOP parts, discussing each section's purpose.

SAY: We are going to discuss each part of the SOP.

- **Purpose statement** indicates why the SOP is important and how it fits into the food safety program.
- **Scope** details people, activities, and equipment to which the SOP would pertain.
- **Keywords** provide an at-a-glance idea of the topics covered in the SOP.
- **Instructions** detail a step-by-step description of procedures to be followed.
- **Monitoring** ensures an operation follows SOPs and meets essential times and temperatures for food. Documenting times and temperatures is part of the monitoring process.
- **Corrective Actions** state pre-planned actions to take if SOP is not followed or if a time/ temperature is not met.
- **Record Keeping** documents monitoring and corrective actions taken. Records should be retained for one year (or longer if your State requires).

DO: Refer staff to the provided SOP and ask the provided questions.

ASK:

- What temperature does the *Hot and Cold Holding for Time and Temperature Control for Safety Foods (Sample SOP)* state to keep cold food at or below?
  - *41 ºF*
- What temperature does the SOP state to keep hot food at or above?
  - *135 ºF*
- How does the SOP say you monitor hot and cold foods to keep them out of the temperature danger zone?
  - *Use a calibrated thermometer to take and record food temperatures at regular intervals.*
- What recommended records would provide the temperature of hot food during production and service?
  - *Hot and cold holding log, production records*
- What corrective action is stated in the SOP if cold food records show the walk-in refrigerator to be at 50 °F?
  - *Check the refrigerator log for the last time the temperature was taken. Discard food that has been in the temperature danger zone for more than 4 hours.*

DO: Allow staff to ask questions.

SAY: Our SOPs are located (tell frontline staff the location of site SOPs).

DO: Show a copy of your site's SOPs**.**

SAY: SOPs can change if the site implements new foodservice processes, equipment, or other related tasks, so please refer to SOPs frequently.

Additional Resources:

- *Food Safety Fact Sheets:*
  - *Calibrating Thermometers* (E/S)
  - *Holding Cold Foods* (E/S)
  - *Holding Hot Foods* (E/S)
- Food Safety Standard Operating Procedures
- Standard Operating Procedures Resources
- *Writing, Updating, and Revising a HACCP-Based Food Safety Plan for Schools Workshop*

CALIBRATE THERMOMETER – ICE WATER METHOD

Objective: Demonstrate how to calibrate a bi-metallic stem (dial) thermometer.

Why it is important: An uncalibrated thermometer reads temperatures incorrectly. If a thermometer is reading higher than it should, the internal cooking temperature of a food may not be reached. Food not cooked to the correct internal cooking temperature could lead to a child becoming sick from bacteria not killed in the cooking process. For example, an uncalibrated thermometer reads 155 °F, but the actual temperature of the beef is 143 °F.

Materials (print/locate materials before training)**:**

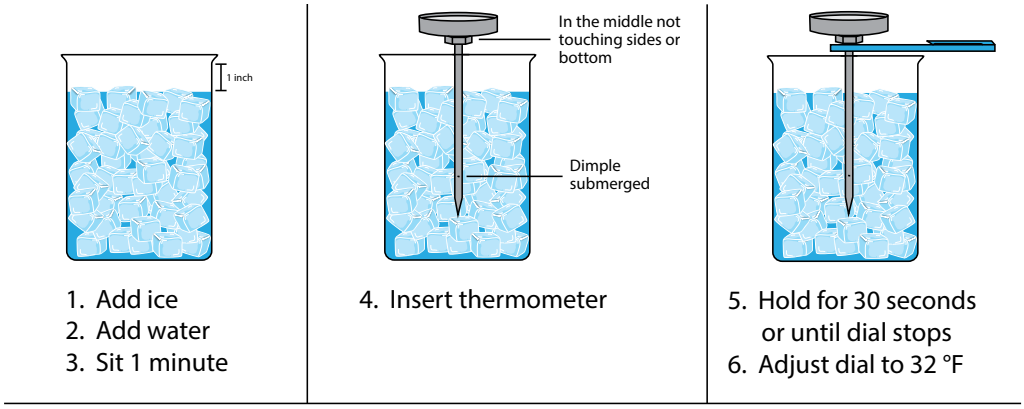
- Bi-metallic stem (dial) thermometers (enough for each staff member to practice with or share with a group)
- Large containers (one for each thermometer, thermometers should not be able to touch the bottom)
- Ice (enough to fill the container)
- Water (enough to fill the container)
- Thermometer calibration wrench

Training Instructions:

SAY: Calibrating thermometers in the school kitchen is essential to ensure that food is stored, cooked, held, reheated, and cooled to the correct temperatures. A thermometer that is out of calibration can show incorrect temperatures, meaning that food may not be adequately cooked or be in the temperature danger zone (41 ˚F – 135 ˚F, the temperature range where bacteria grow rapidly.)

