

# Basic Kitchen Safety Curriculum



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## About the Author



Mrs. Trista Best is a Registered Dietitian, Registered Environmental Health Specialist, Content Writer, and Adjunct Nutrition Professor. She has worked in public health for ten years, with half of that focused on food and kitchen safety.

She completed her Bachelor of Science in Health Science from Armstrong Atlantic State University in 2009, Master of Public Health Nutrition from Liberty University in 2014, Bachelor of Science in Food and Environmental Sciences from the University of Alabama in 2018, Dietetic Internship through Iowa State University, and Dietitian Registration in 2018. Her dietetic background is in public health and weight maintenance private practice.

As a dietitian, she seeks to provide her clients with the skills necessary to take control of their health one decision at a time. Her philosophy is based on the principles of intuitive eating to improve one's relationship with food and movement to be able to live at their best quality of life.

As an environmental health specialist, Trista works to equip her clients with the skills and knowledge necessary to provide their customers with safe food and their employees with a safe environment. Her philosophy for kitchen safety is being alert and having fun.

Mrs. Best currently works with women and children to help them achieve and live their healthiest lives through teaching vital life skills both in and out of the kitchen. Her passion for food, nutrition, and kitchen safety have cultivated over a decade of seeing firsthand how equipping people with this knowledge can change lives and simply make life easier.

# Curriculum Structure

The *Basic Kitchen Safety* curriculum is composed of the following lessons. Approximate lesson times are included.

| Lesson | Title                                                           | Approximate Time |
|--------|-----------------------------------------------------------------|------------------|
| One    | Introduction to Kitchen Safety                                  | 60 minutes       |
| Two    | Sanitation                                                      | 90 minutes       |
| Three  | Knife Safety                                                    | 60 minutes       |
| Four   | Prevention of Burns, Falls, and Electrical and Chemical Hazards | 60 minutes       |
| Five   | Kitchen Safety, Hazardous Kitchen Assessment                    | 60 minutes       |
|        | Total                                                           | 5 hours          |

The lessons follow a specific order, but you can vary the order as needed to fit your class needs. The pre-tests and post-tests are specific to each lesson. Lesson Five should be reserved for the end regardless of the order that the other lessons follow, as the assessment contains information from all of the previous lessons.

## Lesson Structure

Each lesson begins with a Lesson Overview, Lesson Objectives, and a Lesson at a Glance table which lists the lesson activities, materials required, suggested preparation steps, and approximate class time.

### Lesson Sections

The actual lesson follows the overview, which will contain some of the sections described below.

#### ***FOCUS***

Every lesson begins with a FOCUS activity intended to capture participants' attention. This may be in the form of a small or large class discussion, a game, a review of previous lesson information, or a demonstration. During this activity, participants are introduced to the topic of the lesson.

#### ***LEARN***

The LEARN activity in each lesson varies in its presentation mode. It may be a slide presentation, group activity, or demonstration.

#### ***REVIEW***

The majority of lessons end with a REVIEW activity intended to review the lesson's key messages or main points.

# Lesson One – Introduction to Kitchen Safety

## Lesson Overview

*Understanding and implementing kitchen safety is vital for both the employee and the customer. Safety is important on all levels. There are NO minor safety concerns. Hazards in the kitchen can lead to life-altering injury and death.*

## Lesson Objectives

After completing this lesson, participants will be able to:

- State the four primary areas of kitchen hazards
- Understand how burns can take place in the kitchen
- Demonstrate how mistakes in the kitchen can be hazardous

## Lesson at a Glance

| Activity | Materials                                                                                                                                                                                                                                                                                                                       | Preparation                                                                                                                                                                                                                                         | Approximate class time |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| FOCUS    | <ul style="list-style-type: none"><li>• <i>Introduction to Kitchen Safety Pre-Test</i></li><li>• <i>Introduction to Kitchen Safety Pre-Test – Answer Key</i></li></ul>                                                                                                                                                          | 1. Print/photocopy <i>Introduction to Kitchen Safety Pre-Test</i> (one per participant)                                                                                                                                                             | 10 minutes             |
| LEARN    | <ul style="list-style-type: none"><li>• <i>Introduction to Kitchen Safety</i> slide presentation</li><li>• <i>Top 10 Kitchen Safety Tips</i> video or slide presentation</li><li>• <i>Introduction to Kitchen Safety Listening Guide</i></li><li>• <i>Introduction to Kitchen Safety Listening Guide – Answer Key</i></li></ul> | 1. Print/photocopy <i>Introduction to Kitchen Safety Listening Guide</i> (one per participant)<br>2. Prepare <i>Introduction to Kitchen Safety</i> slide presentation and <i>Top 10 Kitchen Safety Tips</i> video or slide presentation for viewing | 40 minutes             |
| REVIEW   | <ul style="list-style-type: none"><li>• <i>Introduction to Kitchen Safety Post-Test</i></li><li>• <i>Introduction to Kitchen Safety Post-Test – Answer Key</i></li></ul>                                                                                                                                                        | 1. Print/photocopy <i>Introduction to Kitchen Safety Post-Test</i> (one per participant)                                                                                                                                                            | 10 minutes             |

## Lesson One – Introduction to Kitchen Safety

# FOCUS: Kitchen Safety Pre-Test

**10 minutes**

### **Purpose:**

The questions on the pre-test serve to gauge current participant knowledge on basic kitchen safety. Participants must become familiar with these concepts to ensure a safe kitchen experience.

### **Materials:**

- *Introduction to Kitchen Safety Pre-Test*
- *Introduction to Kitchen Safety Pre-test – Answer Key*

### **Facilitation Steps:**

1. Share these statistics with the participants:

Every year, over 100,000 people are injured in a kitchen-related accident. While burns rank highest in kitchen-related injuries, knives, electrical appliances, and lack of sanitation also lead to countless injuries and occupational illnesses.

2. What is kitchen safety?

Kitchen safety is comprised of practices that reduce the chance of accidents happening. In a commercial kitchen, safety is everyone's job. Workers must accept this responsibility throughout the working day. Accidents can occur because a worker lacks the knowledge of proper task procedure, carelessly performs an operation or job, or isn't consciously aware during the performance of a task. Careless workers not only jeopardize their own health and well-being but also endanger those around them.

3. Hand out the *Introduction to Kitchen Safety Pre-Test*. Give participants two minutes to complete the questions. Participants will set this aside until later on in the lesson.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Introduction to Kitchen Safety Pre-Test

Directions: Answer the questions by circling the best answer or writing your response in the space provided.

1. What are the four primary hazard areas in the kitchen?
2. True or False Sanitation does not include personal hygiene (circle one).
3. Which of the following can cause burns in the kitchen?
  - a. Fire
  - b. Water
  - c. Surfaces
  - d. Chemicals
  - e. All of the above
4. Explain why kitchen safety is essential in 100 words or less.

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5. True or False Materials in the kitchen can lead to serious cuts or injury (circle one).

## Introduction to Kitchen Safety Pre-Test – Answer Key

Directions: Answer the questions by circling the best answer or writing your response in the space provided

1. What are the four primary hazard areas in the kitchen?

Sanitation, Burns, Falls, and Cuts

2. True or False Sanitation does not include personal hygiene (circle one).

3. Which of the following can cause burns in the kitchen?

- a. Fire
- b. Water
- c. Surfaces
- d. Chemicals
- e. All of the above

4. Explain why kitchen safety is essential in 100 words or less.

Answers will vary

5. True or False Materials in the kitchen can lead to serious cuts or injury (circle one).

## Lesson One – Introduction to Kitchen Safety

# LEARN: Kitchen Safety Presentation

40 minutes

### Purpose:

The content shared with participants should help increase their overall knowledge of basic kitchen safety. It will give an overview of subsequent lessons providing a deeper dive into the main topics.

### Materials:

- *Top 10 Kitchen Safety Tips* video link or slide presentation
- *Introduction to Kitchen Safety Listening Guide*
- *Introduction to Kitchen Safety* slide presentation
- *Introduction to Kitchen Safety Listening Guide – Answer Key*

### Facilitation Steps:

1. Ask participants for suggestions they may have for preventing accidents in a kitchen. Take 5-10 participant suggestions. Explain that they are going to watch a short video introducing basic kitchen safety strategies.
2. Give participants the *Introduction to Kitchen Safety Listening Guide*. Have them complete the questions as they watch the video or watch the slide presentation. Tell them to try to get as many answers as they can.
3. Share the *Introduction to Kitchen Safety* slide presentation or share the video [https://www.youtube.com/watch?v=L-b8gb6\\_vrw](https://www.youtube.com/watch?v=L-b8gb6_vrw)

#### Slide 1: Introductory slide

**Slide 2: The Dangers** – In the kitchen, these dangers are real. Think again about the statistic we shared earlier: Every year, over 100,000 people are injured in a kitchen-related accident. While burns rank highest in kitchen-related injuries, knives, electrical appliances, and lack of sanitation also lead to countless injuries and occupational illnesses. For our purposes, we will categorize the dangers into four main areas: sanitation, burns, falls, and cuts.

**Slide 3:** Sanitation is essential, relating to four areas in the kitchen: food storage, food preparation, personal hygiene, and human error. According to the USDA, mishandling of food can lead to foodborne illness. While the United States has one of the safest food supplies in the world, preventing foodborne illness remains an ongoing and significant public health challenge. Later in this unit, you will be introduced to proper sanitation procedures.

**Slide 4:** Burns can occur from numerous sources in the kitchen. Some of them include fire, water, chemical, electrical, and hot surfaces. If you cook often, you've probably been burned once or twice in your kitchen. Now, imagine working in a kitchen where the pots are bigger, the heat is stronger, and the pressure is higher. According to the Bureau of Labor Statistics, 6,910 workers in the accommodation and food services industry lost time from work in 2017 due to burns caused by contact with hot surfaces.

Here are a few more statistics from the School Nutrition Association regarding burns in home kitchens.

- U.S. fire departments responded to an estimated annual average of 162,400 cooking-related fires between 2009-2013; those fires resulted in 430 civilian deaths, 5,400 civilian injuries, and \$1.1 billion in direct damage.
- Two of every five house fires are started in the kitchen.
- Unattended cooking was a factor in one-third of reported home cooking fires.
- Two-thirds of home cooking fires started with the ignition of food or other cooking materials.
- Ranges accounted for three of every five (61%) home cooking fire incidents. Ovens accounted for 13%.

**Slide 5:** Falls – The National Safety Council estimates that more than 25,000 slip-and-fall accidents occur every day in the United States,

## Basic Kitchen Safety

so restaurants must take a proactive role in preventing them. Most slips, trips, and falls are caused by a liquid spilled on the floor, most of which occur near sinks or fryer vats.

