

# Home • Lesson 19

## PICNIC SAFETY

**Class period:** one or two 30-min. class periods

**Supplement section:** Home PA PAS for FCS: 9.3.3 A, 9.3.3 B, 9.3.6 B, 9.3.9 B.

**National Education Standards:** FCS 8.2.1, 8.2.2, 8.2.3, 8.2.5, 8.2.6, 9.2.1, 9.2.2, 9.2.3, 9.2.5, 9.2.6; LA 2, 3, 035, 132, 278; MA 130; SC 5.

### LESSON SUMMARY

Students will plan a picnic menu using the “Fight BAC” rules. They will be able to pack a cooler with different types of cold packs.

### Objectives:

*The students will be able to:*

- Plan a picnic menu with a cooler available and a menu for when a cooler is not available.
- Recognize the importance of keeping food cold to minimize the growth of harmful bacteria.
- List a variety of cold sources for picnic coolers or baskets.
- Identify rules for keeping food as cold as possible while at the picnic table.

### Materials Provided

**Overheads:**

1. Four Simple Steps to “Fight BAC”
2. Menu Planning
3. Packing for a Picnic
4. Types of Freezer Packs for Picnics
5. Food Safety at the Picnic

**Worksheet:**

1. Temperature Comparison of Picnic Hampers in a Trunk of a Car
2. Food Safety: From Farm to Table NIE Newspaper Activity, Picnic Food Safety

**Teacher information sheet;**

1. Pack a Picnic Lunch Evaluation
2. Evaluation of NIE Newspaper Activity

### Suggested Presentation Aids

- Commercial freezer gel pack
- Ice cubes in a plastic bag, wrap the bag in foil
- Small cans or boxes of juice, yogurt, applesauce
- Frozen hamburgers
- Cold fruit
- Cooler
- Food containers or wrappers to represent picnic foods
- Picnic tablecloth (optional)

## LESSON PLAN

### Class Period 1

#### Introduction

Picnics can be fun, but don't spoil them with food contamination. The fun can be ruined if someone gets sick because the food wasn't kept cold or hot and prepared properly to keep it safe. Menu planning is the key to food safe picnics. Included in this lesson are a list of suggested foods, tips if a cooler is not available, and ways to add a cold source to the cooler or picnic basket. Keep cold food cold and hot food hot to avoid bacterial growth, and plan the menu carefully to minimize sources of foodborne illness.

#### Lesson Sequence

- Review the "Fight BAC" principles: Overhead 1: The Four Simple Steps To "Fight BAC"
- Show two identical picnic hampers, both insulated. One has cooler packs or some method to keep foods cold and one does not. Both have been in the trunk of the car for two to three hours.
- Have selected students come up to examine hampers. Students will take the temperature of each hamper with a thermometer and report to the class. Observe some changes in temperature, color, odor, appearance, and mold growth on foods, if any (report to the class).
- Menu planning for picnics is very important to minimize the sources of foodborne illness. Overhead 2: Menu Planning
- Plan to take only the amounts of food you'll use.
- With cooler and ice, most foods are safe for short periods of time.
- Make several sandwiches at one time. Wrap each one separately. Put all the wrapped sandwiches in a big plastic bag and freeze them. Simple sandwiches freeze best. Try using peanut butter, cheese, sliced meat, or poultry.
- If a cooler is not an option, take fresh, canned, or dried fruits, raw vegetables, concentrated juice boxes, dried noodles and soups, hard cheese, canned or dried meats or fish, dry cereal, bread, peanut butter, crackers, or cookies.

#### Closure class period 1

- In groups of two or three students, plan and write a menu for a picnic without using a cooler. What foods should you take that are not easily perishable?

### Class Period 2

- Overhead 3: Packing Foods for a Picnic. When packing foods for a picnic, start with cold food, pack right from the refrigerator or freezer, pack all food in clean plastic wrap or sandwich bags, use an insulated cooler, and include a cold source in the cooler.
- Overhead 4: Types of Freezer Packs for Picnics
- Demonstrate all types of freezer packs using examples of food and different freezer packs.
- Put all perishables in one cooler and keep beverages in a separate cooler as it will be opened more often.
- Throw out any foods that are warmed above 40° F.
- Plan to keep hot foods hot with a thermos or insulated dish.
- Don't forget disposable baby wipes or hand sanitizer to wash hands and faces.
- In groups of two to three have students plan and write a picnic menu using a cooler.
- Overhead 5:
- If you plan to prepare food on site, keep food cold until you are ready to grill it, cook completely at the picnic site, and no partial cooking at the site.