If a thermometer is not calibrated, you may overcook or undercook food. Undercooked food may lead to a foodborne illness since you are not reaching the temperature needed to kill the bacteria in the food. Overcooked food would reduce the quality of the product. Calibrate thermometers ideally daily or at least once a week. If they are dropped, exposed to very high temperatures, or if accuracy is in question, recalibrate the thermometers before using them.

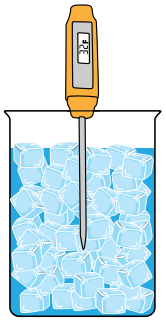
The Ice Water Method is a simple way to calibrate a bi-metallic stemmed thermometer. I will demonstrate how to do it first and then allow everyone (if time allows) a chance to practice.



1. Add ice
2. Add water
3. Sit 1 minute

4. Insert thermometer

5. Hold for 30 seconds or until dial stops
6. Adjust dial to 32 °F



For digital thermometers press the reset button if available

DO: Using the Ice Water Method, demonstrate calibrating a bi-metallic stem (dial) thermometer.

1. Fill a 1-quart measure container with ice.
2. Add water to within 1 inch of the top of the container.
3. Stir mixture well.
4. Let sit for one minute.
5. Place a thermometer in the container so that the sensing area of the stem or probe is completely submerged over the dimple.
6. Keep the thermometer from touching the sides or bottom of the container. Tip: Using a perforated lid helps hold thermometers in place. This method allows for temperature checks on multiple thermometers at once.
7. Let the thermometer stay in ice water for 30 seconds or until the dial stops moving.
8. Place the calibration tool on the hex adjusting nut and rotate until the dial reads 32 °F while in ice water.
9. Some digital stemmed thermometers (thermistors) and thermocouples have a reset button to push.
10. Repeat the process with each thermometer.

Allow staff to practice calibrating a bi-metallic stem (dial) thermometer.

ASK:

- What are the steps for calibrating a thermometer using the Ice Water Method?

  See steps 1-10 on previous page.
- How often should a thermometer be calibrated?
  - *At regular intervals (at least once per week, ideally daily)*
  - *If dropped*
  - *If used to measure extreme temperatures, such as in an oven*
  - *Whenever accuracy is in question*
- How do you reset a digital thermometer? Bi-metallic stem thermometer?
  - *Digital thermometer: may have a reset button or follow the manufacturer's instructions*
  - *Bi-metallic stem thermometer: use calibration wrench*

DO: Answer staff questions.

Additional Resources:

- *Food Safety Fact Sheet: Calibrating Thermometers* / *Ficha técnica sobre seguridad de los alimentos: Calibrando termometros*
- *Food Safety Fact Sheet: Using Food Thermometers* / *Ficha técnica sobre seguridad de los alimentos: Usando termometros para alimentos*
- *Using and Calibrating Thermometers (Sample SOP)*

TEMPERATURE DANGER ZONE

Objective: Describe the importance of the temperature danger zone.

Why it is important: The temperature danger zone (41 ˚F – 135 ˚F) is the temperature range where bacteria grow rapidly. Bacteria can double in number in as little as 20 minutes. At this rate, harmful bacteria that cause foodborne illness can quickly grow in food.