**Slide 6:** Cuts – According to Restaurant Technologies’ “*Kitchen Safety 101: How to Prevent costly Restaurant Injuries*” published in 2017, the largest percentage at 22% of the back-of-the-house claims were due to cuts, lacerations, and punctures. The use of knives and other common equipment such as grinders, slicers, and blenders are the devices with which most of these injuries occur. During this unit, you will learn specific knife safety skills.

**Slide 7:** Wrap Up – Here are a few reasons why kitchen safety is important. It protects both the employee and the customer. Hazards in the kitchen can lead to several injuries and death. Cooking is fun, but kitchen safety is a priority. Think about the tools of the trade used, including knives, hot surfaces, and bacteria. Culinary professionals should always pay attention to what they’re doing in the kitchen because one slip can cause serious injury or accidents.

Play the “Top 10 Kitchen Safety Tips” video link. The playing time is six minutes.

[https://www.youtube.com/watch?v=L-b8gb6\\_vrw](https://www.youtube.com/watch?v=L-b8gb6_vrw). In lieu of the link, the *Top 10 Kitchen Safety Tips* slide presentation may be shared. Explain to participants that this list of top 10 safety tips is just one list and that there are many opinions on what the top safety tips in the kitchen are. Think of these as suggested best practices or good habits to start practicing. As they become more experienced in the kitchen, they should keep adding to their toolkit.

4. After completing the video/slide presentation, go through the *Listening Guide* and ask participants to share answers. Have your *Listening Guide – Answer Key* available to assist if participants cannot answer.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Introduction to Kitchen Safety Listening Guide

Directions: Complete the following questions as slide presentations, videos, and other information are shared throughout the lesson.

1. What ranks highest in kitchen-related injuries?
2. What are the four hazard areas in the kitchen?
  - a.
  - b.
  - c.
  - d.
3. Name three of the areas in which implementing sanitation is vital to kitchen safety:
  - a.
  - b.
  - c.
4. Identify the other two sources of burns in a kitchen:
  - a. Fire
  - b. \_\_\_\_\_
  - c. Chemical/Electrical
  - d. \_\_\_\_\_
5. Where do most slip and fall incidents happen in kitchens?
  - a.
  - b.
6. What causes the highest percentage of back-of-the-house (kitchen) restaurant injuries?
7. What are two of the benefits of practicing proper kitchen safety?
8. Identify four recommended kitchen safety tips or strategies.
  - a.
  - b.
  - c.
  - d.

## Introduction to Kitchen Safety Listening Guide – Answer Key

Directions: Complete the following questions as slide presentations, videos, and information are shared throughout the lesson.

1. What ranks highest in kitchen-related injuries?  
burns
2. What are the four hazard areas in the kitchen?
  - a. Sanitation
  - b. Burns
  - c. Falls
  - d. Cuts
3. Name three of the areas in which implementing sanitation is vital to kitchen safety:
  - a. Food storage
  - b. Food preparation
  - c. Personal hygiene or Human error
4. Identify the other two sources of burns in a kitchen:
  - a. Fire
  - b. Water
  - c. Chemical/Electrical
  - d. Surfaces
5. Where do most slip and fall incidents happen in kitchens?
  - a. Sinks
  - b. Frying vats
6. What causes the highest percentage of back-of-the-house (kitchen) restaurant injuries?  
Cuts, lacerations, and punctures due to knives, grinders, slicers and other sharp equipment
7. What are two of the benefits of practicing proper kitchen safety? (answers will vary)  
It keeps employees and customers safe.  
Prevents injury and death.  
Prevents foodborne illness outbreaks.
8. Identify four recommended kitchen safety tips or strategies. (answers will vary)

## Lesson One – Introduction to Kitchen Safety

# REVIEW: Post-Test

**10 minutes**

**Purpose:**

This activity assesses participant knowledge about the facts presented throughout the introductory lesson on kitchen safety.

**Materials:**

- *Introduction to Kitchen Safety Post-Test*
- *Introduction to Kitchen Safety Post-Test – Answer Key*

**Facilitation Steps:**

1. Distribute the *Post-Test* to each participant, allowing them five minutes to complete it.
2. Share answers as a group. Have participants compare their results to the *Pre-Test*.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Introduction to Kitchen Safety Post-Test

Directions: Answer the questions by circling the best answer or writing your response in the space provided.

1. What are the four primary hazard areas in the kitchen?

2. True or False Sanitation does not include personal hygiene (circle one).

3. Burns in the kitchen can be caused by which of the following:

- a. Fire
- b. Water
- c. Surfaces
- d. Chemicals
- e. All of the above

4. Explain why kitchen safety is important in 100 words or less.

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5. True or False Materials in the kitchen can lead to serious cuts or injury (circle one).

## Introduction to Kitchen Safety Post-Test – Answer Key

Directions: Answer the questions by circling the best answer or writing your response in the space provided.

1. What are the four primary hazard areas in the kitchen?  
Sanitation, Burns, Falls, and Cuts
2. True or False Sanitation does not include personal hygiene (circle one).
3. Burns in the kitchen can be caused by which of the following:
  - a. Fire
  - b. Water
  - c. Surfaces
  - d. Chemicals
  - e. All of the above
4. Explain why kitchen safety is important in 100 words or less.  
Answers will vary
5. True or False Materials in the kitchen can lead to serious cuts or injury (circle one).

## Lesson Two – Sanitation

### Lesson Overview

*Sanitation in the kitchen is an important part of kitchen safety. Proper sanitation practices can prevent illness. The differences between cleaning and sanitizing will be explained as well.*

### Lesson Objectives

After completing this lesson, participants will be able to:

- Clearly define sanitation
- Understand the difference between cleaning and sanitizing
- Demonstrate proper sanitizing practices

### Lesson at a Glance

| Activity | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Preparation                                                                                                                                                                                                                            | Approximate class time |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| FOCUS    | <ul style="list-style-type: none"> <li>• <i>Sanitation</i> slide presentation</li> <li>• <i>Sanitation Pre-Test</i></li> <li>• <i>Sanitation Pre-Test – Answer Key</i></li> <li>• <i>Sanitation Graphic Organizer</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                               | <ol style="list-style-type: none"> <li>1. Print/photocopy <i>Sanitation Pre-Test</i> and <i>Sanitation Graphic Organizer</i> (one per participant)</li> <li>2. Prepare the <i>Sanitation</i> slide presentation for viewing</li> </ol> | 20 minutes             |
| LEARN    | <ul style="list-style-type: none"> <li>• A Flash of Food Safety Handwashing video clip (USDA) 3:14 length</li> <li>• <i>Proper Handwashing Technique</i> poster</li> <li>• <i>Handwashing</i> slide presentation</li> <li>• Glo Germ™ gel</li> <li>• U.V. lights</li> <li>• Access to warm water, soap, and towels</li> <li>• Cleaning and Sanitizing video clip (Iowa State University) 10:50 length</li> <li>• Glo Germ™ powder</li> <li>• Measuring cup and spoon sets</li> <li>• Chlorine</li> <li>• Water</li> <li>• Commercial sanitizer</li> <li>• Sanitizing wipes</li> <li>• Spray bottles</li> </ul> | <ol style="list-style-type: none"> <li>1. Prepare video clips to play</li> <li>2. Prepare materials for Handwashing Activity and Sanitizing Lab</li> </ol>                                                                             | 60 minutes             |
| REVIEW   | <ul style="list-style-type: none"> <li>• <i>Sanitation Post-Test</i></li> <li>• <i>Sanitation Post-Test – Answer Key</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ol style="list-style-type: none"> <li>1. Print/photocopy <i>Sanitation Post-Test</i> (one per participant)</li> </ol>                                                                                                                 | 10 minutes             |

## Lesson Two – Sanitation

# FOCUS: Introduction to Kitchen Sanitation

20 minutes

### Purpose:

Participants will work in groups to answer questions and test their knowledge of kitchen sanitation. They will receive an overview of key concepts relating to sanitation practices.

### Materials:

1. *Sanitation* slide presentation
2. *Sanitation Pre-Test*
3. *Sanitation Pre-Test – Answer Key*
4. *Sanitation Graphic Organizer*

### Facilitation Steps:

1. Divide the class into small groups. Give each participant the *Sanitation Pre-Test*.
2. As a group, have participants discuss each of the questions on the pre-test and determine the best answer. This is to see what they already know and don't know about sanitation in the kitchen. Allow five minutes to discuss as a group. Have one participant be the scribe and write down the group answers on the *Pre-Test*.
3. Hand out the *Sanitation Graphic Organizer*. Have participants complete this handout as you share the *Sanitation* slide presentation.
4. Slide presentation:

#### Slide 1: Introductory slide

**Slide 2:** What is Sanitation? Merriam Webster dictionary defines sanitation as 1) *The act or process of making sanitary or* 2) *The promotion of hygiene and prevention of disease by maintenance of sanitary conditions*. Remember, this is one of the most important areas of kitchen safety.

**Slide 3:** Areas of Sanitation – There are three primary areas of sanitation. Let's take a closer look at all three:  
Preparation/packaging/handling; personal hygiene; food contact surfaces.

**Slide 4:** Sanitation in Food – The main four safety steps in food handling, cooking, and

storage are essential to prevent foodborne illness. You can't see, smell, or taste harmful bacteria that may cause illness. In every step of food preparation, follow the four steps of the USDA Food Safe Families campaign to keep food safe:

Clean – Wash hands and surfaces often.

Separate – Don't cross-contaminate.

Cook – Cook to the right temperature.

Chill – Refrigerate promptly.

Whether in a commercial kitchen or at home, following proper sanitation practice in food preparation, packaging, and handling will ensure a safe food supply.

### Slide 5: Personal Hygiene

Handwashing: Later in this lesson, you'll learn proper handwashing procedure and practice it. Remember to wash your hands often!

Here are food tips regarding personal health for food handlers: Culinary workers may contaminate food, so employers and employees must be careful to ensure that no illness is passed on by those working in the industry. Do not go to work if you are vomiting or have diarrhea. Don't return to work until your symptoms have stopped for 48 hours. Do not go to work if you are sick with an illness that is likely to be transmitted through food. Such illnesses include gastroenteritis, hepatitis A and hepatitis E, sore throat with fever, and fever with jaundice. Also, avoid working in the kitchen with conditions like the cold, flu, and eye infections.

Clothing: Here are a few clothing safety tips from [www.foodsafetyandquality.com](http://www.foodsafetyandquality.com).

- Uniforms, aprons, and garments should be clean at the beginning of each shift and changed regularly.
- Do not wear uniforms or aprons outside the food-preparation area.

- Avoid using handkerchiefs for wiping or blowing noses; use disposable tissues.
- Wear disposable gloves.
- Avoid wearing jewelry while handling or preparing food.
- Do not wear damaged or deteriorating uniforms, aprons, or garments.

**Behavior:** Workers can control aspects of their behavior that may contribute to a sanitary environment. As a food handler, it is impossible to control the behavior of consumers. The customer may not wash his or her hands before eating; they might even eat leftovers that have been in the temperature danger zone too long. This behavior is not within the control of the food handler. However, the food handler can control their own behavior.

