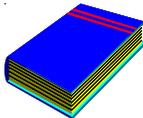


# Sanitizing the Kitchen

## Lesson 11 Overview

	<b>Time</b> 30 minutes
	<b>Purpose</b> To explain how to properly clean and sanitize the kitchen <b>Objectives</b> At the conclusion of this lesson, employees will be able to: <ul style="list-style-type: none"><li>▪ Explain the difference between cleaning and sanitizing</li><li>▪ State the responsibilities of the manager and employees for cleaning and sanitizing the kitchen</li><li>▪ List the steps for cleaning and sanitizing items in the kitchen</li></ul>
	<b>Definitions</b> <i>Clean:</i> Free from soil or dust <i>Degreaser:</i> Substance that dissolves grease <i>Detergent:</i> Substance that loosens soil from the surface <i>Foodborne Illness:</i> Any illness that is carried or transmitted to people by a food or beverage <i>Sanitary:</i> Free of harmful levels of contamination equal to 99.999% reduction <i>Sanitizer:</i> Substance that kills harmful microorganisms
	<b>Materials</b> <ul style="list-style-type: none"><li>▪ Samples of a cleaning solution, a dishwashing detergent, a chemical sanitizer used for hand-washed items, a degreaser, and a quaternary ammonium compound</li><li>▪ Temperature logs, cleaning schedule, sanitation checklists</li><li>▪ Most recent health department sanitation/inspection report</li><li>▪ Flipchart and markers</li><li>▪ Handout 1: Icebreaker</li><li>▪ Handout 2: How to Sanitize</li><li>▪ Handout 3: Sample Dishmachine Temperature Log</li><li>▪ Lesson Evaluation</li><li>▪ Answer key for Handout 1</li></ul>

## Lesson 11 Overview (cont.)



### Activities

**Activity 1: Icebreaker.** Set up a display of the following products used in the center and number each product as follows:

Product 1: Cleaning solution

Product 2: Dishwashing detergent

Product 3: Chemical sanitizer for hand-washed items

Product 4: Degreaser

Product 5: Quaternary Ammonium Compounds (Quats)

Ask the employees to identify the best use for each product on Handout 1. Discuss the results using the answer key.

**Activity 2: Mystery Cleaners.** Take two greasy pans and put a small amount of different “mystery” cleaners in the pan. Use one sanitizer and one degreaser for the “mystery” cleaners. Ask the employees to clean the pan within a time limit. Show the results. Ask, “Which pan is clean?” Discuss the importance of selecting the correct cleaning products. Emphasize that using more of the wrong product will not get the job done!



### Evaluation

Use the Lesson Evaluation to assess the employees’ knowledge of the concepts presented in this lesson.

### References

Food and Drug Administration. (2001). *Food code*. Washington, DC: Author.

National Food Service Management Institute. (2002, reprinted 2004 with corrections). *Serving it safe* (2nd ed.). University, MS: Author.

National Restaurant Association. (1999). *Serving safe food*. Chicago, IL: The Educational Foundation of the National Restaurant Association.

Roberts, C.A. (2001). *The food safety information handbook*. Westport, CT: Oryx Press.

## Lesson 11 Content

### Activity 1: Icebreaker



**Note:** The materials needed for Activity 1 are a copy of Handout 1 for each employee and a display of the following products used in the center numbered as follows:

Product 1: Cleaning solution

Product 2: Dishwashing detergent

Product 3: Chemical sanitizer for hand-washed items

Product 4: Degreaser

Product 5: Quaternary Ammonium Compounds (Quats)

The purpose of Activity 1 is to acquaint the employees with the cleaning and sanitizing products used in the adult day care center.

**Tell:** Look at each cleaning product on the display. Then, select the best use of this product on Handout 1.

**Discuss:** Employees' responses.

**Note:** Use the answer key to discuss the employees' responses.

### Introduction

**Tell:** All food needs to be prepared and served under clean and sanitary conditions. A kitchen may look clean, but it is an unsafe area if it is not sanitary.

### Clean vs. Sanitary

**Note:** Review the difference between "clean" and "sanitary." If necessary, write the important points on a flipchart.

**Tell:** "Clean" means free from soil or dust or grease. Cleaners remove soil and grease.

"Sanitary" means free of harmful levels of contamination equal to 99.999% reduction. Sanitizers kill bacteria.

## Lesson 11 Content (cont.)

### Clean vs. Sanitary (cont.)

**Tell:** A sanitary kitchen is a place where the food prepared is safe to eat. That means all food contact surfaces, all equipment, and all utensils are cleaned and sanitized after use.

### Importance of Sanitizing the Kitchen

**Tell:** All food must be prepared in a sanitary kitchen.

- Adult day care serves elderly and disabled adults who are at risk of getting a foodborne illness because of weakened immune systems.
- Adult day care providers do not want to do anything in the kitchen that might result in one of the participants getting sick.

### Responsibilities for Sanitizing the Kitchen

**Tell:** Everyone has a job when it comes to sanitizing the kitchen. In other words, everyone is responsible for sanitizing the kitchen.