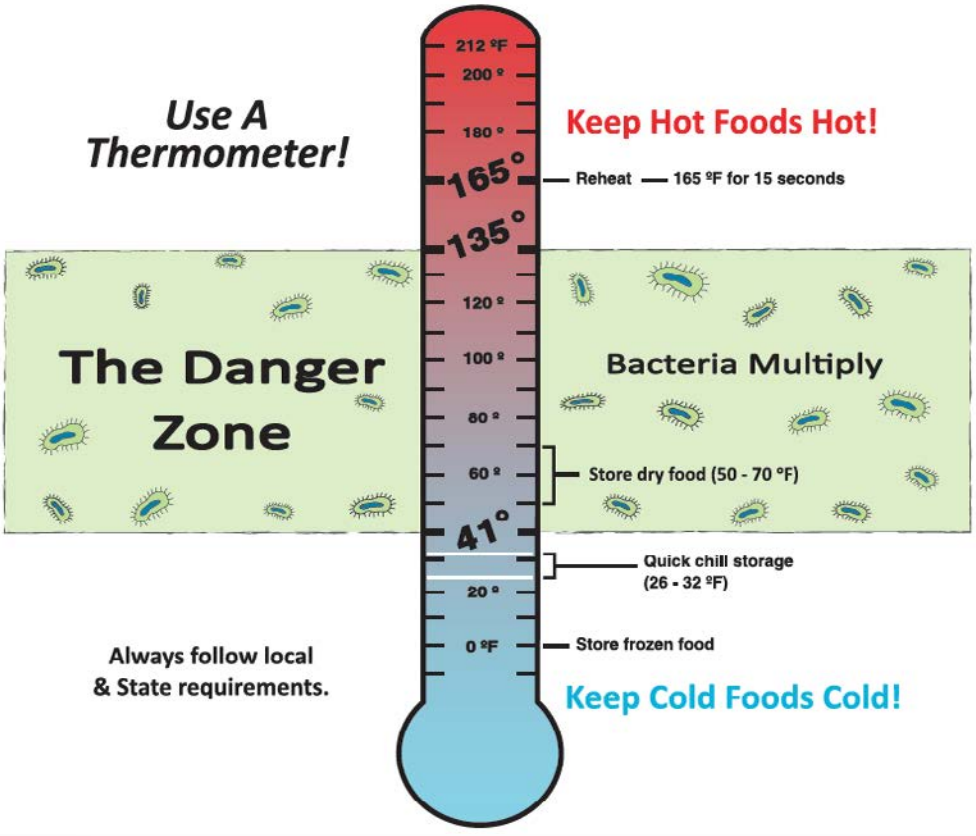
Materials (print/locate materials before training):

- *Temperature Danger Zone Fact Sheet* / *Zona de peligro*
- *Temperature Mini-Poster* / *Poster en miniatura de temperature*
- Food production log or standardized recipe from the kitchen

Training Instructions:

SAY: Keeping foods out of the temperature danger zone is a priority in foodservice operations, including school nutrition. The temperature danger zone is the temperature range where bacteria grow rapidly (41 °F – 135 °F.) Bacteria can double in number in as little as 20 minutes. At this rate, harmful bacteria can multiply in food to a level that can cause foodborne illness. Keeping hot food above 135 °F, cold food below 41 °F, and all perishable food out of the danger zone is critical.

DO: Provide staff with a copy of the *Temperature Danger Zone Fact Sheet*. Discuss some foods in your kitchen that must be kept hot and cold. Demonstrate where temperature information should be on the food production log or standardized recipe.



ASK:

- Were any temperatures on our food production log in the temperature danger zone? If yes, what corrective action was taken?
- At the following temperatures, is a food in the temperature danger zone?
  - *48 °F: Yes*
  - *165 °F: No*
  - *122 °F: Yes*
  - *40 °F: No*
- If you are preparing a large amount of cold sandwiches, what techniques can you use to keep the food out of the temperature danger zone?
  - *Prepare sandwiches in small batches.*
  - *Put completed sandwiches back into cold storage.*
  - *Pre-chill canned items, such as tuna, chicken, etc.*
- If you are preparing a large amount of hamburgers, what techniques can you use to keep the food out of the temperature danger zone?
  - *Cook hamburgers to proper internal temperature.*
  - *Store hamburgers in hot holding.*

DO: Answer staff questions. Reinforce using temperature information on production sheets to help keep hot foods hot and cold foods cold. Post a temperature poster in the kitchen.

Additional Resources:

- *Hot and Cold Holding for Time Temperature Control for Safe Foods (Sample SOP)*
- *Keep Hot Foods Hot! Keep Cold Foods Cold* / *¡Mantenga caliente los alimentos calientes! ¡Mantenga frio los alimentos frios!*

PERSONAL HYGIENE: HOW TO WASH YOUR HANDS

Objective: Demonstrate proper handwashing.

Why it is important: Proper handwashing is one of the easiest and most efficient ways to prevent food contamination by removing germs from the hands.

Materials (print/locate materials before training):

- *How to Properly Wash Your Hands Poster* / *Como lavarse las manos correctamente*

Training Instructions:

SAY: Handwashing is one of the most important personal hygiene practices for frontline staff. It is the most effective way to remove microorganisms, dirt, and food from hands and to help prevent the spread of foodborne illness. Knowing the proper steps in the handwashing process is extremely important.

DO: Show *How to Properly Wash Your Hands Poster*. Request a staff member to read the proper handwashing steps on the poster and ask another volunteer to demonstrate the steps as they are read aloud.

*If you cannot print the *How to Properly Wash Your Hands Poster*, read these steps aloud and ask a volunteer to demonstrate.