**Slide 6:** Cleaning vs. Sanitizing – According to the USDA:

1. **Clean FIRST.** Cleaning is an important first step to make sure you are removing bacteria that can cause foodborne illness from your kitchen. Cleaning is the first step to get rid of bacteria from these surfaces.
2. **THEN Sanitize.** Sanitizing is the second, but equally important step to removing bacteria from your kitchen. This step will kill any remaining bacteria. Including a sanitizing step in your kitchen cleaning routine reduces the number of foodborne illness-causing pathogens that survive in the kitchen. Sanitizing kills bacteria. However, sanitizing is most effective after you have cleaned those surfaces.

**Slide 7:** Two Types of Sanitizers – Food contact surfaces must be sanitized after they have been cleaned and rinsed. This can be done by using heat or chemicals.

**Slide 8:** Heat Sanitizing

- Soak in hot water of 171 degrees Fahrenheit or more
- Soak for at least 30 seconds OR
- Run items through a high-temperature dishwasher

**Slide 9:** Chemical Sanitizing – Either through soaking the surface in or spraying on a sanitizing solution. There are three types of chemical sanitizers: chlorine, iodine, and quaternary ammonium compounds (quats). These sanitizers are regulated by the Environmental Protection Agency (EPA).

**Slide 10:** What Should be Sanitized?

Food Contact Surface (FCS) is any surface that touches food such as knives, stockpots, cutting boards, utensils, tools, tables, and stationary or clean-in-place equipment.

**Slide 11:** Non-Food Contact Surfaces – These areas must be cleaned regularly and include ceilings, floors, the exterior of equipment, restrooms, walls, etc.

**Slide 12:** Manual Dishwashing – Clean and sanitize each sink and drainboard. Fill the first sink with detergent and water of 110 degrees Fahrenheit or more. Fill the second sink with clean water. Fill the third sink with a solution of water and sanitizer that is correctly concentrated. Place a clock with a second hand over the area so workers can follow the 30-second contact rule for surfaces.

**Slide 13 and 14:** Resources and End of Presentation

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Sanitation Pre-Test

Directions: The following questions will test your knowledge of sanitation. Please answer the questions by circling the best answer or writing your response in the space provided.

1. True or False     The terms cleaning and sanitizing can be used interchangeably (circle one).

2. What are the four steps to properly cleaning a food contact surface? Put them in order, steps 1-4.

\_\_\_\_\_ Rinse the surface

\_\_\_\_\_ Allow to dry

\_\_\_\_\_ Clean the surface

\_\_\_\_\_ Sanitize the surface

3. Define what a food contact surface is in 100 words or less.

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4. Put the steps to proper handwashing in order from first to last (1-6).

\_\_\_\_\_ Apply the recommended amount of soap based on product specifications.

\_\_\_\_\_ Dry thoroughly.

\_\_\_\_\_ Rub together vigorously for 20 seconds.

\_\_\_\_\_ Wet hands with hot water.

\_\_\_\_\_ Rinse thoroughly under running water.

\_\_\_\_\_ Clean under fingernails.

5. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?

a. 1 minute

b. 20 seconds

c. 10 seconds

d. 30 second

## Sanitation Pre-Test – Answer Key

Directions: The following questions will ask you about your knowledge of sanitation. Please answer the questions by circling the best answer or writing your response in the space provided.

1. True or **False** The terms cleaning and sanitizing can be used interchangeably (circle one).
2. What are the four steps to properly cleaning a food contact surface? Put them in order steps 1-4.
  - 2** Rinse the surface
  - 4** Allow to dry
  - 1** Clean the surface
  - 3** Sanitize the surface
3. Define what a food contact surface is in 100 words or less. (answers will vary)  
**Any surface that touches food such as knives, pots, cutting boards, utensils, tables, equipment.**
4. Put the steps to proper handwashing in order from first to last (1-6).
  - 2** Apply the recommended amount of soap based on product specifications.
  - 6** Dry thoroughly.
  - 3** Rub together vigorously for 20 seconds.
  - 1** Wet hands with hot water.
  - 5** Rinse thoroughly under running water.
  - 4** Clean under fingernails.
5. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?
  - a. 1 minute
  - b. 20 seconds**
  - c. 10 seconds
  - d. 30 seconds

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Sanitizing Graphic Organizer

Record your answers as information is shared during the lesson.

1. Define sanitation.
2. What are the three primary areas of sanitation that one must be aware of in a commercial kitchen?
  - 
  - 
  -
3. What are the four steps to keeping food safe?
  - Step 1:
  - Step 2:
  - Step 3:
  - Step 4:
4. What personal hygiene practices can you take to ensure a safe kitchen environment? Share at least three.
5. What is the difference between cleaning and sanitizing? What does each step do differently?
6. What are two ways to heat sanitize food contact surfaces?
7. What are three types of chemical sanitizers?

8. Define what a food contact surface (FCS) is.
9. When performing manual dishwashing, how many compartments do you need, and what do you put into each compartment?

## Sanitizing Graphic Organizer – Answer Key

1. Define sanitation.

The act or process of making sanitary or the promotion of hygiene and prevention of disease by maintenance of sanitary conditions in the kitchen.

2. What are the three primary areas of sanitation that one must be aware of in a commercial kitchen?

- Preparation, Packaging, Handling

- Personal Hygiene

- Food Contact Surfaces

3. What are the four steps to keeping food safe?

Step 1: Clean – wash hands and surfaces often

Step 2: Separate – don't cross-contaminate

Step 3: Cook – to the right temperature

Step 4: Chill – refrigerate promptly

4. What personal hygiene practices can you take to ensure a safe kitchen environment? Share at least three. (answers will vary but could include)

- Handwashing

- Do not go to work if you are sick

- Wear clean clothing

- Wear disposable gloves

- Do not wear kitchen uniforms outside of the food-preparation areas

- Avoiding using handkerchiefs for wiping or blowing noses

- Avoid wearing jewelry while handling or preparing food

- Control your behavior when preparing food

5. What is the difference between cleaning and sanitizing? What does each step do differently?

Cleaning is the first step to getting rid of bacteria from surfaces. Sanitizing will kill any remaining bacteria. Clean first, then sanitize.

6. What are two ways to heat sanitize food contact surfaces?

- a. Soak in hot water of 171 degrees F or more for at least 30 seconds

- b. Run items through a high-temperature dishwasher

7. What three types of chemical sanitizers?

- Chlorine
- Iodine
- Quaternary Ammonium Compounds

8. Define what a food contact surface (FCS) is.

This is any surface that touches food such as knives, pots, cutting boards, utensils, tools, tables, stationary or clean-in-place equipment.

9. When performing manual dishwashing, how many compartments do you need, and what do you put into each compartment?

Three sink compartments

Sink 1: Fill with detergent and water of 110 degrees F or more

Sink 2: Fill with clean water

Sink 3: Fill with water and sanitizer correctly concentrated

## Lesson Two – Sanitation

# LEARN: Cleaning vs. Sanitizing

60 minutes

### Purpose:

Participants will learn proper handwashing techniques. They will learn about the concept of cleaning versus sanitizing and proper procedures for each step. Finally, participants will work in groups to make a sanitizing solution and use it to sanitize a counter surface properly.

### Materials:

- *A Flash of Food Safety Handwashing* video clip (USDA) 3:14 length
- *Proper Handwashing Technique* poster
- *Handwashing* slide presentation
- Glo Germ™ gel
- U.V. lights
- Access to warm water, soap, and towels
- *Cleaning and Sanitizing video clip* (Iowa State University) 10:50 length
- Glo Germ™ powder
- Measuring cup and spoon sets
- Chlorine
- Water
- Commercial Sanitizer
- Sanitizing Wipes
- Spray bottles

### Facilitation Steps:

#### Activity 1: Proper Handwashing Procedures

1. Divide the class into five small groups. Give each group the handwashing kit items, including the U.V. light and Glo Germ gel.
2. Share the FDA Food Code recommended steps for proper handwashing found on the poster. Show *A Flash of Food Safety Handwashing* video clip.  
<https://www.youtube.com/watch?v=7zWHkZl-7lg> You can share some of the notes, which are from the FDA Food Code (in *italics*).

Handwashing procedures used by food workers must be adequate to eliminate pathogenic microorganisms from hand

surfaces. The FDA Food Code recommends the following:

Step 1 – Wet hands with hot water. (*Rinse under clean, running hot water.*)

Step 2 – Apply the recommended amount of soap based on product specifications (*Apply an amount of cleaning compound recommended by the cleaning compound manufacturer.*)

Step 3 – Rub together vigorously for 20 seconds. (*Rub together vigorously for at least 10 to 15 seconds.*)

Step 4 – Clean under fingernails. (*Paying particular attention to removing soil from underneath the fingernails during the cleaning procedure, and creating friction on the surfaces of the hands and arms or surrogate prosthetic devices for hands and arms, fingertips, and areas between the fingers.*)

Step 5 – Rinse thoroughly under running water. (*Thoroughly rinse under clean, running warm water.*)

Step 6 – Dry thoroughly. (*Immediately follow the cleaning procedure with thorough drying with a clean unused paper towel.*)

3. Have the *Proper Handwashing Technique* poster up in the classroom as a reference point for participants if they need a reminder.
4. Have each member of every group place a small amount of the Glo Germ gel, about the size of a nickel, into the palm of one hand, and spread completely over both hands as if applying hand lotion. Be sure to cover the hands completely, particularly under nails, around cuticles, and between fingers.
5. Have participants place their hands under U.V. light to view the “glowing germs” that exist before hand washing. This

demonstration works best in a darkened room.

6. Perform the FDA-recommended hand wash using soap and warm water as outlined in the steps reviewed. The amount of effort required to remove the simulated germs is equal to that of removing most bacteria.
7. Again, place hands under the U.V. light, paying particular attention to the thumbs, areas around nails, and between the fingers. The U.V. light will reveal the remaining “germs” as proof of improper hand washing.

Note: Complete removal of Glo Germ with regular washing is more difficult if the skin is chapped or cracked, indicating that bacteria are also harder to remove.

Recommend a follow-up care regime with a quality lotion twice daily and judicious use of a hand sanitizing gel.

### **Activity 2:** Introduction to Cleaning vs. Sanitizing

1. Share the Cleaning and Sanitizing video clip by Iowa State University length 10:50  
<https://www.youtube.com/watch?v=r0sWf0jf6T4>

Note: If there are any difficulties with this link, there are dozens more to choose from on YouTube.