- Cook food completely: Use a thermometer to test internal temperature of beef (160° F), and fish should flake with a fork.
- Use a clean plate to serve cooked food.
- Be careful so raw meat juices don't touch other foods.
- Pack two identical picnic hampers with three different foods (example: peanut butter and jelly sandwich, cheddar cheese cubes, and milk). Place an ice pack in one, but not the other. Set the hampers in the trunk of the car (beginning of the day) and have a student record the temperature of the trunk and the temperature of the picnic hampers. Record the temperature of the trunk and the picnic hampers at the end of the day. Record results of color, odor, mold growth, and overall appearance of each food. (Worksheet 1, Temperature Comparison of Picnic Hampers in Trunk of a Car).

### **Closure class period 2**

- Packing a Picnic Cooler  
Materials: picnic cooler, freezer gel pack or other cold source, plastic containers to represent picnic foods, and picnic tablecloth.  
To do: Demonstrate how to pack a picnic cooler.
  - \* Cold air is heavier than warm air, place freezer gel packs or other sources on top of foods to be kept cold.
  - \* Foods stay colder when packed tightly together. Air space allows warm air in.
  - \* If you are taking a tablecloth, lay it on top of the foods in the cooler. It adds extra insulation to keep the cold inside.

### **Suggested Learning Activities**

- Find newspaper articles that cover information about picnics, camping, outdoor cooking, and/or grilling food safety. Using Worksheet 2: Food Safety: From Farm to

Table NIE Newspaper Activity, Picnic Food Safety, list the food safety tips the article addresses.

- Students will prepare picnic lunches using picnic meal planning tips learned in this lesson. Sandwiches, side dishes, desserts, and snacks will be prepared.
- Students will properly and safely pack a picnic cooler with picnic foods and go outside school or to a local park to eat the foods they have prepared.

### **Evaluation**

- In groups of three to four, have students pack a cooler with the foods they have prepared or foods provided by the teacher. Evaluate organization of packing procedure, menu planning, types of foods packed, freezer packs to keep cold foods cold, insulated dishes or thermos to keep hot foods hot, and if time permits, evaluate correct picnic food safety (Teacher information sheet 1). (To save time and money, food containers and wrappers can be substituted.)
- Evaluate the Food Safety: From Farm to Table NIE Newspaper Activity, Picnic Safety, Teacher information sheet 2.
- Quiz #19.
- Examination #5 at the end of the Home unit.

### **References**

- Safe Food: It's Up To You. U.S. Department of Agriculture, Extension Service, Project number: 91-EFSQ-1-4029. Picnic Safely.
- Operation RISK: A research and outreach program of Michigan State University's College of Human Ecology and Children, Youth and Family Extension Programs. Lesson 2.

## **Overhead 1**

### **FOUR SIMPLE STEPS TO “FIGHT BAC”**

**1. Clean: Wash hands and surfaces often**

**2. Separate: Don't contaminate**

**3. Cook: Cook to proper temperatures**

**4. Chill: Refrigerate promptly**

## **Overhead 2**

### **MENU PLANNING**

- **Take only the amounts of food you will use.**
- **Make several sandwiches ahead and freeze.**
- **If you don't have a cooler, take these foods:**

**Fruit (fresh, canned, or dried)**

**Raw vegetables**

**Hard cheese**

**Dry cereal**

**Canned or dried meat or fish**

**Bread**

**Peanut butter**

**Crackers**

**Cookies**

## **Overhead 3**

### **PACKING FOR A PICNIC**

- **Start with cold food**
- **Pack in clean plastic wrap or sandwich bags**
- **Use an insulated cooler with a cold source**
- **Keep hot foods hot**
- **Don't forget baby wipes or sanitary hand cleanser**

## Overhead 4

### TYPES OF FREEZER PACKS FOR PICNICS

A freezer pack can keep cold food cold for up to four hours. For maximum benefit, pack the freezer pack next to the foods that need to be kept cold.

- **Commercial gel-filled pack**
- **Ice in a leak-proof plastic container**
- **Leak-proof plastic container filled with water and frozen**
- **Ice cubes placed in a plastic bag, bag wrapped in foil**
- **Frozen juice pack, yogurt, or applesauce: they will stay cold and thaw by lunchtime**
- **Frozen foods, such as hamburgers**
- **A sandwich frozen overnight (the sandwich cannot be used to keep other food cold)**

Operation RISK: A research and outreach program of Michigan State University's College of Human Ecology and Children, Youth and Family Extension Programs. Used with permission.

## **Overhead 5**

### **FOOD SAFETY AT THE PICNIC**

- **Keep cooler in the shade**
- **Keep the lid on the cooler**
- **Add more ice as it melts**
- **Don't let food sit out**
- **Serve food quickly from cooler**
- **Serve small portions**

**Worksheet 1**

Name \_\_\_\_\_

Class/Period \_\_\_\_\_

Date \_\_\_\_\_

**TEMPERATURE COMPARISON OF PICNIC HAMPERS IN TRUNK OF A CAR**

Pack two picnic hampers, one with an ice pack and one without an ice pack (or cold source). Place both picnic hampers in the trunk of a car. Record the temperatures inside the picnic hampers and the trunk of the car at the beginning of the day and at the end of the day. At the end of the day, write down comments in the spaces provided about the color, odor, mold growth, and overall appearance of each food.

