

# **Lesson Overview**

Time: 10-20 Minutes

# **Learning Objectives:**

In this lesson, participants will:

- Define cross contamination and identify ways that it could happen.
- Identify cleaning steps which can be done at home to prevent harmful bacteria from spreading.
- Analyze the home kitchen and create a checklist for clean and safe kitchen monitoring.

## **Tennessee Department of Education Academic Standards:**

- Health Education Standards 3-5: 1.1; 1.2; 2.1, 2.3
- Science Education Standards 5: 0507.Inq.1, 0507.Inq.4

# **Contents:**

- Handout & Activity Page: Overview of key points and puzzle activity
- Clean it! Make it Safe! Checklist: Handout for participants to make their own cleaning checklist to take home.
- Check For Understanding Review: Review of key points
- Video Guide: Fill-in-the-blank and short answer worksheet to supplement educational video
- Video: "Clean It! Make it Safe!"
- Optional extended activity suggestions (Activity 1-2)

#### **Materials:**

- Printed handout & activity page for each participant
- Printed Video Guide for each participant
- Access to the "Clean It! Make It Safe" Video
- Printed Check For Understanding Review for each participant
- Printed Clean it! Make it Safe! Checklist for each participant
- PowerPoint or other visual
- Activity 2 Materials: liquid chlorine bleach, water, measuring tools, 1 quart plastic bottle(s)

# **Subject Matter Outline**

# How Does This Relate to Poultry and Egg Safety?

• Egg and Poultry safety begins with cleanliness. This means starting with a clean and safe kitchen area to prevent harmful bacteria that can be found on poultry and in eggs from spreading to other foods and surfaces, which can cause illness.

## Vocabulary

- Cross Contamination: Occurs when harmful bacteria is unintentionally transferred from one surface to another causing a higher risk for foodborne illness.
- **Bacteria:** Living single-celled organisms that can be found everywhere. They can be dangerous or beneficial and thrive best in places such as the mouth, nose, hands, intestines and food stored at room temperature.
- **Germs:** A microorganism capable of spreading disease and illness.

#### **Cross Contamination:**

- Always use clean utensils and surfaces to prevent bacteria from transferring from dirty surfaces to food that will be consumed.
- Clean utensils and surfaces immediately after use and before going on to the next food item.
- Examples of Cross Contamination:
  - Sitting a food item on a dirty kitchen counter before eating it
  - Using the same cutting board and/or knife to cut raw chicken and fresh vegetables without washing
  - Using the same tongs (or other kitchen utensils) on cooked chicken that were used previously on the uncooked chicken

#### **Cleaning Steps:**

- Clean dish cloths regularly
- Throw away & replace sponges often (it's recommend not to use sponges!)
- Be sure to clean all surfaces and counter tops
- Don't forget to clean all handles
- Clean sinks and drains
- Take everything out of the refrigerator, and wipe down insides and shelves.
- Throw away expired foods.

**Sanitation Solution:** As an extra precaution, you can make your own sanitation solution to use to wipe down kitchen surfaces.

- 1 teaspoon of unscented liquid chlorine bleach
- 1 quart of water
- Spray solution on surfaces and allow to air dry for 2-3 minutes. Wipe down with a clean paper towel.
  - \*Note. Make fresh solution each time you clean.

# **Teaching Guide**

# **Interest Approach:**

**Ask**: "Why is it important to have a safe and clean kitchen area when cooking or handling food (poultry and eggs?)"

**Explain** "Egg and Poultry safety begins with cleanliness. This means starting with a clean and safe kitchen area to prevent harmful bacteria that can be found on poultry and in eggs from spreading to other foods and surfaces, which can cause illness."

# Objective 1. Define cross contamination and identify ways that it could happen.

- a. **Explain** "before we can talk about keeping a clean and safe environment, we need to know why we should keep a clean and safe environment."
- b. **Review** the Salmonella and Campylobacter vocabulary definitions. **Explain** "these harmful bacteria that can be found in poultry and eggs can make us sick. One of the ways that we can avoid becoming sick is preventing them from spreading around our kitchen."
- c. **Think-Pair-Share**: First ask students to 1) Write their own definition of Cross Contamination on a sheet of paper, 2) Find a partner and share their definitions with each other, 3) Come up with a definition they can both agree on, and 4) when finished call on a member of the group to Share their definition with the whole class.
- d. **Clarify.** Commend students for a job well done and use the definition of "Cross Contamination" in the Subject Matter Outline to ensure everyone has the correct understanding of cross contamination following the think-pair-share.

