

Unit 4 – Clean, Sanitize, Disinfect

Learning Objectives

- Demonstrate the steps to proper cleaning and sanitizing for food contact surfaces
- Describe the differences between cleaning, sanitizing, and disinfecting
- Identify key principles to cleaning and sanitizing in foodservice operations

Outline

Lecture and Discussion:

Sanitizing prevents foodborne illness. It is important to properly clean and sanitize food contact surfaces because during use, food contact surfaces can become contaminated with harmful microorganisms that can be transferred to food.

There are 2 methods of sanitizing: Hot water/heat or Chemical sanitizer

- Hot water/heat:
 - Hot water used in the third compartment of a three-compartment sink, it must be at least 171°F
 - High-temperature dishwashing machine final sanitizing rinse must be at least 180°F
 - Cleaned items must be exposed to these temperatures for at least 30 seconds
- Chemical sanitizer:
 - Always follow the manufacturer instructions for use and proper dilutions
 - Different factors influence the effectiveness of chemical sanitizers: Concentration, Temperature, and Contact time

Cleaning	Sanitizing	Disinfecting
Cleaning is the physical removal of soil, dust, grease and microbes from a surface. Cleaning includes using a soap or detergent to scrub these contaminants from a surface.	When we sanitize a surface, we are taking steps to <i>reduce</i> the number of pathogens on that surface to what is considered a safe level. Remember, harmful pathogens cause foodborne illness.	When disinfectants are used, hygienic cleaning is taken to a much higher level. Disinfectants are designed to <i>kill</i> pathogens on a surface.

Sanitizing steps for prep-tables and stationary equipment:

1. Wash the surface with detergent
2. Rinse the surface with clean water
3. Sanitize the surface (*be sure the sanitizer is at the correct concentration using a test strip*)
4. Allow the surface to air dry

Answer Key:

1. false, 2. B, 3. D, 4. C, 5. False, 6. E

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Pre/Post Test

Employee name: _____

In-service date: _____

1. True/False: Sanitizer wipes should never be stored submerged in the sanitizer solution.
2. Which of the following is a food contact surface?
 - a. Walk-in refrigerator floor
 - b. Cutting board
 - c. Mop bucket
 - d. Door knob
3. How should sanitizer concentration be verified?
 - a. Strong chemical smell
 - b. Only by an employee or manager with years of experience
 - c. By looking at the color of solution
 - d. Using a test strip and testing reference kit
4. Which of the following is NOT an approved mode of sanitizing?
 - a. Using a high-temp dish machine
 - b. Using a 3-compartment sink procedure
 - c. Washing dishes in the hand washing sink
 - d. Properly concentrated sanitizer in a bucket
5. True/False: Sanitizing and Disinfecting are two terms meaning the same thing.
6. What steps should be followed for proper sanitizing?
 - a. Check sanitizer solution concentration with a test strip
 - b. Keep rags or cleaning cloths submerged in the sanitizer solution
 - c. Always allow for air drying
 - d. Never mix chemicals
 - e. All of the above

A person wearing a white lab coat is shown from the waist down, leaning over a dark, reflective surface. They are using a pink cloth to wipe the surface. To the left, a red bucket is partially visible. The background is a blurred indoor setting.

Cleaning, Sanitizing, and Disinfecting

In-Service Toolkit – Unit 4

After completing this in-service, employees should be able to

- Demonstrate the steps to proper cleaning and sanitizing for food contact surfaces
- Describe the differences between cleaning, sanitizing, and disinfecting
- Identify key principles to cleaning and sanitizing in foodservice operations



Learning Objectives

*Competency areas for
food service team members*



Why is sanitizing important?

