Put a Bounce in Your Step with Savory Cranberries

Grades: K-5
Total Lesson Time: 30-45 minutes

Lesson Overview
Students involved in the Farm to School AmeriCorp classrooms will learn about locally grown fruits and vegetables. Students will have a chance to prepare and taste cranberry muffins.

Objectives
Students will fulfill educational expectations by meeting school standards and benchmarks in:
1. Reading and Language Arts: Using general skills and strategies of the reading process.
2. Mathematics: Understand and apply basic measurement skills.
3. Science: Appreciate the process of growing and eating healthy food.
4. Social Studies: Learn about relationships between themselves, farming and local environment.

Preparation
1. Students should wash and sanitize hands before working with foods.
2. Assemble activity props, pictures, and equipment for session.
3. Conduct Cranberry Bounce Test in class or following as a math activity.

Procedures

Introduction
*Read the story Cranberries-Fruit of the Bogs, By Diane L. Burns

*Share some interesting cranberry facts with the students:
Why do cranberries bounce? Cranberries have an air chamber inside that compresses and rebounds much like a tennis ball. As a cranberry ages, it loses air and bounces less.

There are 4 major varieties of cranberries: European, American, Mountain and Highbush.
American
This variety is the most common in the United States. The U.S. Department of Agriculture uses this variety as the standard for fresh cranberries and cranberry juice. This variety is bright red.
**European**
This variety is smaller than the American and is eaten less often than other varieties. It is primarily ornamental.

**Mountain**
This variety is approximately ¼ to ½ inch in diameter and is bright red to dark red. It is occasionally found in markets.

**Highbush**
This variety is primarily used for jellies, jams, and sauces. It is also used as an ornamental fruit.

*The cranberry is one of only a handful of major fruits native to North America. Others include the blueberry and Concord grape.*

*Legend has it that the Pilgrims may have served cranberries at the first Thanksgiving in 1621 in Plymouth, Massachusetts.*

*It takes one ton or more of cranberry vines per acre to plant a bog.*

*Depending on the weather, cranberry blossoms last 10 to 12 days.*

*Cranberries do not grow in water. They are grown on sandy bogs or marshes.*

*Cranberries are primarily grown in five states—Massachusetts, Wisconsin, New Jersey, Oregon, and Washington.*

*Did you know there are 450 cranberries in one pound? 4,500 cranberries in one gallon of juice? 45,000 cranberries in a 100-pound barrel?*

*Americans consume some 400 million pounds of cranberries each year. About 80 million pounds are eaten at Thanksgiving.*

**Wisconsin Production**
Wisconsin produces about 50% of the nation’s crop with over 3.6 million barrels of fruit. An average acre will yield about 189 barrels per acre— a barrel weighs about 100 pounds. Cranberry marshes occupy more than 180,000 acres and cranberries are harvested on about 18,000 of those acres. There are about 240 growers in 20 different counties in Wisconsin. The cranberry was named Wisconsin’s fruit on April 5, 2004. Cranberry marches date back to the 1830’s, which was before Wisconsin became a state.

*Explain to the students they will be making cranberry muffins (mini muffins will be made prior to class for students to taste)*

*Remember proper safety procedures. If you cough or sneeze do so away from the food and wash hands before touching. Do not put hands near face when touching food.*

**Assembly**
Choose a couple of students to come up and help with measuring out the ingredients. The class can read the recipe and tell what goes into the muffin mixture. Show students how the muffin pan would be prepared and filled with the mixture.

**Tasting Activity**
Talk to the students about the many words we can use to describe foods and flavors. Ask the students to use all of their senses to describe the taste and flavor of the pumpkin dip. Discuss the look, smell, taste, and texture. What other words can we use instead of yuck or yum?
Cranberry Muffins
2 cups all-purpose flour
1 ¼ cups sugar
1 ½ teaspoons baking powder
1 teaspoon salt
½ teaspoon baking soda
¼ cup vegetable oil
1 egg, well-beaten
¾ cup orange juice
1 ½ to 2 cups whole or halved cranberries
1 teaspoon vanilla

Sift flour, sugar, baking powder, salt and baking soda into a large bowl. Mix in oil. Add egg and orange juice; stir until evenly moist. Fold in cranberries. Spoon batter into prepared muffin cups, filling 2/3 full. Bake at 350 F for 25 to 30 minutes until golden brown. Makes 15 muffins.

155 Calories; 3.5 gram fat

Cranberries, 1 cup fresh

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<th>Amount per serving</th>
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<tbody>
<tr>
<td>Calories 51</td>
<td>Calories from Fat 1</td>
</tr>
<tr>
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<td>% Daily Value*</td>
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<tr>
<td>Total Fat 0g</td>
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<tr>
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<tr>
<td>Zinc 1%</td>
<td>Copper 3%</td>
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* Percent Daily Values are based on a 2,000 calorie diet.
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2 cups all-purpose flour       ¼ cup vegetable oil
1 ½ cups sugar                 1 egg, well-beaten
1 ½ teaspoons baking powder   ¼ cup orange juice
1 teaspoon salt               1 ½ to 2 cups whole or halved cranberries
½ teaspoon baking soda        1 teaspoon vanilla

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