1. Wet hands and forearms with warm running water and apply soap.

2. Scrub lathered hands and forearms, under fingernails, and between fingers for at least 10–15 seconds.

3. Rinse thoroughly under warm running water for 5–10 seconds.

4. Dry hands and forearms thoroughly with single-use paper towels or a warm air hand dryer.

5. Turn off the water using paper towels.

6. Use a paper towel to open the door when exiting the restroom.

ASK:

- How long are you supposed to scrub your hands?
  - *Scrub lathered hands and forearms, under fingernails, and between fingers for at least 10–15 seconds. Singing the alphabet or "Happy Birthday" twice are both about 10-15 seconds and can be used to reinforce the timeframe.*
- How should you turn off the water faucet?
  - *Turn off the water using paper towels.*

DO: Answer staff questions. Post a handwashing poster at every sink in the kitchen and restrooms.

Additional Resources:

- *Hand Washing - #1 Defense Against Foodborne Illness* / *Lavarse las manos – ¡Defensa #1 contra las enfermendades transmitidas por los alimentos!*
- *Food Safety Fact Sheet: Handwashing* / *Ficha técnica sobre seguridad de los alimentos: Lavado de manos*
- *Washing Hands (Sample SOP)*

PERSONAL HYGIENE: WHEN TO WASH HANDS

Objective: State when to wash your hands.

Why it is important: Washing hands at appropriate times is one of the most efficient ways to prevent food contamination by removing germs from the hands.

Materials (print/locate materials before training)**:**

- *Food Safety Fact Sheet: Handwashing* / *Ficha técnica sobre seguridad de los alimentos: Lavado de manos*
- Pen or pencil
- Scratch paper

Training Instruction:

SAY: Proper handwashing is essential to keep food safe at all times. As you work, you are constantly moving from one activity to another. You may be washing vegetables and then assembling sandwiches. After each step of the food process, you must remember to wash your hands properly. Every frontline staff is responsible for washing hands routinely throughout the workday to prevent the spread of foodborne illness. We are now going to discuss when to wash your hands.

DO: Split frontline staff into groups of 2–3 people. Provide each group with a piece of paper and a pen/pencil. Give the groups 1–2 minutes to write down as many situations as possible where they need to wash their hands. After the time, ask the following question and allow each group to report 1–2 answers. Ask each group to present a new answer, not one previously stated.

ASK:

When should you wash your hands?

- *Beginning of work, either at the beginning of the shift or after breaks*
- *Before*
  - *Moving from one food preparation area to another*
  - *Putting on or changing disposable gloves*

- *After*
  - *Using the toilet*
  - *Sneezing, coughing, or using a handkerchief or tissue*
  - *Touching hair, face, or body*
  - *Handling raw meats, poultry, or fish*
  - *Eating, drinking, or chewing gum*
  - *Clean-up activity such as sweeping, mopping, or wiping counters*
  - *Touching dirty dishes, equipment, or utensils*
  - *Handling trash*
  - *Handling money*
  - *Any time that hands may have become contaminated*

DO: Use the *Food Safety Fact Sheet: Handwashing* to state any handwashing situations that are not mentioned and answer staff questions.

Additional Resources:

- *Hand Washing — #1 Defense Against Foodborne Illness* / *Lavarse las manos — ¡Defensa #1 contra las enfermendades transmitidas por los alimentos!*
- *How to Properly Wash Your Hands Poster* / *Como lavarse las manos correctamente*
- *Washing Hands (Sample SOP)*

PERSONAL HYGIENE: PREVENTING BARE HAND CONTACT WITH READY-TO-EAT FOOD

Objective: Discuss how to prevent bare hand contact with ready-to-eat foods by using disposable gloves and utensils.

Why it is important: Ready-to-eat foods are foods that can be eaten without further rinsing or cooking. Properly using gloves can help prevent the contamination of ready-to-eat foods by placing a barrier between the employee's hands and the food. Proper use of utensils is also an appropriate barrier between food and employee hands.

Materials (print/locate materials before training):

- *How to Properly Use Disposable Gloves Poster* / *Utilice correctamente los guantes desechables*

Training Instructions:

SAY: Proper use of single-use gloves and utensils protects ready-to-eat foods from contamination by bare hand contact. Ready-to-eat (RTE) foods are foods that can be eaten without further rinsing or cooking, such as cut fruits and vegetables, sandwiches, and cheese. Single-use (disposable) gloves or utensils provide a barrier between bare hands and RTE foods as an additional defense against contamination.