Preventing foodborne illness:

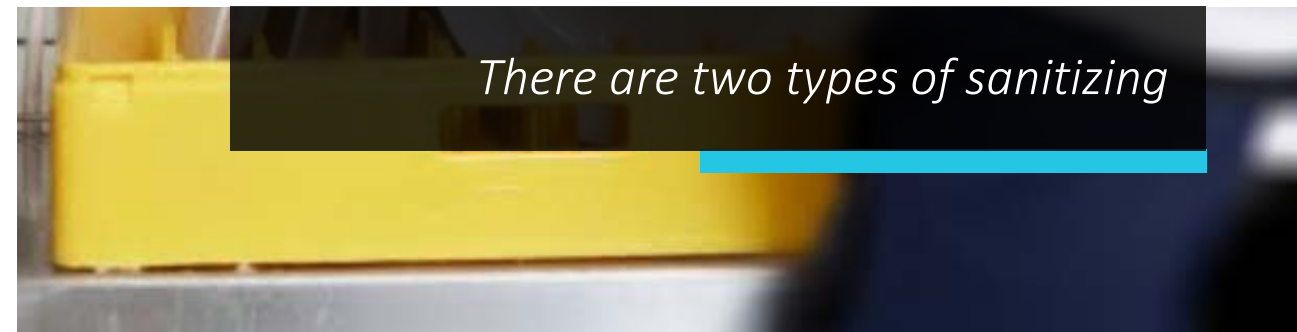
It is important to properly clean and sanitize food contact surfaces because during use, food contact surfaces can become contaminated with harmful microorganisms that can be transferred to food.

Sanitizing a food contact surface can be done with **Hot Water/Heat** or **Chemically**

Hot Water/Heat	Chemical
<ul style="list-style-type: none">• Hot water used in the third compartment of a three-compartment sink, it must be at least 171°F• High-temperature dishwashing machine final sanitizing rinse must be at least 180°F• Cleaned items must be exposed to these temperatures for at least 30 seconds	<ul style="list-style-type: none">• Always follow the manufacturer instructions for use and proper dilutions• Different factors influence the effectiveness of chemical sanitizers:<ul style="list-style-type: none">• Concentration• Temperature• Contact time



Methods of sanitizing



There are two types of sanitizing



Poor cleaning and sanitizing

Prevent these mistakes:

- Food contact surfaces are wiped clean instead of being washed, rinsed, and sanitized
- Wiping cloths are not stored in a sanitizer solution between uses
- Sanitizer solution was not prepared correctly





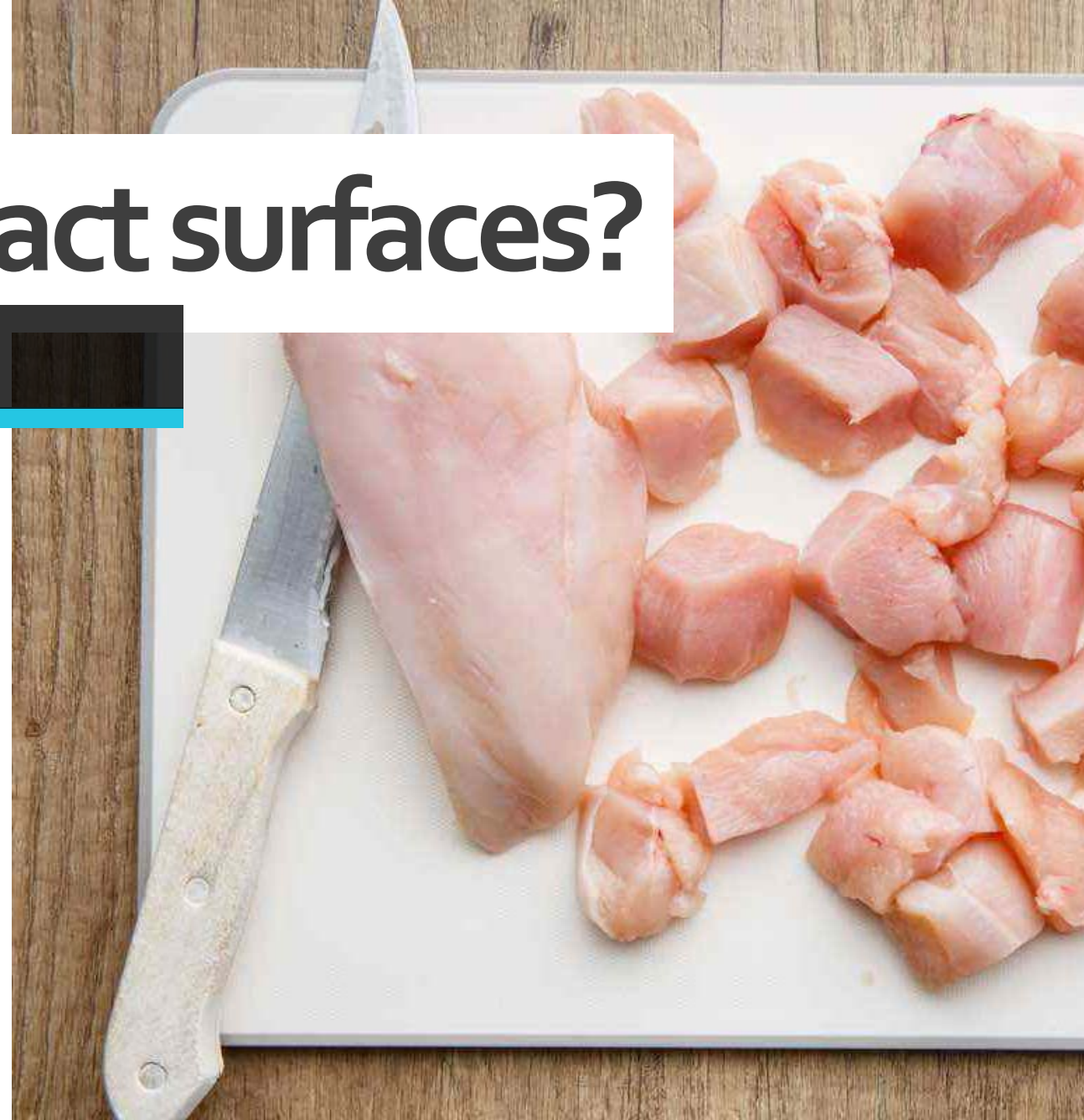
What's the difference?

