Choosing Healthy Beverages
_ Rethink Your Drink_
Grades 5 – 8

I. Lesson Objectives:
A. Students will explain the importance of limiting added sugar.
B. Students will determine the amount of sugar in a beverage using its food label.
C. Students will compare the amount of sugar in various beverages.
D. Students will identify beverages that are lower in added sugar.

II. Behavior Outcomes:
A. Drink plenty of water.
B. Limit foods high in fat, sodium and added sugar.

III. Pennsylvania Educational Standards:
A. 1.6 Speaking and Listening
B. 2.5 Mathematical Problem Solving and Communication
C. 10.1 Concepts of Health
D. 10.2 Healthful Living
E. 11.3 Food Science and Nutrition

IV. Materials:
A. Handouts: “APPetite for Health” workbook (pages 16-19) OR “Make Better Beverage Choices: 10 tips to get started” (from choosemyplate.gov), “How much sugar is in my soda,” and “Guess the Sugar Amount”
B. Optional handouts: “Drinks Word Search”, “Which milk is healthier?”
C. Demonstration beverages: Empty bottles or containers of a variety of beverages including soda, fruit drink, 100% fruit/vegetable juice, milk, flavored milk, sports drink, and water
D. Supplies: Container of sugar, measuring teaspoons, clear cups
E. Reinforcement that conveys the appropriate nutrition message
F. Hand wipes
G. Food Tasting and any necessary supplies
A. Ten Tips Fact Sheet: Make Better Beverage Choices (available from: http://choosemyplate.gov/healthy-eating-tips/ten-tips.html) or other appropriate fact sheet

V. Procedure: Text in italics are instructions for the presenter, non-italicized text is the suggested script.
A. Introductory:
1. Lesson Introduction:
   a. Introduce yourself and the nutrition education program/organization presenting the lesson.
   b. Review previous lesson.
   c. Distribute student workbooks, if using, and turn to page 16. Review the title of today’s lesson/APP, “Rethink Your Drink”, and the “Highlights” box. Explain that today’s topic is healthy drinks. Students will learn why they need to be concerned with what types of beverages they consume and how to determine much sugar is in some common beverages using the Nutrition Facts Label.

2. Icebreaker:
   a. Ask students to name some of their favorite drinks and state which drinks they think are healthy choices. You may record the results on the board.
   b. Have students turn to page 16 in their workbooks and review the points to introduce the topic of choosing healthy beverages. Have a student read each bullet point.
   c. What you choose to drink is just as important as what you eat.
   d. We need to choose the right types of beverages to keep our bodies healthy.
   e. Beverages may contain empty calories and added sugar, which can lead to weight gain and cavities. Explain the concept of “empty calories”: “Empty calories” are calories that have little to no nutritional value to them. Added sugar is an example of “empty calories”. Added sugar provides energy and flavor, but no vitamins, minerals, protein, or other nutrients.
   f. Discuss facts and myths about sugar and health:
      i. Facts:
         a) Sugar in large amounts can cause you to gain too much weight
         b) Sugar can contribute to cavities in the teeth
      ii. Myths:
         a) Sugar causes diabetes
         b) Sugar causes children to become hyperactive
         c) Sugar causes heart attacks
   g. Water, 100% juice, and low-fat or fat-free milk are your best beverage choices.

3. Alternate Icebreakers:
   a. Drinks Word Search
   b. “Which milk is healthier?” worksheet

B. Developmental:
1. Have students turn to page 17 in their workbooks or distribute copies of “Make Better Beverage Choices: 10 tips to get started” handout. Call on a different student to read each tip, and then discuss how each could help students make healthier beverage choices.
   1) Drink Water – Ask the students: Raise your hand if you prefer to drink water instead of a soda or other sweet drink. Solicit responses. Encourage students to try to drink more water if appropriate. If students report drinking water, acknowledge the positive behavior.
   2) How much water is enough? – Explain to the students to listen to their body. When they feel thirsty, they should have a drink.
3) A thrifty option – *Explain to the students that tap water is safe to drink and drinking it saves money.*

4) Manage your calories – *Ask students: Why is it important to manage our calories? Solicit responses. The desired response is to help us maintain a healthy body weight.*

5) Kid-friendly drink zone – *Remind students that low-fat or fat-free milk and 100% juice have nutrients that are beneficial to the body.*

6) Don’t forget your dairy – *Encourage students to drink low-fat or fat-free milk and/or milk alternatives.*

7) Enjoy your beverage – *Tell the students that it is fine to enjoy other drinks, but with beverages that are higher in added sugar or fat, moderation is the key.*

8) Water on the go - *Encourage students to use refillable water bottles if they have them. Explain how easy it is to carry them around to have water available whenever they get thirsty.*

9) Check the facts – *Tell the students that we will be looking at food labels in a few minutes.*

10) Compare what your drink – *Encourage students that this last tip is a fun activity that they can do at home and share with their families.*

2. *Ask students how they could use a food label to determine if a drink is a healthy choice.* The food label on a drink bottle or container can be used to find the sugar content of the beverage. Sugar is contained within many foods, including drinks. We may be eating and drinking more sugar than we think.

