The Refrigerator and Your Health: Keeping Your Food Safe

You can get sick if you eat or drink foods contaminated with bacteria, fungi, parasites, or viruses. Bacteria, fungi, parasites, and viruses are very small living things. They live in the air, water, soil, food we eat, and on many things we touch every day. Some live inside our bodies. Others live in plants or animals. Some can be good for our health, while others can be bad.

Think about this: Can a steak that looks, smells, or tastes good make you sick? Yes. It can happen when bad bacteria grow in it. You may not be sick right after you eat contaminated food. It may take hours or even days for any signs or symptoms to appear. You might have diarrhea, nausea, vomiting, and stomach cramps.

How can you prevent this from happening? There are many ways. You should wash your hands and keep your kitchen clean. You should refrigerate your food to prevent bacteria from growing in it.

Follow these steps to keep your food safe:

FIRST
- Check your refrigerator. Make sure its temperature is at 40°F (degrees Fahrenheit) or below. If the temperature is higher than 40°F, bacteria can grow in your food very quickly.
- If your refrigerator does not come with a thermometer, buy one. Keep it inside the refrigerator. Make sure the temperature is 40°F or below all the time.
- If the power goes off, keep the door closed. That will keep the food colder for a longer time. If the power is off for less than 2 hours, your food should be safe. If the power is off for more than 2 hours, the food might be spoiled. Check the food’s temperature just before you cook or eat it. If its temperature is above 40°F, don’t eat it. Throw it away.
- If something spills in your refrigerator, clean it up right away. Use hot, soapy water and then rinse it with water.
- If you need to turn off your refrigerator to clean it, keep your food cold. Make sure your frozen foods do not defrost. Put your food in a cooler with ice. Or, you may put your food in a box and cover it with blankets. This will keep the food cold for a while.
- Do not use any type of heat to defrost your refrigerator. Do not use anything sharp to remove the ice and frost. It could harm your refrigerator.

Vocabulary
- Contaminated
- Thermometer
- Defrost
- Spoiled
- Perishable
SECOND
- As soon as you come home from the store, put your food in the refrigerator. Do not leave raw meat, eggs, milk, or cheese out. Put cooked food, cut fruit, or cut vegetables in the refrigerator.
- After cooking, store any leftovers in the refrigerator right away. Cut large pieces of meat into smaller pieces. Put them in small containers. They will cool more quickly.
- Divide a large pot of soup or stew into smaller portions. Put the portions in small containers. They will cool more quickly.
- Do not store meat, milk, or fruits inside the refrigerator door.
- Keep eggs in their carton on a refrigerator shelf.

THIRD
- Perishable foods have a date on the package. Use the date as a guide.
- Keep perishable foods in the refrigerator for about one week. Throw them out after one week.
- Keep cooked leftover food in the refrigerator for no more than 4 days. Throw it out after four days.
- Keep raw poultry and ground meat in the refrigerator for no more than 1 or 2 days. Keep other fresh meat in the refrigerator no longer than 3 to 5 days.

FOURTH
- The best way to defrost frozen food is to leave it in the refrigerator. Do not defrost it at room temperature or in warm water. Bacteria can grow in those conditions.
- You can thaw food in the microwave or in cold water. If you use cold water, put the food in a sealed plastic bag first.

Vocabulary & Definitions

**Contaminated:** When something clean comes into contact with something harmful. For example, food becomes contaminated when bacteria grow in it.

**Thermometer:** A device that measures temperature.

**Defrost:** When something frozen becomes warmer.

**Spoiled:** Unsafe to eat.

**Perishable:** Can spoil quickly.
The Refrigerator and Your Health: Keeping Your Food Safe

Lesson Plan

<table>
<thead>
<tr>
<th>Materials needed</th>
<th>Handouts</th>
<th>Estimated time</th>
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</table>
| • Dry erase board and dry erase markers  
• Pencils | • “The Refrigerator and Your Health: Keeping Your Food Safe” Lesson  
• Skills Practice Worksheet  
• “Listening Activity”  
• Pre-Post Assessments | 1 hour |