Proper glove use prevents food from being contaminated by the employee; therefore, gloves used in food service protect the food, not the employee. An essential step in proper glove use is to wash hands before putting them on so as not to contaminate the outside of the gloves with any microorganisms that may be on the hands. Fresh produce can be washed with bare hands, but no bare hand contact should occur during preparation and service. Your responsibility for keeping food safe requires that bare hand contact with RTE foods during preparation and service be eliminated.

DO: Discuss steps for proper glove use on the *How to Properly Use Disposable Gloves* poster.

ASK:

- When should you change your gloves?
  - *Frequently and between tasks*
  - *After sneezing, wiping your nose, touching hair, or other contact with germs*
  - *If gloves become soiled (i.e., cleaning, touching dirty equipment, taking out the trash)*
  - *If gloves tear*
  - *If handling raw animal food (meat, poultry, fish, eggs), then changing tasks to work with different raw meats or ready-to-eat foods.*
  - *Before preparing allergen-free food.*

- I will read some scenarios. State whether you need to change your gloves, and if yes, why.
  - You have been weighing out raw chicken for a recipe, and now you need to prepare some fresh lettuce for the salad bar.
    - *Yes, while wearing gloves is not required to weigh out raw chicken, some employees may prefer to wear them. If you were wearing gloves while weighing the raw chicken, you need to remove your contaminated gloves, wash your hands, and place a new pair of gloves on prior to preparing food for the salad bar.*
  - You sneeze into your gloves.
    - *Yes, you have contaminated your gloves*.
  - You are halfway through slicing ham on the slicer.
    - *No, you are still doing the same task.*
- Describe how to prevent bare hand contact with the food in the following scenarios.
  - You are serving carrot sticks to a student.
    - *You can wear disposable gloves or use tongs.*
  - You are portioning out applesauce.
    - *You can use a spoodle or portion dipper.*
  - You are serving hummus to a student.
    - *You can use a spoodle or portion dipper.*
  - You are serving grilled chicken breast to a student.
    - *You can use tongs.*
- What should you do before putting on gloves and between changing gloves?
  - *Wash hands.*

DO: Answer staff questions. Reinforce proper glove use by hanging posters around the kitchen.

Additional Resources:

- *Food Safety Fact Sheet Personal Hygiene* / *Ficha técnica sobre seguridad de los alimentos: Higiene personal*
- *Personal Hygiene (Sample SOP)*

PERSONAL HYGIENE: PROPER ATTIRE

Objective: Describe proper attire to wear in a school nutrition kitchen.

Why it is important: Wearing clean and proper attire can prevent food from being contaminated by an employee. Proper attire, such as a hair restraint and clean clothes, can prevent the employee from accidentally transferring contaminants to food.

Materials (print/locate materials before training):

- *Personal Hygiene* / *Higiene personal*

Training Instructions:

DO: Refer to the *Personal Hygiene* poster to prompt staff. Remind staff of the following content if you do not have this poster.

SAY: It is vital to wear clean and proper attire in the school nutrition kitchen to protect the employees and the food. Appropriate clothing, such as long pants and non-slip shoes, protects the employee from kitchen accidents such as spills. Items such as a hairnet and clean clothes can prevent the employee from accidentally transferring contaminants to food, like hair, microorganisms, and allergens. Proper attire goes from head to toe.

- Wear an approved hair restraint like a hairnet, hat, or cap.
- Wear clean clothes.
- Wear a clean apron and change your apron if it becomes soiled. Do not wear aprons in the restroom.
- Keep fingernails trimmed, filed, and maintained, and do not wear artificial nails or nail polish.
    - If employees are allowed by your health department or school district to wear artificial nails or nail polish, the employee must wear single-use gloves while handling food.
- Do not wear jewelry except for a plain ring with no stones, such as a wedding band.
- Wear long pants to protect your legs from spills and sharp objects hitting them.
- Wear close-toed, non-slip shoes to protect your toes from falling objects and prevent slips and falls.
- Cover any wounds on the hands and arms with an appropriate bandage such as an impermeable cover (like a finger cot or stall for fingers) and a single-use glove.

DO: Ask staff to tell you what attire the person should wear to be appropriately dressed to work in the kitchen (for example, disposable gloves, what attire a person should wear, etc.). Discuss the importance of dressing for success and safety in the kitchen.

SAY: I will read some scenarios. State whether the person in the scenario is dressed correctly or

following proper procedures for keeping attire clean. If No, explain what attire or procedure is needed.