### A Manager's Responsibilities

**Note:** Go over a manager's responsibilities for sanitizing the kitchen. If necessary, use a flipchart to write down the points.

**Tell:** A manager's responsibilities for sanitizing the kitchen are to:

- Set sanitation standards
- Prepare the cleaning schedule
- Train employees
- Provide cleaning supplies
- Make sure the job is done correctly

### A Food Service Employee's Responsibilities

**Note:** Go over a food service employee's responsibilities for sanitizing the kitchen. If necessary, use a flipchart to write down the points.

## Lesson 11 Content (cont.)

### A Food Service Employee's Responsibilities (cont.)

**Tell:** A food service employee's responsibilities for sanitizing the kitchen are to:

- Follow standards
- Follow the cleaning schedule
- Follow procedures for cleaning and sanitizing
- Ask questions if they do not know
- Use cleaning supplies correctly

### Review of the Cleaning Schedule

**Tell:** The purpose of the cleaning schedule is to be sure that each cleaning and sanitizing job is completed routinely. Proper cleaning and sanitizing usually do not happen without a schedule.

**Note:** Show a copy of the cleaning schedule and the sanitation checklist to the employees. Review the schedule and the procedures to indicate that cleaning and sanitizing have been completed.

### Principles of Cleaning

**Tell:** Cleaning agents are chemicals that remove soil or mineral deposits.

- Detergents loosen soil from the surface.
- Degreasers dissolve grease.

**Emphasize:** Cleaning agents do not kill bacteria. Only sanitizers kill bacteria.

### Activity 2



**Note:** The materials needed for Activity 2 are two greasy pans, a sanitizer, and a degreaser. The purpose of this activity is to demonstrate that the correct cleaning product must be selected for the best results. Take two greasy pans. In one, put a small amount of a sanitizer. In the other, put a small amount of a degreaser. These are the "mystery" cleaners.

## Lesson 11 Content (cont.)

### Activity 2 (cont.)



**Tell:** Here are two greasy pans. Each pan contains a “mystery” cleaner. I would like two volunteers to clean the pans.

**Note:** Have the volunteers clean the pans while the other employees watch. Give them a certain time limit. When the time is up, show both pans to the employees.

**Ask:** Which pan is clean?

**Tell:** One pan contained a degreaser and the other contained a sanitizer. Only the degreaser completely removed the grease.

**Discuss:** The importance of selecting the correct cleaning product for the best results.

### Principles of Sanitizing

**Tell:** There are two methods for sanitizing utensils and equipment: the heat method and the chemical method.

- With the heat method, a clean object is exposed to enough heat to kill bacteria.
- With the chemical method, a clean object is immersed in or sprayed with a sanitizing solution.

### How to Sanitize Using a Three-Compartment Sink

**Note:** Using plates or utensils, demonstrate how to sanitize using a three-compartment sink as you explain each step.

**Tell:** The method for sanitizing using a three-compartment sink is as follows:

- Scrape and pre-rinse.
- Scrub and wash in the first compartment.
- Rinse in the second compartment.
- Sanitize in the third compartment by using a chemical sanitizer or by heating the water to 170 °F.
- Air dry.
- Change the water frequently. For the chemical method, use a chemical test kit to confirm that the sanitizer is active. For the heat method, use a thermometer to check the temperature of the water.

## Lesson 11 Content (cont.)

### How to Sanitize Equipment

**Note:** Using a piece of equipment in the kitchen, demonstrate how to sanitize equipment as you explain each step.

**Tell:** The method for sanitizing equipment is as follows:

- Unplug the equipment.
- Disassemble the equipment.
- Wash, rinse, and sanitize the removable parts in a three-compartment sink.
- Wash and rinse the stationary parts.
- Sanitize any areas that touch food.
- Air dry.

### How to Sanitize Using a Dishmachine

**Note:** Demonstrate how to sanitize using a dishmachine as you explain each step.

**Tell:** The method for sanitizing using a dishmachine is as follows:

- Scrape, separate, and pre-rinse.
- Place cups, bowls, and plates on the rack.
- Make sure the spray arms, soap trays, and curtains are clean.
- Shut the drain valves and fill the tank.
- Check the detergent, rinse dispenser, and sanitizer.
- Turn the heat and the machine on.
- Check the temperatures and gauges. Record the temperatures in the log.
- Prewash (80–100 °F).
- Wash (140–180 °F).
- Rinse (170–180 °F). FDA requires a minimum of 171 °F for heat sanitizing. States may have different standards.
- The temperature range for most chemical sanitizers to be effective is 75–120 °F. Always follow the manufacturer's instructions. Test the solution with a test kit.

## Lesson 11 Content (cont.)

### Temperature/Chemical pH Logs

**Tell:** The purpose of the dishmachine temperature log is to confirm that the machine is working properly.

- If temperatures are too low, the dishes will not get clean or be sanitized.
- For low-temperature machines that sanitize with chemicals, keep a log of pH levels of chemicals.

**Note:** Have copies of the temperature logs used at the center available for the employees to review. Handout 3 contains a sample log that employees can use.

**Review:** The temperature logs used at the center and the procedures employees should use if temperatures are too high or too low.