You could also share this article from the USDA: Clean THEN Sanitize: A One-Two Punch to Stop Foodborne Illness in the Kitchen

<https://www.usda.gov/media/blog/2019/08/27/clean-then-sanitize-one-two-punch-stop-foodborne-illness-kitchen>

2. During the video, participants should be listening for information so that they can answer the following question: how is cleaning different than sanitizing?
3. After completion of the video or the article, pose the question: how is cleaning different than sanitizing? Ask for a variety of answers from the group. The answer should be similar to this:

Cleaning is an important first step to make sure you are removing bacteria that can cause foodborne illness from your kitchen. Cleaning is the first step to get rid of bacteria from these surfaces. Sanitizing is the second, but equally important step to removing bacteria from your kitchen. This step will kill any remaining bacteria.

### **Activity 3:** Making Sanitizing Solution Lab Activity and Sanitizing a Surface

1. Divide the class into six groups. Explain that each group is going to make a sanitizing solution. They are going to test the results of their solution against a commercial sanitizer and sanitizing wipes. Give each group access to liquid chlorine bleach and water. Have each group mix up a sanitizing solution using one of the following mixtures (depending on the amount you wish each group to have). Source: USDA

Large solution: 1 tablespoon of liquid chlorine bleach per 1 gallon of water

Medium solution: ½ tablespoon of liquid chlorine bleach per 2-quart water

Small solution: ¼ tablespoon of liquid chlorine bleach per 1 quarter of water

2. Explain to participants that they are going to be cleaning a counter first and then sanitizing using three different methods. Before cleaning and sanitizing, lightly dust over the counter surface using a small amount of Glo Germ powder. If each group is doing this in individual kitchen lab areas, dust each counter surface in the lab.
3. Remind participants to follow the four steps to properly cleaning and sanitizing a food contact surface:
  - a. Clean the surface.
  - b. Rinse the surface.
  - c. Sanitize the surface.
  - d. Allow to air dry.
4. To clean the counter surfaces, give participants access to warm, soapy water to wash the area. Have them rinse the surface with clear water and wipe it clean with single-use or paper towels.

## Basic Kitchen Safety

Tell participants that they should divide the counter surface that they just cleaned into three distinct areas. They will use three different methods, one in each space, to sanitize the counter. Use sanitizing solution in one, a commercial sanitizer in the second, and a sanitizing wipe in the third. It is recommended that the sanitizing solution be put into a spray bottle for ease of use; pour or spray the sanitizing solution on surfaces and wipe them clean with a paper towel. When using commercial sanitizers, follow the manufacturer's instructions on the label. Some commercial sanitizers require food surfaces to be rinsed after using the sanitizer.

Note: Instructors should have the commercial sanitizer and wipes available to all small groups.

5. Participants should clean and sanitize the counter surface until all visible powder disappears.
6. Pass the U.V. flashlight over the counter surface. Any remaining traces of powder will glow on the areas that weren't washed thoroughly. Ask participants which area of the counter was cleaned most thoroughly. Which method was most effective? Which was the least effective?

## Lesson Two – Sanitation

# REVIEW: Sanitation Post-Test

**10 minutes**

**Purpose:**

Participants will work in groups to complete a post-test, testing their knowledge of sanitation practices for maintaining a safe kitchen.

**Materials:**

1. *Sanitation Post-Test*
2. *Sanitation Post-Test – Answer Key*
3. *Group Sanitation Pre-Test*

**Facilitation Steps:**

1. Divide the class into the same small groups that they worked with on the *Sanitation Pre-Test*. Give each participant the *Sanitation Post-Test*.
2. As a group, have participants discuss each of the questions on the post-test and determine the best answer to see what they learned about sanitation in the kitchen. Allow five minutes to consider as a group. Have one participant be the scribe and write down the group answers on the *Post-Test*.
3. Have the group compare their *Post-Test* and *Pre-Test* answers as the instructor shares the answers from the answer key. How much has the group improved?

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Sanitation Pre-Test

Directions: The following questions will ask you about your knowledge of sanitation. Please answer the questions by circling the best answer or writing your response in the space provided.

1. True or False     The terms cleaning and sanitizing can be used interchangeably (circle one).
2. What are the four steps to properly cleaning a food contact surface? Put them in order, steps 1-4.  
\_\_\_\_\_ Rinse the surface  
\_\_\_\_\_ Allow to dry  
\_\_\_\_\_ Clean the surface  
\_\_\_\_\_ Sanitize the surface
3. Define what a food contact surface is in 100 words or less.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Put the steps to proper handwashing in order from first to last (1-6).  
\_\_\_\_\_ Apply the recommended amount of soap based on product specifications.  
\_\_\_\_\_ Dry thoroughly.  
\_\_\_\_\_ Rub together vigorously for 20 seconds.  
\_\_\_\_\_ Wet hands with hot water.  
\_\_\_\_\_ Rinse thoroughly under running water.  
\_\_\_\_\_ Clean under fingernails.
5. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?
  - a. 1 minute
  - b. 20 seconds
  - c. 10 seconds
  - d. 30 second

## Sanitation Pre-Test – Answer Key

Directions: The following questions will ask you about your knowledge of sanitation. Please answer the questions by circling the best answer or writing your response in the space provided.

1. True or **False** The terms cleaning and sanitizing can be used interchangeably (circle one).
2. What are the four steps to properly cleaning a food contact surface? Put them in order, steps 1-4.
  - 2** Rinse the surface
  - 4** Allow to dry
  - 1** Clean the surface
  - 3** Sanitize the surface
3. Define what a food contact surface is in 100 words or less. (answers will vary)  
**Any surface that touches food such as knives, pots, cutting boards, utensils, tables, equipment.**
4. Put the steps to proper handwashing in order from first to last (1-6).
  - 2** Apply the recommended amount of soap based on product specifications.
  - 6** Dry thoroughly.
  - 3** Rub together vigorously for 20 seconds.
  - 1** Wet hands with hot water.
  - 5** Rinse thoroughly under running water.
  - 4** Clean under fingernails.
5. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?
  - a. 1 minute
  - b. 20 seconds**
  - c. 10 seconds
  - d. 30 seconds

# Lesson Three – Knife Safety

## Lesson Overview

*Knives are an important, yet potentially dangerous tool in the kitchen. Participants will put together a personal plan for knife safety in the kitchen. Then they will put this plan in place using safe knife handling techniques during a kitchen lab activity.*

## Lesson Objectives

After completing this lesson, participants will be able to:

- Identify parts of a knife.
- Develop a personal knife safety plan of action to use while handling knives in a kitchen setting.
- Understand how to handle, maintain, and store cutlery safely.

## Lesson at a Glance

| Activity | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Preparation                                                                                                                                                                                                                                                           | Approximate class time |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| FOCUS    | <ul style="list-style-type: none"> <li>• <i>Knife Safety Pre-Test</i></li> <li>• <i>Knife Safety Pre-Test – Answer Key</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1. Print/photocopy <i>Knife Safety Pre-Test</i> (one per participant)                                                                                                                                                                                                 | 5 minutes              |
| LEARN    | <ul style="list-style-type: none"> <li>• <i>Knife Safety</i> slide presentation</li> <li>• <i>My Knife Safety Plan</i> handout</li> <li>• <i>Salsa Lab Activity</i> instructions</li> <li>• Salsa Lab Activity materials for each lab:               <ul style="list-style-type: none"> <li>• 4 large tomatoes</li> <li>• 1 clove of garlic</li> <li>• 1 medium white onion</li> <li>• 1 jalapeno pepper</li> <li>• 1 bunch cilantro</li> <li>• Pinch of salt</li> <li>• Chips</li> <li>• Cutting boards</li> <li>• Finger guards</li> <li>• Chef's knives</li> </ul> </li> </ul> | 1. Print/photocopy <i>My Knife Safety Plan</i> (one per participant)<br>2. Print/photocopy <i>Salsa Lab Activity instructions</i> (one per kitchen lab)<br>3. Gather salsa lab ingredients for each kitchen lab<br>4. Have cutting boards and chef's knives available | 40 minutes             |
| REVIEW   | <ul style="list-style-type: none"> <li>• <i>Knife Safety Post-Test</i></li> <li>• <i>Knife Safety Post-Test – Answer Key</i></li> <li>• Sheath materials:               <ul style="list-style-type: none"> <li>• Manilla folder or stiff paper</li> <li>• Scissors, box cutter or knife</li> <li>• Ruler</li> <li>• Pencil</li> <li>• Glue or tape</li> </ul> </li> </ul>                                                                                                                                                                                                         | 1. Print/photocopy <i>Knife Safety Post-Test</i> (one per participant)<br>2. Gather enough materials for the sheath making activity for each participant to have a set                                                                                                | 15 minutes             |

## Lesson Three – Knife Safety

# FOCUS: Introduction to Knife Safety

**5 minutes**

### **Purpose:**

The questions on the pre-test gauge current participant knowledge on basic knife safety. Participants must become familiar with these concepts to ensure a safe experience when handling a knife in the kitchen.

### **Materials:**

- *Knife Safety Pre-Test*
- *Knife Safety Pre-Test – Answer Key*

### **Facilitation Steps:**

1. Share these statistics with the participants:  
Knives cause more disabling injuries than any other type of hand tool. In a study investigating knife-related injuries requiring Emergency Department (E.D.) treatment among children and adults in the United States from 1990 through 2008, an estimated 8,250 knife-related injuries were treated in the U.S. Cooking and kitchen knives accounted for 36% of these injuries.
2. What is “knife safety?”  
Using a knife incorrectly is dangerous. Many adults handle kitchen knives casually and carelessly way too often. Basic knife safety boils down to awareness and some minor techniques.
3. Hand out the *Knife Safety Pre-Test*. Give participants two minutes to complete the questions. Have participants set this aside until later on in the lesson.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Knife Safety Pre-Test

Directions: The following questions will ask you about your knowledge of knife safety. Please answer the questions by circling the best answer or writing your response in the space provided.

1. Put an x by all of the items listed that are parts of a knife.

|              |                  |                    |
|--------------|------------------|--------------------|
| _____ Handle | _____ Bolster    | _____ Fascia       |
| _____ Sheath | _____ Tip        | _____ Butt         |
| _____ Tang   | _____ Tail       | _____ Ceiling      |
| _____ Jar    | _____ Spine      | _____ Cutting Edge |
| _____ Tunic  | _____ Blade Face |                    |

2. True or False     A sharp knife is a safe knife (circle one).

3. A \_\_\_\_\_ is designed to hold, carry, and protect knives.

4. True or False     You should cut food items towards the body and use an angled surface (circle one).

5. Name four practices for safe knife handling, storage, and maintenance.

## Knife Safety Pre-Test – Answer Key

Directions: The following questions will ask you about your knowledge of knife safety. Please answer the questions by circling the best answer or writing your response in the space provided.