- Jennifer comes to work wearing flip-flops.
  - *No, Jennifer needs to wear close-toed shoes.*
- Gary takes off his apron and goes to the restroom.
  - *Yes, this is proper attire.*
- Stacy does not want to mess up her new hairdo, so she has left her bangs out of her hairnet.
  - *No, Stacy needs to contain all her hair, as hair from the bangs can still fall into food.*
- Jim did not have time to wash his clothes last night. He wore his uniform from yesterday, which he accidentally spilled spaghetti sauce on.
  - *No, Jim needs to wear clean clothing as microorganisms could grow in the spilled food on his clothes, and he could transfer them to the food he is preparing.*
- Patricia has a bad cut on her hand. She covers it with a waterproof bandage and wears a single-use glove to prep the salad.
  - *Yes, this is proper attire.*

DO: Answer staff questions. Reinforce proper attire by hanging posters around the kitchen.

Additional Resources:

- *Food Safety Fact Sheet Personal Hygiene* / *Ficha técnica sobre seguridad de los alimentos: Higiene personal*
- *Personal Hygiene (Sample SOP)*

CORRECTLY WASH, RINSE, AND SANITIZE FOOD CONTACT SURFACES

Objective: Demonstrate the proper method for washing, rinsing, and sanitizing a food contact surface to prevent food contamination.

Why it is important: Properly washing, rinsing, and sanitizing a food contact surface removes debris such as allergens and kills microorganisms. Following the manufacturer's instructions for preparing detergent and sanitizer is vital. Manufacturers design sanitizer concentrations to specifically be strong enough to kill microorganisms effectively but not so strong as to damage equipment and utensils. Employees must test the sanitizer before using it to ensure that it is at the concentration specified by the manufacturer. The same detergent and sanitizer concentrations would be used in a three-compartment sink to clean utensils and equipment.

Materials (print/locate materials before training):

- Detergent
- Sanitizer
- Sanitizer test strips
- Manufacturer's instructions for detergent mixing, sanitizing preparation, and test strips if not included on the packaging
- Towels
- 3 Buckets (one for detergent, water, and sanitizer)

Training Instructions:

SAY: Properly washing, rinsing, and sanitizing a food contact surface removes debris such as allergens and kills microorganisms. Use the following procedures to clean a surface.

1. Wash the surface with a detergent solution (mixed according to the manufacturer's instructions) to clean.
2. Rinse the surface with clean water to remove debris and detergent.
3. Sanitize the surface using a sanitizing solution mixed at the concentration specified by the manufacturer.
4. Allow items and surfaces to air dry.

Follow the manufacturer's instructions to make the detergent and sanitizer solutions properly. Detergent manufacturers may require a certain amount of hot, warm, or cold water to be added to a specified amount of detergent. Chemical sanitizers have a specific concentration that they need to be at to be strong enough to kill microorganisms effectively but not so strong as to damage equipment and utensils. It is crucial to test the sanitizer with the correct test strips before using it to ensure it is at the correct concentration specified by the manufacturer.

DO: Review the proper method of mixing the detergent and sanitizer solutions. Using the manufacturer's instructions, demonstrate how to properly prepare each solution in separate buckets. Show staff how to test the sanitizer concentration with the appropriate test kit. Also, state what concentration the solution should be. Add water to the third bucket and clean towels in each bucket. Demonstrate how to wash, rinse, and sanitize a food contact surface, such as a prep table. Emphasize the importance of allowing a surface to air dry.

SAY: Use detergent and sanitizer in a three-compartment sink according to the manufacturer's instructions. It is important to use test strips to test this sanitizer as well.

DO: Discuss the proper first aid steps and the location of Safety Data Sheets (SDS) regarding the detergent and sanitizer solutions used in your kitchen. Emphasize the importance of cleanliness in personal work habits and cleaning equipment and food surfaces.

ASK:

- Explain the correct order for cleaning a food contact surface.
  1. *Wash the surface with a detergent solution (mixed according to the manufacturer's instructions) to clean.*
  2. *Rinse the surface with clean water to remove debris and detergent.*
  3. *Sanitize the surface using a sanitizing solution mixed at the concentration specified by the manufacturer.*
  4. *Allow items and surfaces to air dry.*
- Why would you use the detergent solution during the workday?
  - *Use detergent solutions to remove food particles from a food contact surface.*
- Why should you rinse a surface after using detergent?
  - *Use clean water to remove food particles and detergent from a food contact surface.*
  - *Leftover detergent can sometimes deactivate sanitizer.*
  - *Sanitizer is not effective on organic compounds like food.*
- Why would you use the sanitizer solution during the workday?
  - *Use a sanitizer correctly to kill microorganisms on a food contact surface. It is essential to follow the manufacturer's instructions for contact time and sanitizer concentration and to test the concentration using the correct test strips.*
- Why should you let a surface air dry after washing, rinsing, and sanitizing?
  - *Allow the surface to air dry to avoid reintroducing contamination from towels and paper towels.*

DO: Answer staff questions. Encourage staff to use the demonstration buckets for cleaning and sanitizing that day.