Cleaning	Sanitizing	Disinfecting
Cleaning is the physical removal of soil, dust, grease and microbes from a surface. Cleaning includes using a soap or detergent to scrub these contaminants from a surface.	When we sanitize a surface, we are taking steps to <i>reduce</i> the number of pathogens on that surface to what is considered a safe level. Remember, harmful pathogens cause foodborne illness.	When disinfectants are used, hygienic cleaning is taken to a much higher level. Disinfectants are designed to <i>kill</i> pathogens on a surface.

What are food contact surfaces?

Examples of food contact surfaces:

- Plates
- Silverware
- Glassware
- Prep-tables
- Cutting boards and knives
- Food equipment such as a meat slicer, blender, food processor, etc.





Steps to sanitizing

Follow these steps for prep-tables and stationary equipment:

1. Wash the surface with detergent
2. Rinse the surface with clean water
3. Sanitize the surface (*be sure the sanitizer is at the correct concentration using a test strip*)
4. Allow the surface to air dry



Other forms of sanitizing

Using a 3-compartment sink:

1. Scrape off any food particles
2. Wash with detergent (1st compartment)
3. Rinse with clean water (2nd compartment)
4. Submerge in sanitizer, allow for designated contact time ~30 seconds (3rd compartment)
5. Air dry

Disinfecting

Due to infection control concerns, disinfecting may be necessary:

In high-touch areas such as door knobs, handles, light switches, etc. disinfecting may need to be performed to help control the spread of infectious disease.





Sanitizer vs. Disinfectant

	Sanitize (50-100ppm)	Disinfect (>600ppm)
Areas	Food contact surfaces: dishware, glasses, prep tables, kitchen equipment	Common areas: light switches, door knobs, time clock, transportation carts
Concentration	1/8 teaspoon bleach/1 pint water	3/4 teaspoon bleach/1 pint water
	1/4 teaspoon bleach/1 quart water	1½ teaspoon bleach/1 quart water
	1 teaspoon bleach/1 gallon water	2 Tablespoons bleach/1 gallon water
Contact time	2 minutes	5 minutes

Review

Key steps to proper sanitizing:

- Check sanitizer solution concentration with a test strip
- Replace sanitizer solution if the concentration is not within range
- NEVER mix chemicals
- Keep rags or cleaning cloths submerged in the sanitizer solution
- Always allow for air drying