	<b>PB and J Sandwich</b>	<b>Cheddar Cheese Cubes</b>	<b>Milk</b>	<b>Temp. of Hamper</b>		<b>Temp. of Trunk</b>	
				<b>Beg</b>	<b>End</b>	<b>Beg</b>	<b>End</b>
<b><i>Hamper w/ cold source</i></b>							
Color							
Odor							
Mold growth							
Overall							
<b><i>Hamper w/o cold source</i></b>							
Color							
Odor							
Mold growth							
Overall							

## Worksheet 2

Name \_\_\_\_\_

Class/Period \_\_\_\_\_

Date \_\_\_\_\_

### **Food Safety: From Farm to Table NIE Newspaper Activity, Picnic Food Safety**

Find newspaper articles about picnic food safety. Look for articles about outdoor eating and cooking in particular. Paste the pictures into the first column on this sheet. In the second column, write down the food safety tips the article addresses.

<b>Picnic food safety focus of newspaper article</b>	<b>Food Safety Tips</b>

**Teacher information sheet 1**

Name \_\_\_\_\_

Class/Period \_\_\_\_\_

Date \_\_\_\_\_

**Pack a Picnic Lunch Evaluation**

Team name: \_\_\_\_\_

Students will pack a picnic cooler or hamper using foods prepared in class, foods provided by the teacher, or empty food containers. Evaluate the picnic coolers or hampers for the following criteria using the rating scale (4 highest and 1 lowest). Write comments in the spaces under each numbered rating.

<b>Criteria</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Organization				
Menu planning				
Types of foods packed				
Types of freezer packs				
Types of heat insulated containers				
Correct picnic safety				

**Teacher information sheet 2**

Name \_\_\_\_\_

Class/Period \_\_\_\_\_

Date \_\_\_\_\_

**Evaluation of NIE Newspaper Activity**

Grade the NIE activity on the following criteria using the 0-4 rating scale. Four is the highest rate and zero is the lowest rate. Write comments in the boxes under the rating for each criterion.

<b>Criteria</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Content:</b> Information is correct, complete, and useful.					
<b>Neatness:</b> Clean, organized, and not sloppy.					
<b>Spelling:</b> All words spelled correctly.					
<b>Handed in on time:</b> Handed in on due date. A point is deducted for each day late.					
<b>Time Management:</b> Time used wisely and working on project at allotted time.					

**Quiz 19****Unit: Home****Lessons: Bag Lunch and Picnic Safety**

Name \_\_\_\_\_

Class/Period \_\_\_\_\_

Date \_\_\_\_\_

**Short answer and fill in the blank: Write short answers or fill in the blank to the following questions and statements. Use complete sentences when answering questions.**

1. List the four “Fight BAC” principles.
  - a.
  - b.
  - c.
  - d.
  
2. Name four foods that can safely be packed for a bag or picnic lunch without a cold source or freezer pack.
  - a.
  - b.
  - c.
  - d.
  
3. Describe two types of freezer packs.
  - a.
  - b.
  
4. Which “Fight BAC” principle is important for bag lunch and picnic safety?

## Quiz 19 Key

**Unit: Home**

**Lessons: Bag Lunch and Picnic Safety**

**Short answer and fill in the blank: Write short answers or fill in the blank to the following questions and statements. Use complete sentences when answering questions.**

1. List the four “Fight BAC” principles.
  - a. *Clean: Wash hands and surfaces often*
  - b. *Separate: Don’t contaminate*
  - c. *Cook: Cook to proper temperatures*
  - d. *Chill: Refrigerate promptly*
  
2. Name four foods that can safely be packed for a bag or picnic lunch without a cold source or freezer pack.
  - a. *peanut butter sandwich*
  - b. *apple or banana*
  - c. *cut raw vegetables*
  - d. *raisins*
  - e. *dried cereal*
  - f. *crackers*
  - g. *bread*
  
3. Describe two types of freezer packs.
  - a. *Commercial gel-filled pack*
  - b. *Ice in a leak-proof plastic container*
  - c. *Leak-proof plastic container filled with water and frozen*
  - d. *Ice cubes placed in a plastic bag, bag wrapped in foil*
  - e. *Frozen juice pack, yogurt, or applesauce: they will stay cold and thaw by lunch time.*
  - f. *Sandwich frozen overnight (the sandwich cannot be used to keep other food cold)*
  
4. Which “Fight BAC” principle is important for bag lunch and picnic safety?
  - a. *Chill: Refrigerate promptly*

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