

9

The Flow of Food: Service

Chapter Overview

Chapter 9 introduces students to the fundamentals of safely holding and serving food.

Learning Objectives

- 9-1** Identify ways to prevent time-temperature abuse when holding and serving food
- 9-2** Explain how to protect ready-to-eat food from contamination during preparation, display, and service
- 9-3** Describe the requirements for off-site catering and food transportation to prevent contamination and time-temperature abuse
- 9-4** Describe how to handle utensils and equipment to prevent contamination

Opening Case Study

1. What could have been done to prevent this situation from occurring in the first place?

The buffet attendant should have reported the vomiting and diarrhea to management the week before the outbreak. He also should have been washing his hands correctly, especially after using the restroom. Food handlers carrying pathogens, such as Norovirus, can easily transfer them to food if they do not wash their hands correctly after using the restroom.

Chapter Breakdown

Pages 174 to 178**9.1 Holding Food for Service**

Resources

PowerPoint Slides 3 to 5

Reinforce and Review:

- Your operation should have policies for holding and discarding food. Cover food or use sneeze guards. Hold TCS food at the correct temperature. Use a thermometer to check the internal temperature at least every four hours. Never use hot-holding equipment to reheat food unless it is built to do so.
- When holding TCS food for service, keep hot food at 135°F (57°C) or higher. Keep cold food at 41°F (5°C) or lower. Check the internal temperature of food at least every four hours. Throw food out if it is not at the correct temperature and cannot be restored to a safe condition.
- TCS food may be held without temperature control under certain conditions. Cold food must be held at 41°F (5°C) or lower before it is removed from refrigeration. Then, the food temperature must not get higher than 70°F (21°C). If it does, or if the food is not served or sold within six hours, the food must be thrown away. Hot food must be held at 135°F (57°C) or higher before it is removed from temperature control. Then it must be served, stored, or thrown away within four hours. Both cold and hot food must be labeled with the discard time. Operations that primarily serve high-risk populations should never hold food without temperature control.

Key Terms

No key terms for this section

Knowledge Check Answers

1. Hot-holding equipment should NEVER be used to reheat food unless it is built to do so. Most hot-holding equipment does not pass food through the temperature danger zone quickly enough. Reheat food correctly. Then, move it to the holding unit.
2. Here are some examples of when food might be held without temperature control:
 - When displaying food for a short time, such as at an off-site catered event
 - When electricity is not available to power holding equipment

Chapter Breakdown

Pages 178 to 183**9.2 Serving Food Safely**

Resources

PowerPoint Slides 6 to 9

Reinforce and Review:

- Staff should be trained to avoid bare hand contact with ready-to-eat food. They should also be trained to use and maintain utensils correctly. Use separate utensils for different food items. Clean and sanitize them after each task and after four hours of continuous use. Store serving utensils correctly to avoid contamination. Follow guidelines for refilling take-home containers.
- Teach staff the correct ways for handling service items and tableware. Staff should also be trained on the rules for throwing away and re-serving food that was served to guests. This should address food returned by guests and unused condiments, bread, garnishes, and prepackaged food.
- Self-service areas can be contaminated by staff and guests. Protect food on display with sneeze guards, packaging, or other tools designed to keep food safe. Post self-service rules. Make it clear to guests that clean plates must be used for refills. Put the correct labels on displayed food and bulk food available for self-service. Make sure equipment holds food at the correct temperature.

Key Terms

No key terms for this section

Knowledge Check Answers

1. Items which should never be re-served to guests include:
 - Returned menu items
 - Plate garnishes
 - Uncovered condiments
 - Opened portions of condiments
 - Bread and rolls
 - Opened, pre-packaged food
2. A number of steps can be taken to keep food safe in self-service areas including:
 - Sneeze guards
 - Labels
 - Separating raw and ready-to-eat food
 - Ensuring guests do not refill dirty plates or use dirty utensils
 - Stocking correct utensils for serving, such as tongs and ladles
 - Never using ice that has been used to keep food cold as an ingredient

Chapter Breakdown

Pages 183 to 187**9.3 Off-Site Service**

Resources

PowerPoint Slides 10 to 13

Reinforce and Review:

- Catering, mobile units, temporary units, and vending machines pose their own challenges to food safety. Food served by these sources must be treated with the same care as any other food served to guests. Pack, label, reheat, hold, and store food properly. Make sure delivery vehicles are clean and holding equipment keeps food at the correct temperature. Practice good personal hygiene. Make sure the service site has the correct utilities. Temporary units must be built to keep food safe from weather, dirt, and pests. Mobile units may need to have a special permit or license to operate. Check the shelf life of food in vending machines daily. Learn and follow any regulatory requirements that may apply to your operation.

Key Terms

- **Off-site service:** Service of food to someplace other than where it is prepared or cooked, including catering and vending.
- **Temporary units:** Operations that function in a location for typically no more than 14 days; for example, foodservice tents or kiosks set up for food fairs, special celebrations, or sporting events.
- **Mobile units:** Portable foodservice operations, ranging from concession vans to full field kitchens.

Knowledge Check Answers

1. Examples of off-site service include:

- Delivery
- Catering
- Temporary units
- Mobile units
- Vending machines

2. Containers used to transport food should be food grade and insulated. They should be designed so food cannot mix, leak, or spill. Food transport containers must be able to maintain food at safe temperatures for the intended transport and holding time.