Additional Resources:

- *Food Safety Fact Sheet: Cleaning and Sanitizing* / *Ficha técnica sobre seguridad de los alimentos: Limpiando y desinfectando*
- *Cleaning and Sanitizing Food Contact Surfaces (Sample SOP)*

FOODBORNE ILLNESS AND ALLERGEN EXPOSURE PREVENTION IS OUR BUSINESS

Objective: Discuss ways to maintain safe food preparation and service in the kitchen.

Why it is important: Employees must work to keep food safe throughout food production and service. Tasks include ensuring the proper holding, cooking, and reheating temperatures and preventing contamination to reduce the risk of foodborne illness and allergen exposure. Awareness of food safety concerns in your kitchen can help employees avoid them.

Materials (print/locate materials before training):

- *Food Safety Checklist*

Training Instructions:

SAY: Keeping food safe throughout food production and service is critical. Proper cooking and reheating temperatures help ensure that harmful bacteria are killed. Appropriate holding temperatures help prevent the growth of bacteria in food. Contamination prevention helps reduce the risk of microorganisms, chemicals, allergens, and physical hazards from getting into food. Awareness of food safety concerns in the kitchen can help you avoid them.

DO: Use the Food Safety Checklist as an inspection reference. Walk your staff around the kitchen and stop at the following locations. At each stop, ask a volunteer to discuss possible methods of contamination and time and temperature control. Also, discuss procedures for how to prevent them.

- Refrigerator/Walk-In
- Freezer/Walk-In
- Dry storage
- Receiving area
- Dish room
- Prep sink
- Hand sink
- Serving lines
- Hot and cold holding cabinets
- Food preparation area
- Equipment storage area
- Chemical storage area

Reinforce prevention and steps to maintain a safe food preparation and service environment. Answer staff questions.

Additional Resources:

- *Food Safety Fact Sheet: Calibrating Thermometers* / *Ficha técnica sobre seguridad de los alimentos: Calibrando termometros*
- *Cutting Boards* / *Tablas de cortar*
- *E. coli Fact Sheet*
- *Hand Washing - #1 Defense Against Foodborne Illness* / *Lavarse las manos – ¡Defensa #1 contra las enfermendades transmitidas por los alimentos!*
- *Food Safety Fact Sheet: Handwashing* / *Ficha técnica sobre seguridad de los alimentos: Lavado de manos*
- *Hepatitis Fact Sheet*
- *Keep Hot Foods Hot! Keep Cold Foods Cold* / *¡Mantenga caliente los alimentos calientes! ¡Mantenga frio los alimentos frios!*
- *Norovirus Fact Sheet*
- *Food Safety Fact Sheet: Preventing Contamination When Using Cutting Boards*
- *Refrigerate for Safety Mini-poster* / *Recalentar los alimentos*
- *Food Safety Fact Sheet: Reheating Food* / *Ficha técnica sobre seguridad de los alimentos: Recalentamiento de alimentos*
- *Reheating Foods Mini-Poster* / *Recalentar los alimentos*
- *Salmonellosis Fact Sheet*
- *Shigellosis Fact Sheet*
- *Food Safety Fact Sheet: Temperature Danger Zone* / *Ficha técnica sobre seguridad de los alimentos: Zona de peligro*
- *Typhoid Fever Fact Sheet*
- *Use That Thermometer! Mini-poster* / *Use ese termometro*
- *Food Safety Fact Sheet: Using Food Thermometers* / *Ficha técnica sobre seguridad de los alimentos: Usando termometros para alimentos*

THE PROCESS APPROACH

Objective: Discuss the no cook, same day service, and complex food categories of the Process Approach.

Why it is important: The Process Approach simplifies the Hazard Analysis Critical Control Points (HACCP) regulations for schools. Menu items are grouped into one of three categories:

- No cook process – food does not go through the temperature danger zone (TDZ).
- Same day service process – food goes through the TDZ once.
- Complex process – food goes through the TDZ two or more times.

The Process Approach provides a simple way for staff to know the food safety practices needed for a food item based on its assigned category.

Materials (print/locate materials before training): Process Approach Scenarios (on following page)

Training Instructions:

SAY: The Process Approach simplifies the Hazard Analysis Critical Control Points (HACCP) process for schools. Menu items are grouped into one of three categories that provide a simple way to know the needed food safety practices for a food item.

- No cook process – food does not go through the temperature danger zone (TDZ).
- Same day service process – food goes through the TDZ once.
- Complex process – food goes through the TDZ two or more times.