NOTE TO INSTRUCTOR: To accommodate the literacy levels and educational experiences of the participants, oral and/or group activities may be substituted for reading, writing, skills practice, and assessments.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Activities</th>
<th>Notes</th>
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</table>
| Preparation       | • Introduce the topic.  
Time: 5 minutes | 1. Do you think you have ever gotten sick because of bad food? What happened?  
2. Why do you think food goes bad? What can you do to keep food safe?  
|                   | • Conduct the Pre-Assessment.  
Time: 5 minutes | • Distribute Pre-Assessment, and ask students to turn it in when it is complete.  
• Write the vocabulary words on the board and ask the students to read them aloud. Ask the students if they know what they mean. Provide students with the definitions (use the “The Refrigerator and Your Health: Keeping Your Food Safe” Lesson). |  
|                   | • Introduce the new vocabulary.  
Time: 5 minutes |  
| Instructions       | • Read the lesson on “The Refrigerator and Your Health: Keeping Your Food Safe.”  
Time: 10 minutes | • Students identify the vocabulary words by circling them in the lesson.  
• Activity 1: Students have 10 minutes to complete this activity.  
• Activity 2: Students have 10 minutes to complete this activity.  
• Activity 3: Students have 5 minutes to complete this activity. | |
|                   | • Identify the vocabulary words in the lesson.  
Time: 5 minutes |  
|                   | • Distribute and review the Skills Practice Worksheet with the students and ask them to complete it.  
Time: 25 minutes |  
| Concept Check      | • Conduct Post-Assessment.  
Time: 5 minutes | • Students complete Post-Assessment. |
Activity 1: Let’s Read!

Yesterday was Lalo’s turn to cook for the group. He made some meat with refried beans and tortillas. After dinner, Lalo was supposed to clean up the kitchen before bedtime. But he was very tired, so he left the food on the stove. He put a lid on each pan and thought the food would be fine. This morning he tasted the food. He thought it still tasted good, so he ate some for breakfast. It is 10:00 p.m. now, and he has stomach cramps and has been vomiting for a while.

1. What do you think is happening to Lalo?

__________________________________________________________________________

__________________________________________________________________________

2. Why is this happening to Lalo?

__________________________________________________________________________

__________________________________________________________________________

Activity 2: Is it true or false?

Read each statement carefully and mark the correct answer.

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<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>False</th>
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<tbody>
<tr>
<td>You should wash your hands and keep your kitchen clean to keep bacteria away from your food.</td>
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<tr>
<td>A good temperature for a refrigerator is 39° F.</td>
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<tr>
<td>The power has been off for 3 hours. The refrigerator’s thermometer is at 50° F. The food is still good to eat.</td>
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<tr>
<td>A knife is a good tool to clean the freezer.</td>
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Activity 3: Listen and fill in the blank.

Listen to your teacher’s instructions carefully.

1. Bacteria, fungi, parasites, or viruses can __________________ your food.

2. A __________________ is a device that measures temperature.

3. If something spills in your __________________, clean it with hot, soapy water.

4. Do not leave __________________ food—raw meat, milk, or cut fruits—at room ________________ for more than 2 hours. They will ________________.

5. When storing food in the refrigerator, divide it into small portions. Put each portion in a shallow ________________.
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Listening Activity

Listening Activity
Listen and Fill In the Blanks

Purpose: To practice listening comprehension
Time: 5 minutes

1. Tell your students that in this activity they will practice their listening comprehension skills.
2. State that you are going to read each of the five sentences two times.
3. Let them know that after you finish reading each sentence for the second time, they will need to fill in the blank.
4. At the end, check the students’ answers to make sure they are correct. If some students do not have the right answer, invite other students to participate in the discussion until the information is clear.

Listen and fill in the blanks.

1. Bacteria, fungi, parasites, or viruses can **contaminate** your food.
2. A **thermometer** is a device that measures temperature.
3. If something spills in your **refrigerator**, clean it with hot soapy water.
4. Do not leave **perishable** food—raw meat, milk, cut fruits—at room **temperature** for more than 2 hours. They will **spoil**.
5. When storing food in the refrigerator, divide it into small portions. Put each portion in a shallow **container**.
The Refrigerator and Your Health
Pre-Assessment

 Developed by the National Center for Farmworker Health, Inc. – Buda, TX with funding from the Strategies, Opportunities and Services to Out of School Youth (SOSOSY) Migrant Education Program Consortium Grant (2013)

1. Can storing food in a refrigerator keep your food safe?
   
   Yes   No

2. Which of the following may mean your food has made you sick?
   
   a. stomach cramps
   b. diarrhea
   c. vomiting
   d. all of the above

3. How cold should your refrigerator be?

   40°F and below   70°F and above

4. The word *perishable* means “to spoil quickly”.

   True   False

5. Should you throw leftovers out after four days?

   Yes   No

Total Correct:_______
1. Can storing food in a refrigerator keep your food safe?
   - Yes
   - No

2. Which of the following may mean your food has made you sick?
   - a. stomach cramps
   - b. diarrhea
   - c. vomiting
   - d. all of the above

3. How cold should your refrigerator be?
   - 40°F and below
   - 70°F and above

4. The word *perishable* means “to spoil quickly”.
   - True
   - False

5. Should you throw leftovers out after four days?
   - Yes
   - No

Total Correct:_______

What are some ways to defrost your food? (not scored)

<table>
<thead>
<tr>
<th>Method 1</th>
<th>Method 2</th>
<th>Method 3</th>
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