3. *Explain to students that they are about to become “nutrition experts” in choosing healthy drinks.*

4. **Activity:** How much sugar is in my soda?
   a. *Have students turn to page 18 in their workbooks or distribute copies of “How much sugar is in my soda?” worksheet. You may write the answers to the questions on the board as the students complete the activity.*
   b. Question 1: How do I find out how many total grams of sugar are in the bottle?
      i. **Review:** The grams of sugar listed on the label is the amount in one serving. If you drink more than one serving, you will be consuming more sugar than is listed on the food label for one serving.
      ii. **Instruct the students to:** Find the grams of sugar and the servings per container on the label and write the two numbers in the blanks. Then multiply these numbers to get the total grams of sugar for the whole bottle or can.
      iii. **Answer:** 27 grams x 2.5 servings/container = 67.5 grams of sugar in the bottle.
   c. Question 2: How do I find out how many teaspoons of sugar are in the bottle?
      i. **Ask the students:** How could you convert the grams of sugar in this drink to a number of teaspoons? To convert the grams to teaspoons, you need to know how many grams are in one teaspoon of sugar. **Review the hint:** 1 teaspoon of sugar = 4 grams.
      ii. **Explain to the students:** If you divide the total grams of sugar by the grams per teaspoon (4), you will get the number of teaspoons of sugar in one bottle.
      iii. **Have the students fill in the blanks for question 2 with the total grams of sugar in the drink and then divide by 4 to get number of teaspoons of sugar.”*
iv. Answer: $67.5 \text{ g of sugar} \div 4 \text{ g/tsp} = 16.875 \text{ teaspoons of sugar or almost 17 teaspoons.}

d. Have a student volunteer help measure out the amount of sugar in the soda into a clear plastic cup in front of the class. Have the class help to count the number of teaspoons, and then display the cup of sugar so all can see. Discuss the students’ reactions to the amount of sugar and review why we should limit our intake of added sugar.

5. For 7th & 8th grade: After students have completed the calculation together as a class, have them do the same calculation with various other drinks.
   a. Distribute the empty demonstration bottles/cans to the students. Have the students work in pairs or groups to see if they can calculate how much sugar is in these other drinks.
   b. Give each group a clear cup so they can measure out the teaspoons of sugar in their drink once they have finished the calculation. Remind the students that if they drink more than one bottle or can of the beverage, they will consume even more sugar.
   c. Compare and discuss results with the rest of the class.
      i. Which drinks have the most sugar?
      ii. Which have the least sugar?
      iii. Explain: Milk and 100% fruit juice do have sugar, but it is natural sugar. These drinks also contain more vitamins and minerals, which makes them healthier choices. Soda, fruit drinks and sport drinks have added sugar and usually have no vitamins or minerals. Many of us consume much more sugar than we think especially if we are drinking more than one of these high sugar drinks each day.
   d. Ask students if they think they can switch to a healthier drink option such as milk, 100% juice, water or flavored water.

6. Activity: Guess the Sugar Amount (for 5th & 6th grade, optional for 7th & 8th)
   a. Have students turn to page 19 in their workbooks or distribute copies of “Guess the Sugar Amount” worksheet to each student.
   b. Read the directions and have students complete the activity, matching up how much sugar they think is in each beverage.
   c. Review the correct answers. Have student volunteers measure out the amount of sugar in the beverages into clear cups and compare the amounts.
      i. 24 oz. Flavored Soda = 24 teaspoons
      ii. 16 oz. Milk = 6 teaspoons
      iii. 20 oz. Cola = 17 teaspoons
      iv. 16 oz Water = 0 teaspoons
      v. 16 oz. Energy Drink = 13 teaspoons
      vi. 20 oz Vitamin Water = 8 teaspoons
   d. Discuss which beverages have the most sugar and which have the least. Explain: Milk and 100% fruit juice do have sugar, but it is natural sugar. These drinks also contain more vitamins and minerals, which makes them healthier choices. Soda, fruit drinks and sport drinks have added sugar and usually have no vitamins or minerals. Many of us consume much more sugar than we think especially if we are drinking more than one of these high sugar drinks each day.
e. Ask students if they think they can switch to a healthier drink option such as milk, 100% juice, water or flavored water.

C. VI. Conclusion of lesson:
   1. Distribute hand wipes.
   2. Provide each student with a food tasting and encourage him or her to make small changes in his or her diet now. Explain why this food is a healthy option.
   3. Distribute the reinforcement, read the message and/or explain the reason why they are receiving a reinforcement.
   4. Distribute Ten Tips Fact Sheet (or other appropriate fact sheet), if not already distributed, and encourage students to share it with their families.
   5. Thank the students for their participation and answer any questions the students have.
**Guess the Sugar Amount**

**Directions:** Draw a line from the drink to the amount of sugar you think it contains.

- **Flavored Soda**
  - 24 oz bottle
  - 8 teaspoons

- **Milk**
  - 16 oz bottle
  - 13 teaspoons

- **Cola**
  - 20 oz bottle
  - 0 teaspoons

- **Water**
  - 16 oz bottle
  - 24 teaspoons

- **Energy Drink**
  - 16 oz can
  - 17 teaspoons

- **Vitamin Water**
  - 20 oz bottle
  - 6 teaspoons
How much sugar is in my soda?

1. How do I find out how many total grams of sugar are in the bottle?

_____ × _______ = _______ grams

2. How do I find out how many teaspoons of sugar are in the bottle?

(HINT: 1 teaspoon of sugar = 4 grams)

______ ÷ _______ = _______ teaspoons of sugar

This material was funded by USDA’s Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS). This institution is an equal opportunity provider.
Drinks Word Search

Juice Low fat milk
Orange Minerals
Vitamins Calcium
Healthy Apple
Water Chocolate milk

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Drinks Word Search
ANSWERS

Juice  Low fat milk
Orange Minerals
Vitamins Calcium
Healthy Apple
Water Chocolate milk

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Which milk is healthier?

1. Which nutrients are the **same** for both types of milk?

2. Which nutrients are **different**?

3. Which type of milk do you think is healthier?

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