1. Put an x by all of the items listed that are parts of a knife.

|                                            |                                                |                                                  |
|--------------------------------------------|------------------------------------------------|--------------------------------------------------|
| <input checked="" type="checkbox"/> Handle | <input checked="" type="checkbox"/> Bolster    | <input type="checkbox"/> Fascia                  |
| <input type="checkbox"/> Sheath            | <input checked="" type="checkbox"/> Tip        | <input checked="" type="checkbox"/> Butt         |
| <input checked="" type="checkbox"/> Tang   | <input type="checkbox"/> Tail                  | <input type="checkbox"/> Ceiling                 |
| <input type="checkbox"/> Jar               | <input checked="" type="checkbox"/> Spine      | <input checked="" type="checkbox"/> Cutting Edge |
| <input type="checkbox"/> Tunic             | <input checked="" type="checkbox"/> Blade Face |                                                  |

2. ☒ True or False A sharp knife is a safe knife (circle one).
3. A  sheath is designed to hold, carry, and protect knives.
4. True or ☒ False You should cut food items towards the body and use an angled surface (circle one).
5. Name four practices for safe knife handling, storage, and maintenance.

Answers will vary.

## Lesson Three – Knife Safety

# LEARN: Knife Safety Presentation and Lab Activity

**40 minutes**

### Purpose:

Participants will put together a personal plan for knife safety in the kitchen. Then they will put this plan in place using safe knife handling techniques during a kitchen lab activity.

### Materials:

- *Knife Safety* slide presentation
- *My Knife Safety Plan* handout
- *Salsa Lab Activity* instructions
- Salsa Lab Activity materials for each lab:
  - 4 large tomatoes
  - 1 clove of garlic
  - 1 medium white onion
  - 1 jalapeno pepper
  - 1 bunch cilantro
  - Pinch of salt
  - Chips
  - Cutting boards
  - Finger guards
  - Chef's knives

### Facilitation Steps:

1. Give participants the *My Knife Safety Plan* handout with instructions to take notes as you share information throughout the presentation.
2. Activity 1 - Slide presentation

**Slides 1:** Introductory slide

**Slide 2:** Anatomy of a Knife

Here are the parts of a knife:

- Spine – The unsharpened top of the blade opposite the cutting edge
- Blade face – The wide, flat part of the blade used to crush or transport food
- Handle – Where you grip the knife
- Butt – The farthest end of the handle away from the blade
- Tang – The part of the blade that extends into and attaches to the handle

- Bolster – Only in forged knives; adds weight and balances the knife
- Cutting Edge – The sharp edge of the knife blade
- Tip – The point of the blade used for precision cutting or quick slicing

### Slide 3: Four Knife Safety Considerations

According to the National Restaurant Association, there are four primary areas of knife safety.

### Slide 4: Four More Tips for Good Knife Safety

- Point 1: Never touch the blade, even when it is dull. Dull blades are unsafe blades.
- Point 2: Choose the appropriate knife for the job. If you're cutting a small piece of fruit, use a small knife, like a paring knife. If you're cutting large cuts of meat into smaller pieces, then a larger, sharp knife is appropriate. It is vital to choose a knife that feels comfortable and controlled in your hand.
- Point 3: Cutting foods away from the body decreases the chances of an accident. Also, cut food on a flat surface (such as a cutting board) so that it stays in one place. Do not hold food in your hand while you cut it. Finger guards can help keep your fingers safe.
- Point 4: Do not place knives in a sink of soapy water to soak with other dishes. Be careful when cleaning the knife blade and allow it to air dry. When not in use, store knives safely. Knives are safest when stored in a knife block or a sheath.

Source: Iowa State University

### Slide 5: Proper Cleaning

Main Point: A good quality knife will last years if taken care of properly.

Watch this video for proper steps:

<https://www.youtube.com/watch?v=NnEJOT4o1ag&feature=youtu.be>

**Slide 6: Proper Storage** – It is important to store your knives properly for safety reasons and to prevent damage and premature dulling of the blades. If you do not have a block, you can make a knife sheath out of paper following the instructions in this video:

<https://www.youtube.com/watch?v=IhqNkuLVfM8>

**Slide 7: Knife Cutting Techniques** – Here are three safe knife cutting techniques that every culinary professional should know.

**Slide 8: Basic Culinary Cuts** – Here are some basic culinary cuts that culinary professionals need to master as one of the basic skills in the kitchen.

**Slide 9: Two Ways to Properly Grip a Chef's Knife (slide 1)** – Properly holding the knife will prevent cuts. There are two ways to grip a chef's knife properly.

**Slide 10: Two Ways to Properly Grip a Chef's Knife (slide 2)** – Here is a second way to grip that will help you safely cut with a chef's knife.

**Slide 11: Sources**

### Activity 2 – Knife Cuts Lab Activity: Making Salsa

Knife Safety Kitchen Lab Activity – Making Salsa

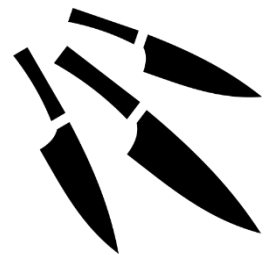
1. The only two pieces of equipment you'll need are a sharp chef's knife and a cutting board. Gather these two items and have them out and available for use in each kitchen lab.
2. Give each kitchen lab group the recipe. This will work best if there are 4-5 participants in each group.

Ingredients:

- 4 large tomatoes
- 1 clove of garlic
- 1 medium white onion
- 1 jalapeno pepper
- 1 bunch cilantro
- Pinch of salt
- Chips

3. Have each group assign one item on the list of ingredients to each participant (i.e. one participant will slice the onion, another the tomatoes, etc.).
4. Get all your ingredients ready and set them beside your cutting board. It also helps to have two bowls handy, one for prepped ingredients and another for trash.
5. Have each participant prepare the item assigned. Remind participants to use the knife safety techniques they have identified in their plan. Participants should peer review each other during the activity to ensure that safe practices are being followed.
6. Provide participants with the recipe and the tips for preparing each item.

Name: \_\_\_\_\_ Class: \_\_\_\_\_



# My Knife Safety Plan

Complete your plan for safe knife handling. Your plan should include practices for handling, storage, and maintaining of knives. Here are six knife safety practices to follow in the kitchen:

|   | Knife Safety Practice Description |
|---|-----------------------------------|
| 1 |                                   |
| 2 |                                   |
| 3 |                                   |
| 4 |                                   |
| 5 |                                   |
| 6 |                                   |

## Salsa Lab Activity

### Salsa Ingredients:

- 4 large tomatoes
- 1 clove of garlic
- 1 medium white onion
- 1 jalapeno pepper
- 1 bunch cilantro
- Pinch of salt
- Chips

### Participant assigned to prepare each ingredient:

---

---

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---

---

Step 1: Assign one item on the list of ingredients for each participant to prepare.

Step 2: Get all your ingredients ready and set them beside your cutting board. It helps to have two bowls handy, one for prepped ingredients and another for trash.

Step 3: Take turns using the chef knife and cutting board to prepare the item assigned. Remember to use the knife safety techniques that you have identified in your plan. Use finger guards if available. Watch each other during the activity to ensure all are following safe practices.

### Step 4: How to Dice an Onion and a Tomato

- Slice off the top of the onion roughly half an inch from the edge.
- Flip the onion up on the cut end and slice it in half through the root.
- Peel the outer layer back from both halves and place them in your trash bowl.
- Hold the root end. The cut face is out. Make vertical incisions (toward the cutting board) to the root end, but not through it.
- Make horizontal incisions (parallel to the board) to the cut end, but not through it.
- Make vertical incisions parallel to the cut face about a quarter-inch apart, all the way to root.
- Discard the root. Repeat steps on the other half and for the remaining onions.
- The onion and the tomato pieces should be the same size. Repeat for the tomato once you finish with the onion.

### Step 5: How to Mince Jalapeno and Garlic

Mincing is a finer cut than dicing. The basic technique is the same as the dice. You can also work the jalapeno and garlic into finer and finer pieces by holding the tip of the knife against the cutting board with your hand and rocking the blade quickly across your cut vegetables.

### Step 6: How to Mince Cilantro

Roll up and compact your cilantro to make it easier to slice, then use the same chopping technique as the garlic to finish mincing.

### Step 7: Final Assembly of Your Salsa

Combine all ingredients in a large bowl. Don't forget the salt. Now you're ready to get the chips out and enjoy your chips and salsa. If you're not eating it immediately, cover the salsa and put it in the refrigerator.

## Lesson Three – Knife Safety

# REVIEW: Post-Test and Sheath Making

**15 minutes**

### Purpose:

These questions check the mastery of participant knowledge on basic knife safety. It is important to become familiar with these concepts to ensure a safe experience when handling a knife in the kitchen.

### Materials:

- *Knife Safety Post-Test*
- *Knife Safety Post-Test – Answer Key*
- Sheath materials (optional activity):
  - Manilla folder or stiff paper
  - Scissors, box cutter or knife
  - Ruler
  - Pencil
  - Glue or tape

### Facilitation Steps:

1. Hand out the *Knife Safety Post-Test*. Give participants two minutes to complete the questions.
2. Access the *Knife Safety Post-Test – Answer Key*. For each question, call on volunteers to answer. Have participants self-check or peer-check the *Post-Test*. If possible, compare against *Pre-Test* results to see the knowledge gained through participation in the lesson.

### Optional: Sheath Making Activity

3. Explain to participants that if they are in a kitchen that does not have a knife block, they can make a knife sheath out of paper.

Needed materials:

- a. Manilla folder or stiff paper
  - b. Scissors, box cutter, or knife
  - c. Ruler
  - d. Pencil
  - e. Glue or tape
4. Follow the instructions by showing this video if possible:  
<https://www.youtube.com/watch?v=IhqNkuLVfM8>  
or <https://www.youtube.com/watch?v=V6EzFq8wzhg>

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Knife Safety Post-Test

Directions: The following questions will ask you about your knowledge of knife safety. Please answer the questions by circling the best answer or writing your response in the space provided.

1. Put an x by all of the items listed that are parts of a knife.

\_\_\_\_\_ Handle

\_\_\_\_\_ Bolster

\_\_\_\_\_ Fascia

\_\_\_\_\_ Sheath

\_\_\_\_\_ Tip

\_\_\_\_\_ Butt

\_\_\_\_\_ Tang

\_\_\_\_\_ Tail

\_\_\_\_\_ Ceiling

\_\_\_\_\_ Jar

\_\_\_\_\_ Spine

\_\_\_\_\_ Cutting Edge

\_\_\_\_\_ Tunic

\_\_\_\_\_ Blade Face

2. True or False      A sharp knife is a safe knife (circle one).

3. A \_\_\_\_\_ is designed to hold, carry, and protect knives.

4. True or False      You should cut food items towards the body and use an angled surface (circle one).

5. Name four practices for safe knife handling, storage, and maintenance.

## Knife Safety Post-Test – Answer Key

Directions: The following questions will ask you about your knowledge of knife safety. Please answer the questions by circling the best answer or writing your response in the space provided.