# Objective 2. Identify cleaning steps which can be done at home to prevent harmful bacteria from spreading.

- a. **Explain** "now that we know how contamination might happen, let's talk about some ways we can prevent contamination by keeping a clean and safe environment."
- b. **Discuss** "Let's identify some steps we can follow at home to keep our kitchens and homes clean and safe. What are some things you would suggest we do?" Use a visual (a dry-erase board, overhead projector, etc.) to make a list of what students suggest are cleaning steps.
- c. **Play** Supplemental Video 2: Stop here and play the "Clean it! Make it Safe" Video (available at the website where you found this lesson plan) and have students complete the Video Guide as they watch. **Compare** the list the students created in the **Discussion** session above with the Cleaning Steps List on the video. **Ask** students if there are steps they think should be added to either list.

# Objective Three. Analyze the home kitchen and create a checklist for clean and safe kitchen monitoring.

- a. **Explain** "It is one thing to watch a video and identify steps for making a kitchen clean and safe. It is quite another to apply what you have learned for your home and family. Our next activity will require you to analyze your home kitchen and to develop a list of actions you can take every day to keep your family safe."
- b. Activity 1: See the Activity Guide on the next page for instructions.

\*Optional\* Activity 2: "Make Your Own Sanitizing Solution." See last page Lesson 2.

# **Teaching Procedure**

# **Teaching Methods**

#### **Review:**

- a. Ask "What questions do you have?"
- b. Evaluate students with the "Check For Understanding" worksheet.
- c. Give each student a copy of the "Clean It, Make It Safe" Handout to take home.

# **Activity & Video Guide**

# Supplemental Video 2: Clean It! Make It Safe

Give each student a copy of the "Clean It! Make It Safe" Video Guide.

**Outline** 

- Play the 'Clean It! Make It Safe" Video (About 2 minutes in length).
- Give students enough time to fill in the Video Guide
- **Discussion** Pause the video on the "Review" screen. Refer back to the Cleaning Steps list from earlier and compare. Ask Students if there is anything the video could have left out or should be added to the list.

### **Activity 1:** Clean It! Make It Safe Checklist

- Have a printed copy of the "Clean It! Make It Safe" Checklist handout for each student.
- Have each student take approximately 5-10 minutes to list safety practices on their checklist. Students can also work in pairs
- Let the students share their checklist with each other (in pairs or groups) or to the class.
- Remind them to take this checklist home and put on their refrigerator to remind them and their family to keep their kitchen clean and safe. "Next time it is time to clean the kitchen, use the checklist to make sure you have followed all the steps."

# Clean It! Make It Safe Video

This video outlines and reviews steps to keep a clean and safe cooking environment.

**Key Points** 

Add the Review Points from the video Here!

### Clean It! Make It Safe Checklist

Simple activity to review and outline steps needed to keep a safe and clean kitchen area at home.

П	Activity & Video Guide					
H	Outline	Key Points				
Act	tivity 2: Make Your Own Sanitation Solution:	Make Your Own Sanitation Solution:				
•	Materials Needed: Liquid Chlorine Bleach, measuring utensils, water & enough 1 quart plastic bottles for every student.	Simple demonstration on making homemade sanitation solution that allows students to take a bottle home for personal use.				
•	Have each student mix 1 teaspoon of liquid chlorine bleach with 1 quart of water and pour into their plastic container. Make sure to remind them to label their sanitizer solution!					
•	*Note* Instead of every student making their own sanitizing solution, you can also:					
	• Have them work in pairs or groups					
	Do the activity as a demonstration and have the students watch.					
	References					
	<b>Educational Resources:</b>					
	Academic Standards. (2016). https://www.tn.gov/education/topic/academic-standards					
	Educational Materials On Food Safety. http://fightc-les.org/					
$\blacksquare$	Fight Bac! - Partnership for Food Safety Education. (2016). http://www.fightbac.org/					

# How does this relate to Poultry and Egg Safety?

Poultry and Egg Safety begins with cleanliness! This means starting with a safe and clean environment to prevent harmful bacteria, like Salmonella and Campylobacter, from spreading to other foods and surfaces; which can make us sick!



