

# Serving Up Food Safety

**Grade Level: 4-6**

**Approximate Length of Activity: 20 Minutes**

## Objectives

### Teacher

1. Teach students safe food handling techniques to use in their homes.
2. Help students learn safe food handling techniques used in grocery stores and restaurants.
3. Teach students about the causes of food spoilage, food-borne illness, and methods of food preservation.
4. Use an activity to show students the importance of hand washing.

### Students

1. Learn that restaurant and grocery stores have strict food safety regulations.
2. Learn the cause of food-borne illness from food.
3. Distinguish safe food handling techniques from unsafe techniques.
4. Use their experience with food at home to generate positive food safety rules.
5. Know the importance of hand washing.

**Michigan Content Standards: (Health) 4: 5.1; 5: 1.5; 5.3; 6: 1.2**

## Introduction

Agriculture is the growing of food and fiber. Agribusinesses are involved in food processing, storage or distribution. Restaurants and grocery stores sell food to us; therefore, they are considered an agribusiness. They must follow health standards concerning food safety and are responsible for providing us with safe high quality food. Health inspectors routinely inspect these agribusinesses to make sure they are following the guidelines. If they find out otherwise, they can penalize the business by closing it for a specific amount of time or perhaps indefinitely.

In the United States, we are fortunate to have a government that makes food safety a priority. In some countries food may be produced or imported, but can be spoiled by pests or microorganisms due to poor storage. Pests (insects and rodents) and microorganisms (bacteria, mold, yeast) are the two chief causes of food spoilage. Food must be transported, stored and prepared correctly to ensure its safety. Agribusinesses that deal with food must know where their food is coming from. They must also know how their food was grown and how it was transported.

All food will spoil if it is not preserved in some way. Some foods such as nuts and grains can be stored for a long time without spoiling. Other foods such as bread and milk must be consumed quickly. Foods can be preserved by canning, freezing and dehydrating. Spoilage may occur before there is a change in taste or odor. Consumers should read expiration dates on food products bought from grocery stores before eating them.

People can reduce their risk of food-borne illness by handling food properly. Eighty-five percent of food-borne illness can be avoided with proper food handling. Keys to food safety are washing hands, checking expiration dates, washing surfaces and utensils with hot, soapy water, refrigeration and freezing, rinsing fruits and vegetables and storing foods in proper places.

## Materials Needed

- “Food for Thought” worksheet
- Cooking spray or vegetable oil
- Cinnamon
- Soap
- Paper towels
- Warm tap water
- Cold tap water

## Activity Outline

1. Talk with students about safe food handling practices at their homes. Do they thoroughly wash dishes? Do they refrigerate food properly? Do they look for expiration dates on packages? Do they wash their hands with soap and warm water?
2. Ask students to complete the sheet entitled “Food for Thought.” Through this worksheet, students will learn safe handling practices and learn practical ways to utilize their own safe food handling practices.
3. Use this activity to show students the importance of washing hands with soap and warm water.
  - a. Apply cooking spray or vegetable oil to each student’s hands.
  - b. Sprinkle cinnamon on the palms, backs and in between the fingers of each student’s hands. The cinnamon represents the germs that get on our hands.
  - c. Try to get rid of the cinnamon using only cold water. Discuss the results.
  - d. Try to get rid of the cinnamon using soap and cold water. Discuss the results.
  - e. Try to get rid of the cinnamon using soap and warm water. The cinnamon “germs” will rinse right off the students’ hands and into the sink.
  - f. Ask students why the cinnamon stayed on their hands until they used soap and warm water. How is this similar to washing germs off our hands. Is it important to use soap and warm water for hand washing?

## Discussion Questions

1. What are the chief causes of food spoilage?
2. What are some safe food handling practices that can be used in your home?
3. What are some food preservation methods that are used before foods reach the grocery store?
4. What responsibilities do agribusinesses such as grocery stores and restaurants have?
5. Why is it important to use soap and warm water when hand washing?

## **Related Activities**

1. Tour a restaurant. What types of food safety methods are used?
2. Add a slice of bread and a little water to a sealable plastic bag. What happens? Over time, chart your observations

## **Other Resources**

Food for America, A resource guide, National FFA Organization, 6060 FFA Drive, P.O. Box 68960, Indianapolis, IN 46268. (888) 332-2668.

# Food for Thought

Draw a picture for each statement that shows the right method and the wrong method. (Example for #1 -- Someone washing their hands vs. someone sitting at a table with dirty hands.)

1. Always wash your hands before handling food.

Right

Wrong

2. Eat food before the expiration date on the package.

Right

Wrong

3. Do not cut meat and vegetables on the same surface or with the same knife. Wash the surface with hot, soapy water to kill bacteria.

Right

Wrong

4. Refrigerate or freeze foods that spoil.

Right

Wrong

5. Rinse fruits and vegetables before eating or cooking.

Right

Wrong

6. What are some other food safety methods? Draw right and wrong pictures for these methods.

Right

Wrong

Right

Wrong