1. Put an x by all of the items listed that are parts of a knife.

|                                            |                                                |                                                  |
|--------------------------------------------|------------------------------------------------|--------------------------------------------------|
| <input checked="" type="checkbox"/> Handle | <input checked="" type="checkbox"/> Bolster    | <input type="checkbox"/> Fascia                  |
| <input type="checkbox"/> Sheath            | <input checked="" type="checkbox"/> Tip        | <input checked="" type="checkbox"/> Butt         |
| <input checked="" type="checkbox"/> Tang   | <input type="checkbox"/> Tail                  | <input type="checkbox"/> Ceiling                 |
| <input type="checkbox"/> Jar               | <input checked="" type="checkbox"/> Spine      | <input checked="" type="checkbox"/> Cutting Edge |
| <input type="checkbox"/> Tunic             | <input checked="" type="checkbox"/> Blade Face |                                                  |

2. ☒ True or ☐ False A sharp knife is a safe knife (circle one).

3. A  is designed to hold, carry, and protect knives.

4. True or ☒ False You should cut food items towards the body and use an angled surface (circle one).

5. Name four practices for safe knife handling, storage, and maintenance.

Answers will vary.

## Lesson Four – Prevention of Burns, Falls, and Electrical and Chemical Hazards

### Lesson Overview

*This lesson will help participants in two different ways. First, they will learn to identify all potential hazards in the kitchen relating to burns, falls, and electrical and chemical hazards. They will also learn prevention techniques to employ to keep these types of accidents from occurring.*

### Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the most common and serious hazards in the kitchen
- Demonstrate and share knowledge of how to prevent common kitchen hazards

### Lesson at a Glance

| Activity | Materials                                                                                                                                                                                                                                                                                                                                                                                         | Preparation                                                                                                                                                                                                                                                                                                                                            | Approximate class time |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| FOCUS    | <ul style="list-style-type: none"><li>• <i>Burns, Falls, and Electrical and Chemical Hazards Pre-Test</i></li><li>• <i>Burns, Falls, and Electrical and Chemical Hazards Pre-Test – Answer Key</i></li><li>• <i>Burns, Falls, and Electrical and Chemical Hazards Listening Guide</i></li><li>• <i>Prevention: Burns, Falls, and Electrical and Chemical Hazards</i> slide presentation</li></ul> | <ol style="list-style-type: none"><li>1. Print/photocopy <i>Burns, Falls, and Electrical and Chemical Hazards Pre-Test</i> and <i>Burns, Falls, and Electrical and Chemical Hazards Listening Guide</i> (one per participant)</li><li>2. Prepare the <i>Burns, Falls, and Electrical and Chemical Hazards</i> slide presentation for viewing</li></ol> | 40 minutes             |
| LEARN    | <ul style="list-style-type: none"><li>• <i>Burns, Falls, and Electrical and Chemical Accidents Listening Guide</i></li><li>• <i>Kitchen Safety Posters</i></li><li>• <i>Class Presentation Rubric</i></li><li>• Computer access for online research, books, articles on kitchen safety</li></ul>                                                                                                  | <ol style="list-style-type: none"><li>1. Print/photocopy <i>Class Presentation Rubric</i> (one for each group)</li><li>2. Hang up <i>Kitchen Safety Posters</i> in each kitchen lab for reference.</li></ol>                                                                                                                                           | 60-120 minutes         |
| REVIEW   | <ul style="list-style-type: none"><li>• <i>Kitchen Safety Trivia Cards</i></li></ul>                                                                                                                                                                                                                                                                                                              | <ol style="list-style-type: none"><li>1. Have <i>Kitchen Safety Trivia Cards</i> ready to play</li></ol>                                                                                                                                                                                                                                               | 10 minutes             |

## Lesson Four – Prevention of Burns, Falls, and Electrical and Chemical Hazards

### FOCUS: Introduction to Prevention of Burns, Falls, and Electrical and Chemical Hazards

**40 minutes**

**Purpose:**

The questions on the pre-test gauge current participant knowledge on kitchen burns, falls, electrical hazards, and chemical hazards. They will become familiar with the common causes of each area to prevent the same from happening.

**Materials:**

- *Burns, Falls, Electrical, and Chemical Hazards Pre-Test*
- *Burns, Falls, Electrical, and Chemical Hazards Pre-Test – Answer Key*
- *Burns, Falls, Electrical, and Chemical Hazards Listening Guide*
- *Prevention: Burns, Falls, Electrical, and Chemical Accidents* slide presentation

**Facilitation Steps:**

1. Share these statistics with the participants: According to the Bureau of Labor Statistics, Accommodation and Food Services ranks 7<sup>th</sup> out of the top 19 most accident-prone industries. Because the statistics are high and many young people work in this area, it is essential to learn how to prevent these types of injuries from happening.
2. Hand out the *Burns, Falls, Electrical, and Chemical Hazards Pre-Test*. Give participants five minutes to complete the questions.
3. Share the answers to the *Pre-Test*, having participants check their own. This will help them understand how much they know or don't know on the topic.
4. Hand out the *Burns, Falls, Electrical, and Chemical Hazards Listening Guide*. Participants should take notes and complete information on each type of hazard listed.
5. Slide Presentation:

**Slide 1:** Introduction slide

**Slide 2:** Most Dangerous Items in the Kitchen –

According to the Consumer Product Safety Commission, here are the top ten most dangerous items in the kitchen. What categories of injuries are most common? From this list, we see cuts and burns. What else?

Cintas Corporation cites these as the top four:

1. Lacerations and punctures
2. Burns
3. Sprains and strains
4. Eye injuries

One in 20 on-the-job injuries and illnesses worldwide occur at eating and drinking establishments. According to studies from the Occupational Safety and Health Administration (OSHA), for every \$1 spent in safety programs, businesses can save between \$4 to \$6 from costs associated with injuries and fatalities.

In addition to those four, slip-and-fall injuries and electrical and chemical accidents are also real risks. Let's see how we can prevent these!

**Slide 3:** Burns in the Kitchen – Burns can occur from many causes in the kitchen. Knowledge of potential burn hazards is essential for prevention.

**Slide 4:** Fryers – Deep-fat fryers are the top cause of burns in restaurant kitchens, according to the federal government's Occupational Safety & Health Administration. Here are a few prevention tips regarding the use of fryers from the National Restaurant Association:

- Oil and water don't mix. Dry the fryer and fryer baskets after washing with water to avoid splatters. Don't allow excess ice crystals from frozen foods to get into the cooking oil.
- Don't stand too close or lean over hot oil.
- Cook at the manufacturer's recommended temperatures. Don't overheat the oil.
- Gently raise or lower the fryer basket while cooking to avoid splashing.

## Basic Kitchen Safety

- Use the correct grease level to help prevent splatters; never pour past the fill line.
- Handle only one fryer basket at a time.
- Provide protective mitts and gloves here and elsewhere in the kitchen as needed. Never use wet materials as potholders.

**Slide 5:** Stove-tops and Grills – Here are a few prevention tips regarding the use of stove-tops and grills from the National Restaurant Association:

- Clean grill and stove surfaces to prevent grease flare-ups.
- Adjust burner flames to the proper level. On stove-tops, they should cover only the bottom of the pan.
- Avoid filling pots too high.
- Place foods carefully into hot water to avoid splashing.
- Ensure lids are tight-fitting, and handles are securely attached to vessels that contain hot liquids.
- Be careful when moving or carrying a heavy pot of hot liquid off the stove. Ask for help if needed. Make sure you transfer the pot to a place that can hold it steady.
- If transferring hot liquids using a rolling cart, ensure that the container is secure and will not tip or spill.
- Use proper cooking tools, such as tongs, to prevent contact with hot surfaces and foods.

**Slide 6:** Steamers and Ovens – Here are a few prevention tips regarding the use of steamers and ovens from the National Restaurant Association:

- Don't reach above an oven or steamer; steam can burn.
- Don't open cookers and steam ovens when they are under pressure.
- Open ovens or steamers by standing to the side, keeping the door between you and the open steamer.
- When steamers are stacked, open the top steamer first to prevent burns from the rising steam.

**Slide 7:** Microwaves – Here are a few prevention tips regarding the use of microwaves from the National Restaurant Association:

- Place microwaves within easy reach.
- The door of the microwave should be lower than the face of the person using it.

- Allow the steam to escape by using plastic wrap or vented containers.
- Lift the lid away from the face.

**Slide 8:** Easy Burn Prevention Dos – Here are some prevention guidelines from the Occupational Safety and Health Administration (OSHA) Do's:

- Wear long sleeves and long pants.
- Use potholders, gloves, and mitts.
- Never use wet material.
- Adjust burner flames to cover only the bottom of the pan.
- Check hot food on stoves carefully.
- Avoid steam. Open lids away from you.
- Use caution when removing items from the microwave.
- Wear sturdy footwear that offers protection for your feet.

**Slide 9:** Easy Burn Prevention Don'ts – Here are some prevention guidelines from the Occupational Safety and Health Administration (OSHA) Don'ts:

- Leave hot oil unattended.
- Lean over pots of boiling liquids.
- Spill water into the hot oil.
- Allow pot handles or cooking utensils to stick out from counters or stove front.
- Keep pot handles away from burners.
- Use metal containers, foil, or utensils in microwave ovens.

**Slide 10:** Burn Treatments – Here are recommended burn treatments from the Centers for Disease Control and Prevention. *Read the four treatments from the slide.*

First-degree burns usually heal without further treatment. However, if a first-degree burn covers a large area of the body or the victim is an infant or elderly, seek emergency medical attention.

**Slide 11:** Fall Prevention – Statistics from the National Safety Council show that most kitchen falls are caused by liquid on the floor.

- Here are some tips from the State Food Safety organization for preventing slips, trips, and falls.
- Don't rush around corners, doorways, or narrow hallways.
- Wear proper shoes with tied shoelaces, non-slip soles, and closed toes.
- Keep floors clean and dry.

## Basic Kitchen Safety

- Watch where you are going. Take extra caution around cables, lighting, obstructions, and uneven surfaces.

**Slide 12:** Electrical Hazards – OSHA states that electrical hazards occur in commercial kitchens because of the variety of electrical appliances in use.

Each employee has a risk of electrocution, shock, or death from:

- unsafe work practices
- faulty electrical equipment or wiring
- use of damaged receptacles and connectors

Remember, one-tenth (0.1) amp of electricity flowing through the human body for two seconds can cause death. Any electrical circuit can pose a potentially lethal hazard to employees. With so many electrical appliances in use in commercial kitchens, it is essential for businesses to put safeguards in place and teach safe work practices to staff.

**Slide 13:** Electrical Hazard Preventions

- Keep cords clear of equipment.
- Do not plug in electrical equipment while touching the water.
- Do not use cords that are worn or damaged.
- Do not touch a worker being electrocuted until power is shut off.

**Slide 14:** Chemical Hazards – Chemical hazards are harmful substances found in food either naturally or unintentionally.