# What IS Cross Contamination?

Cross contamination occurs when harmful bacteria is unintentionally transferred from one surface to another causing a higher risk for foodborne illness. An example of cross contamination is using the same cutting board or knife for fresh vegetables and raw chicken.



# Tips for keeping it CLEAN and SAFE!

- Clean your refrigerator often, wiping down all inside surfaces and shelves
- Throw away expired foods
- Wipe down surfaces, counters, and appliances
- Clean door knobs and handles
- Don't reuse dirty utensils or plates
- Clean sinks and drains
- Clean dish cloths after use
- Clean utensils and surfaces immediately after use and before going on to the next food item.



As an extra precaution, you can use sanitizing solution to wipe down kitchen surfaces and prevent harmful bacteria from spreading throughout your kitchen. Here is HOW to make your OWN:

### Mix:

- 1 teaspoon of unscented liquid chloride bleach
- 1 quart of water

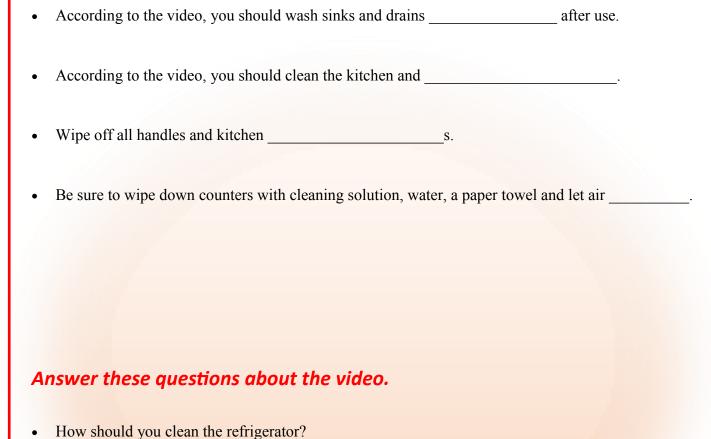
Lightly spray down surfaces

Let stand for 2 minutes

Wipe down with a clean paper towel







What is the formula for creating your own cleaning solution?

fill in the blank:	The state of the s				
Keeping a clean and safe kitchen helps preventeggs from making us sick.	that can be found on poultry and				
occurs when harmfu from one surface to another causing a higher risk for foodbor					
Always use utensils and surfaces to prevent bacteria from transferring from dirty surfaces to foods that will be consumed.					
You should regularly take everything out of your the shelves and surfaces.	and wipe down				
Make sure to regularly throw away foo	ds.				
hort Answer					
What are some examples of cross contamination?					
What are some steps you can take at home to make sure you before cooking poultry or eggs?	have a clean and safe environment				

# Fill in the blank:

- Keeping a clean and safe kitchen helps prevent <u>BACTERIA</u> that can be found on poultry and eggs from making us sick.
- <u>CROSS CONTAMINATION</u> occurs when harmful bacteria is unintentionally transferred from one surface to another causing a higher risk for foodborne illness.
- Always use <u>CLEAN</u> utensils and surfaces to prevent bacteria from transferring from dirty surfaces to foods that will be consumed.
- You should regularly take everything out of your **REFRIGERATOR** and wipe down the shelves and surfaces.
- Make sure to regularly throw away **EXPIRED** foods.

# **Short Answer**

What are some examples of cross contamination?

- Using the same cutting board or knife for fresh vegetables and raw chicken
- Taking your lunch in a bag that stored chicken from the store
- Not changing dish cloths after use cleaning poultry or eggs

What are some steps you can take at home to make sure you have a clean and safe environment before cooking poultry or eggs?

- Clean your refrigerator often, wiping down all inside surfaces and shelves
- Throw away expired foods
- Wipe down surfaces, counters, and appliances
- Clean door knobs and handles
- Don't reuse dirty utensils or plates
- Clean sinks and drains
- Clean dish cloths after use
- Clean utensils and surfaces immediately after use and before going on to the next food item.



1		
2	 	
3	 	
·		
4	 	
5	 	
6	 	
7	 	
8		