For no cook food items, examples include deli sandwiches and salads that are prepared and served cold. It is crucial to keep these foods at or below 41 °F. Same day service process food items include hamburgers, pizza, chicken nuggets, and scrambled eggs. These foods go through the TDZ only once when the food is cooked. Whether food is a complex item will differ depending on different cooking techniques and school nutrition preparation needs. This disparity is because complex food goes through the TDZ during cooking, cooling, and reheating, but not all food production processes may be used when preparing a food item. Examples of complex food items include turkey roasts, taco meat, and chili.

Staff should control, monitor, and keep records of the temperatures of foods to minimize time in the TDZ. Check and record time and temperatures during holding, cooking, serving, cooling, and reheating food.

DO: Read the following scenarios from the table for staff. Have them determine if the food is a no cook, same day service, or complex process food item. Then, ask staff to state one time and temperature step that will help keep that food safe.

SAY: I will read some scenarios. Determine if the food is a no cook, same day service, or complex process food item. Then, say one time and temperature step to help keep that food safe.

Process Approach Scenarios

Scenarios	Process Approach Category	Time and Temperature Steps to Keep Food Safe
Celery sticks with hummus	*No cook*	*Hold food at 41 °F or below.*
Chili using ground beef that was prepared and cooled the day before	*Complex*	*Cooking* • *Cook beef to 155 °F.* *Cooling* • *Hot food must be cooled from 135 °F – 70 °F within 2 hours.* • *Hot food must be cooled from 135 °F – 41 °F within a total of 6 hours.* • *If the food does not cool to 70 °F within 2 hours, reheat the food to 165 °F for 15 seconds and begin the cooling process again.* *Reheating* • *Heat food to 165 °F within 2 hours.*
Fish tacos	*Same day service*	*Cooking* • *Cook fish to 145 °F.* *Holding* • *Hold hot food at 135 °F or above.*
Shredded turkey cooked on Tuesday to be used for Thanksgiving stuffing on Thursday	Complex	*Cooking* • *Cook turkey to 165 °F.* *Cooling* • *Hot food must be cooled from 135 °F – 70 °F within 2 hours.* • *Hot food must be cooled from 135 °F – 41 °F within a total of 6 hours.* • *If the food does not cool to 70 °F within 2 hours, reheat the food to 165 °F for 15 seconds and begin the cooling process again.* *Reheating* • *Heat food to 165 °F within 2 hours.*
Hot deli ham* sandwiches	Same day service	*Cooking* • *Cook ham to 135 °F.* *Holding* • *Hold hot food at 135 °F or above.*
Tuna salad sandwich using canned tuna	*No cook*	*Hold food at 41 °F or below.*

*Only pre-cooked or commercially processed ham can be cooked to an internal temperature of 135 °F degrees.

DO: Answer staff questions.

Additional Resources:

- *Food Safety Fact Sheet Complex Process* / *Ficha técnica sobre seguridad de los alimentos: Proceso de preparación complejo de alimentos*
- *Food Safety Fact Sheet Cooking Foods* / *Ficha técnica sobre seguridad de los alimentos: Coccion de los alimentos*
- *Food Safety Fact Sheet: Cooling Foods* / *Ficha ténica sobre seguridad de los alimentos: Descongelamiento de alimentos*
- *Food Safety Fact Sheet: No Cook Process* / *Ficha técnica sobre seguridad de los alimentos: Proceso de preparacion de alimentos sin coccion*
- *Food Safety Fact Sheet: Personal Hygiene* / *Ficha técnica sobre seguridad de los alimentos: Higiene personal*
- *Food Safety Fact Sheet: Preventing Contamination During Food Preparation* / *Ficha técnica sobre seguridad de los alimentos: Previniendo la contaminación durante la preparación de los alimentos*
- *Food Safety Fact Sheet: Reheating Food* / *Ficha técnica sobre seguridad de los alimentos: Recalentamiento de alimentos*
- *Food Safety Fact Sheet: Same Day Service Process* / *Ficha técnica sobre seguridad de los alimentos: Previniendo la contaminación durante la preparación de los alimentos*
- *Food Safety Fact Sheet: Temperature Danger Zone* / *Ficha técnica sobre seguridad de los alimentos: Zona de peligro*
- *Food Safety Fact Sheet: The Process Approach* / *Ficha técnica sobre seguridad de los alimentos: El enfoque en el proceso*
- *Food Safety Fact Sheet: Using Food Thermometers* / *Ficha técnica sobre de los alimentos: Usando termometros para alimentos*

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