### Regulatory Agencies

**Note:** Have a copy of the most recent health department sanitation/inspection report available for the employees to review.

**Discuss:** The regulatory agencies that inspect your food service.

**Review:** The results of the most recent sanitation inspection.

**Praise:** Good work.

**Discuss:** Any concerns.

### Lesson Evaluation



**Note:** The material needed is a copy of the Lesson Evaluation for each employee. Go over the directions with the employees before having them answer the questions.

**Discuss:** Employees' responses.

## Handout 1

### Icebreaker

**Directions:** Look at each cleaning product and select the best use of this product by checking the best choice.

1. Name of product: \_\_\_\_\_

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash dishes in the dishmachine
- d. Clean the grease off the grill

2. Name of product: \_\_\_\_\_

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash dishes in the dishmachine
- d. Clean the grease off the grill

3. Name of product: \_\_\_\_\_

The best use of this product is to:

- a. Clean the mixer
- b. Clean the grease off the floor
- c. Wash flatware in the dishmachine
- d. Sanitize knives

4. Name of product: \_\_\_\_\_

The best use of this product is to:

- a. Clean the grease off the grill
- b. Clean the food preparation table
- c. Sanitize scoops
- d. Wash dishes in the dishmachine

5. Name of product: \_\_\_\_\_

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash pans in the sink
- d. Clean the grease off the floor

## Handout 1: Answer Key

### Icebreaker

**Directions:** Look at each cleaning product and select the best use of this product by checking the best choice.

1. Name of product: Cleaning solution

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash dishes in the dishmachine
- d. Clean the grease off the grill

*Cleaning solutions remove dirt and soil. They are designed for food contact surfaces like the food preparation table.*

2. Name of product: Dishwashing detergent

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash dishes in the dishmachine
- d. Clean the grease off the grill

*Dishwashing detergents remove food and grease. They are designed to be used in a dishmachine.*

3. Name of product: Chemical sanitizer used for hand-washed items

The best use of this product is to:

- a. Clean the mixer
- b. Clean the grease off the floor
- c. Wash flatware in the dishmachine
- d. Sanitize knives

*Chemical sanitizers kill microorganisms. They are designed for sanitizing hand-washed items like knives.*

4. Name of product: Degreaser

The best use of this product is to:

- a. Clean the grease off the grill
- b. Clean the food preparation table
- c. Sanitize scoops
- d. Wash dishes in the dishmachine

*Degreasers remove grease. They are designed for food contact surfaces like the grill.*

5. Name of product: Quaternary Ammonium Compounds (Quats)

The best use of this product is to:

- a. Clean the food preparation table
- b. Sanitize the food preparation table
- c. Wash pans in the sink
- d. Clean the grease off the floor

*Quats are sanitizers that kill microorganisms. They are designed to sanitize food contact surfaces like the food preparation table.*

## Handout 2

### How to Sanitize

#### A. How to Sanitize Using a Three-Compartment Sink

- Scrape and pre-rinse.
- Scrub and wash in the first compartment.
- Rinse in the second compartment.
- Sanitize in the third compartment by using a chemical sanitizer or by heating the water to 170 °F.
- Air dry.
- Change water frequently. For the chemical method, use a chemical test kit to confirm that the sanitizer is active. For the heat method, use a thermometer to check the temperature of the water.

#### B. How to Sanitize Equipment

- Unplug the equipment.
- Disassemble the equipment.
- Wash, rinse and sanitize the removable parts in a three-compartment sink.
- Wash and rinse the stationary parts.
- Sanitize any areas that touch food.
- Air dry.

#### C. How to Sanitize Using a Dishmachine

- Scrap, separate, and pre-rinse.
- Place cups, bowls, and plates on the rack.
- Make sure the spray arms, soap trays, and curtains are clean.
- Shut the drain valves and fill the tank.
- Check the detergent, rinse dispenser, and sanitizer.
- Turn the heat and the machine on.
- Check the temperatures and gauges. Record the temperatures in the log.
- Prewash (80-100 °F).
- Wash (140-180 °F).
- Rinse (170-180 °F). FDA requires a minimum of 171 °F for heat sanitizing. States may have different standards.
- The temperature range for most chemical sanitizers to be effective is 75–120 °F. Always follow the manufacturer's instructions. Test the solution with a test kit.

### Handout 3

## Sample Dishmachine Temperature Log

**Directions:** Record the temperature of the wash and final rinse or pH level for chemical sanitizers. Report any abnormal temperatures to your supervisor.

Date/Time	Temperature for Wash	Temperature for Final Rinse	pH Level for Chemical Sanitizers	Initials
Date/Time				
AM				
Noon				
PM				
Date/Time				
AM				
Noon				
PM				
Date/Time				
AM				
Noon				
PM				
Date/Time				
AM				
Noon				
PM				
Date/Time				
AM				
Noon				
PM				

## **Lesson Evaluation**

Select one area of the kitchen and ask employees to describe or demonstrate the following:

- How to sanitize a food preparation table
- How to sanitize small equipment
- How to check the sanitizer

*Answers will vary based on the demonstration.*