CLASSROOM ACTIVITY: To Serve and Prevent

LO: 9-1 Identify ways to prevent time-temperature abuse when holding and serving food

9-2 Explain how to protect ready-to-eat food from contamination during preparation, display, and service

Materials: Scratch paper or electronic documents

1. Ask students to independently make a list of situations in which food has been served to them (ex: buffet at a wedding, lunch from a food truck, sandwich from a vending machine).
2. Instruct students to get with a partner and compare their lists.
3. Give them five minutes to select three situations from their lists and answer the following questions with their partners:
 - a. In each situation, what practices were put in place to prevent time-temperature abuse and contamination during service?
 - b. What additional measures could have been taken?
4. Go over responses as a class.

End of Chapter

Page 189**Discussion Questions****1. What can be done to minimize contamination in self-service areas?**

To minimize contamination in self-service areas:

- Protect food on display using sneeze guards, display cases, or packaging.
- Label food located in self-service areas.
- Prevent guests from refilling dirty plates or using dirty utensils at self-service areas.
- Stock food displays with the correct utensils for dispensing food.

2. What hazards are associated with the transportation of food and how can they be prevented?

The longer the time between preparation and consumption, the greater the risk that food will be exposed to contamination or time-temperature abuse. To prevent these hazards, do the following:

- Pack food in insulated food-grade containers. They should be designed so food cannot mix, leak, or spill.
- Clean the inside of delivery vehicles regularly.
- Practice good personal hygiene when distributing food.

- Check internal food temperatures. If containers or delivery vehicles are not maintaining the correct temperature, reevaluate the length of the delivery route or the efficiency of the equipment being used.
- Label food with a use-by date and time and with reheating and service instructions for staff at off-site locations.
- Store raw meat, poultry, seafood, and ready-to-eat items separately.

3. What are the requirements for using time rather than temperature as the only method of control when holding TCS food?

TCS food can be displayed or held without temperature control under the following conditions:

- It is not for a primarily high-risk population.

Cold Food

- It was held at 41°F (5°C) or lower before removing it from refrigeration.
- It does not exceed 70°F (21°C) while it is being served.
- It has a label that specifies both the time it was removed from refrigeration and the time it must be thrown out.
- It is sold, served, or thrown out within six hours.
- If the food is discarded within four hours, it can be allowed to reach any temperature during service.

Hot Food

- It was held at 135°F (57°C) or higher before removing it from temperature control.
- It has a label that specifies when the item must be thrown out.
- It is sold, served, or thrown out within four hours.

4. What practices should be followed to serve catered food off-site?

When serving catered food off-site:

- Ensure there is safe water for cooking, dishwashing, and handwashing.
- Make sure garbage is stored away from food-prep, storage, and serving areas.
- Store food properly. Use insulated containers to hold TCS food. Wrap raw meat and store it on ice. Deliver dairy products in a refrigerated vehicle or on ice. Store ready-to-eat food separately from raw meat, poultry, and seafood.
- Serve cold food in containers on ice or in chilled, gel-filled containers, or hold the food without temperature control according to guidelines.
- Label any leftovers given to guests. Provide instructions for storage and reheating and a discard date.

5. How can vending operators protect food from contamination and time-temperature abuse?

To protect food from contamination and time-temperature abuse, vending operators can do the following:

- Check product shelf life daily and dispose of any expired food.
- Keep TCS food at the correct temperature.
- Dispense TCS food in its original container.
- Wash and wrap fresh fruit with edible peels before putting it in a machine.

Pages 189 to 190**Apply Your Knowledge****In the Weeds****1. What did Jill do wrong?**

Here is what Jill did wrong:

- She packed the deliveries in cardboard boxes.
- She failed to make sure that the internal temperature of the food on the serving line was checked at least every four hours. This would have alerted her to the fact that the steam table was not maintaining the correct temperature and that the casserole was in the temperature danger zone.

2. What should she have done?

This is what she should have done:

- She should have packed the food in food-grade, insulated containers.
- She should have checked the temperature of the food on the service line at least every four hours. Doing it this way means that any food not at the correct temperature would need to be thrown out. Because the casserole was only 130°F (54°C), she should have thrown it out. As an alternative, Jill could have checked the temperature of items on the serving line every two hours. This would have left time for corrective action.

Megan's Day**1. What errors did Megan make?**

Megan made the following errors:

- She tasted the food on the guest's plate.
- She failed to wash her hands after clearing the dirty dishes from the table.
- She failed to clean the table correctly after busing it. Megan should not have wiped the table with the cloth she kept in her apron.
- She incorrectly scooped ice into glassware. Megan should not have used the glass itself to retrieve ice from the bin. Using a glass this way could cause it to chip or break in the ice.

- She re-served bread and butter that had been previously served to a guest. Uneaten bread or rolls should never be re-served to other guests.
- She failed to wash her hands after scratching a sore. By scratching it and not washing her hands afterward, she could easily have contaminated everything else she touched.

2. What should she have done?

Here is what Megan should have done:

- She should not have tasted food from the guest's plate.
- She should have washed her hands after clearing the table and before she touched the water glasses.
- When cleaning tables between guest seatings, if food bits or spills are present, Megan should use the correct cleaning tool, such as a clean cloth towel, to remove the debris. Megan should have then cleaned the table with a clean cloth that was stored in a sanitizer solution.
- She should have used tongs or an ice scoop to get ice.
- She should have served a fresh basket of bread and butter.
- She should have washed her hands immediately after scratching the sore.

Pages 190 to 191

Study Questions

1. D. Top
2. C. 6 p.m.
3. C. 41°F (5°C)
4. D. Clean plate
5. C. 135°F (57°C)
6. B. 4
7. C. Throw the food out
8. A. Use-by date and time and reheating and service instructions
9. A. Throw the chips away.
10. A. Running water at any temperature, or a container of water at 135°F (57°C) or higher