Here are some sources. (see slide)

Chemicals in commercial kitchens may present many hazards, including:

- Skin irritation. Soaps and detergents can cause skin irritation.
- Infections. Hazardous chemicals can infect broken skin.
- Burns. Chemicals like oven cleaners, drain openers, and grill cleaners can cause burns to the skin and eyes.
- Respiratory harm. Chlorine and ammonia can cause respiratory, skin and eye irritation, and death, especially if they are mixed together.

**Slide 15:** Chemical Hazard Preventions – Here are a few ways to prevent chemical hazard accidents in a commercial kitchen.

- Proper cleaning and sanitizing procedures are necessary for preventing chemical contamination.
- Train employees to follow guidelines to prevent chemical hazards.
- Limit the use of chemicals to GRAS (generally recognized as safe)
- Label and store chemicals away from food products.

**Slide 16:** OSHA Chemical Hazards Hierarchy of Controls – Controlling exposure to hazardous chemicals and toxic substances is the fundamental method of protecting workers in all areas, including food service. A hierarchy of controls is used as a means of determining how to implement reasonable and effective controls. In other words, what is the best way to control potential exposure to dangerous substances in the commercial kitchen workspace?

OSHA's longstanding policy is that engineering and work practice controls must be the primary means used to reduce employee exposure to toxic chemicals. This means to implement physical changes to the workplace, which eliminates/reduces the hazard on the job/task or establish efficient processes or procedures.

Where possible, elimination or substitution is the most desirable. Administrative or work practice controls may be appropriate in some cases where engineering controls cannot be implemented. Personal protection equipment (PPE), such as eye protection and gloves, is the least desirable but may still be effective.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## **Burns, Falls, and Electrical and Chemical Hazards**

### **Pre-Test**

Directions: The following questions will ask you about your knowledge of burns, falls, electrical hazards, and chemical hazards. Please answer the questions by circling the best answer or writing your response in the space provided.

1. What are four common types of accidents and injuries that can occur in a kitchen?
  
  
  
  
  
  
  
  
  
  
2. What are four sources for burns in the kitchen?
  
  
  
  
  
  
  
  
  
  
3. Name three things you can do to prevent falls in the kitchen.
  
  
  
  
  
  
  
  
  
  
4. True or False      It is safe to plug in electrical equipment while touching water (circle one).
  
  
  
  
  
  
  
  
  
  
5. True or False      Chemical hazards are harmful substances found in food naturally or unintentionally (circle one).

## Burns, Falls, and Electrical and Chemical Hazards

### Pre-Test – Answer Key

Directions: The following questions will ask you about your knowledge of burns, falls, electrical hazards, and chemical hazards. Please answer the questions by circling the best answer or writing your response in the space provided.

1. What are four common types of accidents and injuries that can occur in a kitchen? Answers will vary but may include:

Lacerations and punctures

Slip and fall

Burns

Electrical accidents

Sprains and strains

Chemical accidents

Eye injuries

2. What are four sources for burns in the kitchen? Answers may include:

Fryers

Steamers

Stovetops

Ovens

Grills

Microwaves

3. Name three things you can do to prevent falls in the kitchen. Answers may include:

Don't rush

Keep floors clean and dry

Wear proper shoes

Watch where you're going

4. True or **False** It is safe to plug in electrical equipment while touching water (circle one).

5. **True** or False Chemical hazards are harmful substances found in food naturally or unintentionally (circle one).

Name: \_\_\_\_\_ Class: \_\_\_\_\_

# Burns Listening Guide

Take notes as information is shared by the teacher and by other participants.

| Causes                                    | Prevention Strategies |
|-------------------------------------------|-----------------------|
| Information from slide presentation       |                       |
| Information from participant presentation |                       |

Name: \_\_\_\_\_ Class: \_\_\_\_\_

# Slips, Trips, and Falls Listening Guide

Take notes as information is shared by the teacher and by other participants.

| Causes                                    | Prevention Strategies |
|-------------------------------------------|-----------------------|
| Information from slide presentation       |                       |
| Information from participant presentation |                       |

Name: \_\_\_\_\_ Class: \_\_\_\_\_

# Electrical Hazards Listening Guide

Take notes as information is shared by the teacher and by other participants.

| Causes                                    | Prevention Strategies |
|-------------------------------------------|-----------------------|
| Information from slide presentation       |                       |
| Information from participant presentation |                       |

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Chemical Hazards Listening Guide

Take notes as information is shared by the teacher and by other participants.

| Causes                                    | Prevention Strategies |
|-------------------------------------------|-----------------------|
| Information from slide presentation       |                       |
| Information from participant presentation |                       |

## Lesson Four – Prevention of Burns, Falls, and Electrical and Chemical Hazards

# LEARN: Research Project and Presentations

60-120 minutes

### Purpose:

Participants work in groups to conduct research and create a presentation.

### Materials:

- *Burns, Falls, and Electrical and Chemical Hazards Listening Guide*
- *Kitchen Safety Poster*
- *Class Presentation Rubric*
- Computer access for online research, books, articles on kitchen safety

### Facilitation Steps:

1. Divide the class into small groups of three or four participants. These small groups will work together to research, develop, and deliver a presentation.
2. Participants will prepare and deliver a five-minute multi-media class presentation. Each group will be assigned a different kitchen hazard area to research. Choices include burns, cuts, sanitation, falls, electrical hazards, or chemical hazards. The presentation should include the following information:
  - Sources of the hazard in the kitchen
  - Prevention strategies
  - Statistics regarding this type of injury
3. Participants should choose a minimum of two different media with which to present the information. It could be a slide presentation, video, lecture, models, written handouts, role-play scenarios, etc.
4. Participants should limit their presentation time to five minutes and include ten slides. Give the participants time in class to research, prepare. Participants can work in groups and/or you assign this as work outside of class.
5. A presentation rubric is included in the lesson for your convenience.
6. Remind the participants that as they listen to the presentations, they should be taking notes on their Listening Guide for each type of hazard.
7. Hang the Kitchen Safety Poster in each kitchen lab for future reference and reminders of kitchen safety.

## Class Presentation Rubric

Use the following rubric to assess the small group presentation.

Participants:

| Task                                                                    | Above<br>Expectations<br>3 points | Meets<br>Expectations<br>2 points | Needs<br>Improvement<br>1 point |
|-------------------------------------------------------------------------|-----------------------------------|-----------------------------------|---------------------------------|
| Did the speaker connect with the audience?                              |                                   |                                   |                                 |
| Was the core message simple?                                            |                                   |                                   |                                 |
| Did the presentation start strong?                                      |                                   |                                   |                                 |
| Did the speaker make eye contact and smile?                             |                                   |                                   |                                 |
| Did the speaker use their voice effectively?                            |                                   |                                   |                                 |
| Did the presentation include something that engaged the audience?       |                                   |                                   |                                 |
| Did the speaker use more than one technique to present the information? |                                   |                                   |                                 |
| Did the presenter speak slowly in a relaxed way?                        |                                   |                                   |                                 |
| Did the presentation end with a strong conclusion?                      |                                   |                                   |                                 |
| Total                                                                   |                                   |                                   |                                 |

## Lesson Four – Prevention of Burns, Falls, and Electrical and Chemical Hazards

### REVIEW: Trivia Game

10 minutes

**Purpose:**

Participants will review what they know about burns, falls, cuts, electrical hazards, and chemical hazards by playing the *Kitchen Safety Trivia Cards*.

**Materials:**

- *Kitchen Safety Trivia Cards*

**Facilitation Steps:**

1. Explain to participants that they are five different categories of questions in the trivia game: Burns & Falls, Cuts, Sanitation, Electrical & Chemical Accidents, and Bonus.

Whole class version:

- a. Mix up all of the trivia cards.
- b. Have participants line up or get in a circle.
- c. Ask the first participant the first question.
- d. Give the participants a short time to answer. If it is correct, affirm it. If they do not answer correctly, that participant sits down or leaves the circle. Go to the next participant and so on until the correct answer is given.
- e. The last participant standing is the kitchen safety guru.

Teams version:

- a. Divide the class into teams of four or five participants.
- b. Assign each team a category.
- c. Ask the whole team the first question from each pile of category cards. Each team can choose one 'bonus' card if they are unsure about the answer on their category card.
- d. Each correct answer is one point for the team. The team with the most points at the end wins.

# Lesson Five – Kitchen Safety, Hazardous Kitchen Assessment

## Lesson Overview

*This lesson will involve a variety of props to simulate a kitchen with many hazards. Participants will walk through the “hazardous kitchen” to identify each hazard and report on how to properly handle it. This activity will serve as an assessment. The lesson will also include a post-test, which participants will work on when not involved in the activity.*

## Lesson Objectives

After completing this lesson, participants will be able to:

- Test their knowledge of kitchen safety in a variety of topics
- Identify hazards in a kitchen setting
- Understand how to mitigation common kitchen hazards

## Lesson at a Glance

| Activity | Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Preparation                                                                                                                                                                                                     | Approximate class time |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| FOCUS    | <ul style="list-style-type: none"> <li>• <i>Kitchen Safety Summative Post-Test</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                   | <ol style="list-style-type: none"> <li>1. Print/photocopy <i>Kitchen Safety Summative Post-Test</i> (one per participant)</li> </ol>                                                                            | 20 minutes             |
| LEARN    | <p>Kitchen Safety Kit Props:</p> <ul style="list-style-type: none"> <li>• Hazard tape</li> <li>• Faux spill</li> <li>• Chipped dish</li> <li>• Overloaded outlet</li> <li>• Cooking pot with faux flames</li> <li>• Plastic rodent</li> <li>• Mouse droppings</li> </ul> <p>Instructor Provided Props:</p> <ul style="list-style-type: none"> <li>• Small rug</li> <li>• Knife (in a drawer)</li> <li>• Dishtowel</li> </ul> <p><i>Hazardous Kitchen Simulation</i> handout</p> | <ol style="list-style-type: none"> <li>1. Print/photocopy (<i>Proper name of document</i>)s for each participant</li> <li>2. Prepare (<i>Proper name of document</i>) slide presentation for viewing</li> </ol> | 30 minutes             |
| REVIEW   | <ul style="list-style-type: none"> <li>• <i>Kitchen Safety Summative Post-Test</i></li> <li>• <i>Kitchen Safety Summative Post-Test Answer Key</i></li> <li>• <i>Hazardous Kitchen Simulation</i> handout</li> </ul>                                                                                                                                                                                                                                                            | <ol style="list-style-type: none"> <li>1. Access <i>Post-Test Answer Key</i></li> </ol>                                                                                                                         | 15 minutes             |

## **Lesson Five – Kitchen Safety, Hazardous Kitchen Assessment**

### **FOCUS: Summative Post-Test**

**20 minutes**

**Purpose:**

Participants will test their knowledge of kitchen safety through a written post-test.

