Healthy Beverage Choices
What’s in Your Beverage?
Grades 9-12

I. Nutrition Education Goal & Objective:
Goal 1: Students will comprehend concepts consistent with USDA guidance related to eating and physical activity for good health.
   Objective: As a result of Pennsylvania’s SNAP-Ed plan, students will know, understand, analyze, and apply concepts, as developmentally appropriate, that are consistent with USDA guidance about the benefits of:
   1. Drinking plenty of water.
   2. Limiting foods high in fat, sodium and added sugar.

II. Pennsylvania Educational Standards:
   A. 2.5 Mathematical Problem Solving and Communication
   B. 10.2 Healthful Living
   C. 11.3 Food Science and Nutrition

III. Outcomes:
   A. Students will discuss their usual beverages choices.
   B. Students will read a food label and interpret the nutrition information in regard to beverages.
   C. Students will calculate the number of teaspoons of sugar in one container of a sugar-sweetened beverage.

IV. Materials:
   A. Various cans, boxes or bottle containers (8 oz., 12 oz., 16 oz. and/or 20 oz.) that represent commonly available beverages. Be sure to include enough containers of milk, flavored milk, and 100% juice as the beverages for comparison. Prior to the lesson students should be encouraged to bring in containers of their favorite beverages.
   B. Sugar, clear sandwich bags with zipper seals, and measuring spoons (teaspoon)
   C. Calculators
   D. Handout: “What’s in your beverage”
   E. “Background Information for Teachers”

V. Procedure:
   A. Introductory:
      1. Provide the students with background information regarding the nutritional value of beverages. Refer to “Background Information for Teachers” at the end of the lesson.
2. Ask the students what beverages they commonly consume, what beverages are considered healthy and why and how added sugars are different from natural sugars in beverages.

B. Developmental:
   1. Students can work separately or in pairs to complete the worksheet, “What’s in your beverage?” If students work in groups, suggest that students select a representative of the group to report information back to the class.

C. Concluding:
   1. Review the worksheet with the students by having them share their answers with the class.
   2. Encourage students to consume water as their first beverage of choice.
   3. Also remind students to eat 3 cups of low-fat or fat-free dairy group foods for calcium and protein.
**“What’s in your beverage?”**

Name: ____________________________ Date: ____________________________

**PART 1 – What does it all mean?**

Choose one of the beverages **except milk, flavored milk, or 100% juice**. Then choose the milk, flavored milk or 100% juice. Record the following information or values for your products in the chart provided.

<table>
<thead>
<tr>
<th>Record the following for Product #1 and #2</th>
<th>Product #1:</th>
<th>Product #2 (milk, flavored milk, or 100% juice):</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the product’s name?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the serving size according to the label?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many servings are in the entire container or package?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many total calories are there in one serving?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many calories would you consume if you drank the whole container?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many grams of sugar are in one serving of the beverage?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many teaspoons of sugar are in one serving of the beverage? <strong>(Hint: 1 teaspoon = 4 grams of sugar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many grams of sugar would you consume if you drank the entire container?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many teaspoons of sugar would you consume if you drank the entire container? <strong>(Hint: 1 teaspoon = 4 grams of sugar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the 1st ingredient listed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the 2nd ingredient listed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What vitamins and/or minerals are listed on the labels?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>List 1-2 ingredients which are a mystery to you.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART 2: Answer the following questions.

1. Looking at nutrition label, ingredients list, and number of teaspoons of sugar, which product do you think is a healthier choice, product #1 or product #2? Why?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

2. What can you do to make healthier choices when selecting what you want to drink?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
Background Information for Teachers
Eating habits are established in childhood. Therefore, it is important to encourage healthful eating habits at an early age. According to the Centers for Disease Control (CDC), however, a large amount of young Americans (~60%) eat too much fat, and <20% eat the recommended amount of fruits and vegetables daily. Consumption of soft drinks has increased while consumption of milk has decreased. This trend has placed children at an increased risk of not getting enough of the nutrients such as calcium that they need for optimal growth. Additionally, excessive consumption of soft drinks can contribute to tooth decay and obesity.

- Students often don’t understand the number of calories in sugar-sweetened beverages. This lab utilizes a visual aid to make students aware of the amount of sugar (and calories!) in different beverages, and increases their awareness of their dietary caloric contribution.

- Place a container of a sugar-sweetened beverage, a bag of sugar, and a container of a healthy beverage (milk, flavored milk or juice) on a table where students can see them. Put an empty sandwich bag in front of each beverage container. Ask students to guess how much sugar is in each container. Then have the students use the teaspoon to scoop the correct amount of sugar into the bag in front of the container. (Use the grams of sugar listed on the food label to estimate how many teaspoons are in each serving of the beverage. Then do the same for the amount of sugar in each container (Multiply the servings per container by the grams of sugar per serving to figure out). Remember that 1 teaspoon of sugar = 4 grams of sugar.

- Tips on sugar sweetened beverages such as soda, tea, ade, punch or drink:
  - An 8 oz. container will have ~7 teaspoons sugar.
  - A 12 oz can with 36-40 grams sugar has ~9-10 teaspoons of sugar.
  - A 16 oz bottle with about 61 grams of sugar (depending on brand) has about 15 teaspoons of sugar.
  - A 20 oz. bottle will have ~17 teaspoons sugar.

- Discuss:
  - The effects of sugar on teeth and weight.
  - The difference between healthy drinks and unhealthy drinks. Examples of healthy drinks are 100% juice, milk, flavored milks, water and fruit fizzes.
  - An example of a low-sugar beverage, fruit fizzes, is one that they can make at home. Fruit fizzes are made from 100% juice and club soda.
  - The difference between natural sugar and added sugar. Natural sugar is the sugar that is naturally in the product. Added sugar is sugar that is added to the product during processing.

- Show students how to look for the vitamin content of different drinks on the product Nutrition Label.

- For this activity, give groups of students two different products (one healthy product such as milk or juice and one “not so healthy” product). Have them evaluate both products using the attached worksheet.