**Materials:**

- *Kitchen Safety Summative Post-Test*
- *Kitchen Safety Summative Post-Test – Answer Key*

**Facilitation Steps:**

1. Distribute the Kitchen Safety Summative Post-Test to each participant, allowing 20 minutes to complete.
2. Have participants hang onto this until later on in this lesson.

Name: \_\_\_\_\_ Class: \_\_\_\_\_

## Kitchen Safety Summative Post-Test

Directions: The following questions will ask you about your knowledge of food safety. Please answer the questions by circling the best answer or writing your response in the space provided

1. What are four primary hazard areas in the kitchen?
2. True or False Sanitation does not include personal hygiene (circle one).
3. Which of the following can cause burns in the kitchen?
  - a. Fire
  - b. Water
  - c. Surfaces
  - d. Chemicals
  - e. All of the above
4. In 100 words or less, explain why kitchen safety is important.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. True or False Materials in the kitchen can lead to serious cuts or injury (circle one).
6. True or False The terms cleaning and sanitizing can be used interchangeably (circle one).
7. What are the four steps to properly cleaning a food contact surface? Put them in order, steps 1-4.  
\_\_\_\_\_ Rinse the surface  
\_\_\_\_\_ Allow to dry  
\_\_\_\_\_ Clean the surface  
\_\_\_\_\_ Sanitize the surface
8. In 100 words or less, define a food contact surface.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?
  - a. 1 minute
  - b. 20 seconds
  - c. 10 seconds
  - d. 30 second

## Basic Kitchen Safety

10. Put the steps to proper handwashing in order from first to last by placing a number 1-6 beside each step.

- \_\_\_\_\_ Apply recommended amount of soap based on product specifications.
- \_\_\_\_\_ Dry thoroughly.
- \_\_\_\_\_ Rub together vigorously for 20 seconds.
- \_\_\_\_\_ Wet hands with hot water.
- \_\_\_\_\_ Rinse thoroughly under running water.
- \_\_\_\_\_ Clean under fingernails.

11. Put an x by all of the items listed that are parts of a knife.

- |              |                  |                    |
|--------------|------------------|--------------------|
| _____ Handle | _____ Bolster    | _____ Fascia       |
| _____ Sheath | _____ Tip        | _____ Butt         |
| _____ Tang   | _____ Tail       | _____ Ceiling      |
| _____ Jar    | _____ Spine      | _____ Cutting Edge |
| _____ Tunic  | _____ Blade Face |                    |

12. True or False A sharp knife is a safe knife (circle one).

13. A \_\_\_\_\_ is designed to hold, carry, and protect knives.

14. True or False You should cut food items towards the body and use an angled surface (circle one).

15. Name four practices for safe knife handling, storage, and maintenance.

16. What are four common types of accidents and injuries that can occur in a kitchen?

17. What are four sources for burns in the kitchen?

18. Name three things you can do to prevent falls in the kitchen.

19. True or False It is safe to plug in electrical equipment while touching water (circle one).

20. True or False Chemical hazards are harmful substances found in food naturally or unintentionally (circle one).

## Lesson Five – Kitchen Safety Hazardous Kitchen Assessment

# LEARN: Hazardous Kitchen Assessment

30 minutes

### Purpose:

This lesson will involve a variety of props to use to set up a kitchen with many hazards. Participants will walk through the “hazardous kitchen” to identify each hazard and report on how to mitigate it. This activity will serve as an assessment. The lesson will also include a post-test, which participants will work on when not walking through the hazardous kitchen.

### Materials:

- Kitchen Safety Kit Props:
  - Hazard tape
  - Faux spill
  - Chipped dish
  - Overloaded outlet
  - Cooking pot with faux flames
  - Plastic rodent
  - Mouse droppings
- Instructor Provided Props:
  - Small rug
  - Knife (in a drawer)
  - Dishtowel
- *Hazardous Kitchen Simulation* handout

### Facilitation Steps:

1. Choose one of the classroom kitchen labs to set up as the “Hazardous Kitchen.” Access the following hazardous kitchen props included in the Kitchen Safety Kit:
  - Hazard tape
  - Faux spill
  - Chipped dish
  - Overloaded outlet
  - Cooking pot with faux flames
  - Plastic rodent
  - Mouse droppings
2. Access the following instructor-provided items:
  - Small rug
  - Knife in drawer
  - Dishtowel
3. Set the kitchen up in the following manner:
  - Faux spill – set on the floor or on a counter
  - Chipped dish – put on a table or counter
  - Overloaded outlet – plug into an outlet by the countertop where participants will see it
  - Cooking pot with faux flames – put the “burning pot with flames” simulator into a real pot and plug it in so that the ‘flames’ are rising over the top of the pot. Do NOT turn on the stove
  - Plastic rodent – lay the mouse in a discreet place within the kitchen lab
  - Mouse droppings – sprinkle them around on top of the counter, floor, and inside of a drawer
  - Small rug – lay in the middle of the kitchen lab, folded over to create a tripping hazard
  - Knife in a drawer – lay a knife in a drawer without a protective covering
  - Dishtowel – lay on the kitchen counter overlapping a burner on the stove
  - Hazard tape – tape this to the exterior of the kitchen lab to keep participants out until it is time to do the walkthrough. Tell participants that all of the kitchen hazards will be found within the perimeter of the hazard tape
4. Give participants the Hazardous Kitchen Simulation handout. Give each small group of participants (or lab groups) a chance to do a walkthrough without touching anything. On their handout, they should identify as many hazards as possible and potential consequences that those hazards pose in a kitchen. The walkthrough should take five minutes for each group.

Curriculum name \_\_\_\_\_

Name: \_\_\_\_\_ Class: \_\_\_\_\_

# Hazardous Kitchen Simulation

As you walk through the hazardous kitchen, identify as many hazards as you can. Identify how each hazard on your list can compromise safety in the kitchen and how to mitigate each hazard.



Safety Hazard:

Negative Consequence:

Mitigation:

## Lesson Five: Kitchen Safety Hazardous Kitchen Assessment

# REVIEW: Kitchen Safety Post-Summative Assessment

**15 minutes**

**Purpose:**

Participants review knowledge gained throughout the lesson and curriculum.

**Materials:**

- *Kitchen Safety Post-Summative Assessment*
- *Kitchen Safety Post-Summative Assessment – Answer Key*
- *Hazardous Kitchen Simulation Handout*

**Facilitation Steps:**

1. De-brief from the Hazardous Kitchen Simulation walkthrough. Have participants identify the hazards that they see and what potential consequences each one could result from being in a kitchen.
2. Have participants pair up and edit the *Kitchen Safety Post-Summative Assessment*. Access the answer key and share answers while participants correct the written answers.
3. If participants enjoy identifying kitchen hazards, you can share another simulation by doing a keyword search on YouTube: hazardous kitchen. Here is an example of a brief video showing hazards in a commercial kitchen. Spot the Hazards: Kitchen Walkthrough (1:13)  
<https://www.youtube.com/watch?v=DtneRNV MgVk>

## Kitchen Safety Summative Post-Test – Answer Key

Directions: The following questions will ask you about your knowledge of food safety. Please answer the questions by circling the best answer or writing your response in the space provided.

1. What are four primary hazard areas in the kitchen? **Sanitation, Burns, Falls, and Cuts**
2. True or **False** Sanitation does not include personal hygiene (circle one).
3. Which of the following can cause burns in the kitchen?
  - a. Fire
  - b. Water
  - c. Surfaces
  - d. Chemicals
  - e. All of the above**
4. In 100 words or less, explain why kitchen safety is important. **Answers will vary**
5. **True** or False Materials in the kitchen can lead to serious cuts or injury (circle one).
6. True or **False** The terms cleaning and sanitizing can be used interchangeably (circle one).
7. What are the four steps to properly cleaning a food contact surface? Put them in order steps 1-4.
 

|          |                      |
|----------|----------------------|
| <b>2</b> | Rinse the surface    |
| <b>4</b> | Allow to dry         |
| <b>1</b> | Clean the surface    |
| <b>3</b> | Sanitize the surface |
8. In 100 words or less, define a food contact surface (answers will vary).
 

**Any surface that touches food such as knives, pots, cutting boards, utensils, tables, equipment.**
9. What is the proper amount of time to scrub hands and arms during handwashing (circle one)?
  - a. 1 minute
  - b. 20 seconds**
  - c. 10 seconds
  - d. 30 seconds
10. Put the steps to proper handwashing in order (1-6) from first to last.
 

|          |                                                                       |
|----------|-----------------------------------------------------------------------|
| <b>2</b> | Apply the recommended amount of soap based on product specifications. |
| <b>6</b> | Dry thoroughly.                                                       |
| <b>3</b> | Rub together vigorously for 20 seconds.                               |
| <b>1</b> | Wet hands with hot water.                                             |
| <b>5</b> | Rinse thoroughly under running water.                                 |
| <b>4</b> | Clean under fingernails.                                              |
11. Put an x by all of the items listed that are parts of a knife.
 

|                 |                     |                       |
|-----------------|---------------------|-----------------------|
| <b>x</b> Handle | <b>x</b> Bolster    | Fascia                |
| Sheath          | <b>x</b> Tip        | <b>x</b> Butt         |
| <b>x</b> Tang   | Tail                | Ceiling               |
| Jar             | <b>x</b> Spine      | <b>x</b> Cutting Edge |
| Tunic           | <b>x</b> Blade Face |                       |

## Basic Kitchen Safety

12. ☒ True or ☐ False A sharp knife is a safe knife (circle one).
13. A sheath is designed to hold, carry and protect knives.
14. True or ☒ False You should cut food items towards the body and use an angled surface (circle one).
15. Name four practices for safe knife handling, storage, and maintenance. Answers will vary.
16. What are four common types of accidents and injuries that can occur in a kitchen?
- Answers will vary but may include:
- |                                  |                             |
|----------------------------------|-----------------------------|
| <u>Lacerations and punctures</u> | <u>Slip and fall</u>        |
| <u>Burns</u>                     | <u>Electrical accidents</u> |
| <u>Sprains and strains</u>       | <u>Chemical accidents</u>   |
| <u>Eye injuries</u>              |                             |
17. What are four sources for burns in the kitchen? Answers may include:
- |                  |                   |
|------------------|-------------------|
| <u>Fryers</u>    | <u>Steamers</u>   |
| <u>Stovetops</u> | <u>Ovens</u>      |
| <u>Grills</u>    | <u>Microwaves</u> |
18. Name three things you can do to prevent falls in the kitchen. Answers may include:
- Don't rush
  - Wear proper shoes
  - Keep floors clean and dry
  - Watch where you're going
19. True or ☒ False It is safe to plug in electrical equipment while touching water (circle one).
20. ☒ True or ☐ False Chemical hazards are harmful substances found in food naturally or unintentionally (circle one).

## Sources

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