

SMART DRINKS LESSON

EXPERIENCE: BE A DRINK DETECTIVE



Age	<input type="checkbox"/> Children 7-10	<input checked="" type="checkbox"/> Children 11-14	<input checked="" type="checkbox"/> Mixed Ages
Setting	<input type="checkbox"/> Classroom	<input type="checkbox"/> Camp	<input checked="" type="checkbox"/> Either
Location	<input type="checkbox"/> Outside	<input checked="" type="checkbox"/> Indoors	<input type="checkbox"/> Either

Virginia Standards of Learning

English 3.1, 3.2, 3.8, 4.1, 4.2, 5.1, 5.2, 6.1, 6.2, 7.1
 Health 3.1, 3.2, 4.2, 4.7, 5.1, 5.2, 6.2, 7.2, 7.3
 Math 3.14, 4.12, 5.3, 5.11, 6.10

Project Skill: Measuring sugar in soda and other sweetened beverages

Success Indicators: As a result of this activity, children will be able to:

- visualize the amount of sugar found in soda and other high sugar drinks
- list a healthy drink option
- explain the health consequences of drinking soda and other sweetened beverages

Life Skills: Decision-making, Teamwork, Collaboration

Preparation Time: Assemble the sugar, bowls, and beverage containers and set up the stations.

SUPPLIES :

- *Be a Drink Detective* (VCE publication 348-242)
- Different beverage containers and bowls for the stations
- Sugar
- Measuring spoons
- Paper or note cards
- Pencils (one for each group)
- *Color Your Plate* (VCE publication 349-015)
- Visual aids illustrating some consequences of diets high in sugar

OPTIONAL HANDOUTS:

- *Nutrient Scavenger Hunt* (VCE publication 348-243)

STEPS:

1. Obtain examples of various beverages and set

up a separate station for each one. Also place a sugar bowl, an empty bowl, and a teaspoon at each station along with a situation and task. See examples shown on the next page.

2. Assign children to groups of four to explore each of the stations.
3. After all of the groups have visited each station, discuss the results from each station.
4. On the chalkboard, list the different estimates, along with the amounts of sugar found in one serving and in each product. How do these compare?
5. Next, talk about the first ingredients in each of the drinks. How does the first ingredient correspond to the amount of sugar in the drink? What can sugar do to your body?
6. Go through the discussion questions and emphasize the benefit of water and milk over soda, even if the milk is flavored. Show where drinks belong in MyPlate. Distinguish between natural and added sugars in fruit versus sweetened products.
7. Give students copies of *Be a Drink Detective* to do with their parents.

TIPS:

- Modify the number of stations according to group size.
- Coordinate the movement of groups through the stations.
- Emphasize the importance of following the directions and being neat.
- Use sugar cubes with younger children.

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*18 U.S.C. 707

- Visually illustrate health consequences of high sugar intake, dental cavities.
- Based on the ingredient list, what is the first intakes of sugar. (See examples.)

OTHER IDEAS:

- Measure out sugar ahead of time and place in jars with nondescript labels. Set up the jars on one table with containers for different beverages on another table. Distribute index cards to each student. Ask them to silently try to match the jars with the beverage.
- Compare the number of carrots or apples that would equal the calories in a Big Gulp (or other size sodas).
- Have the students calculate the number of pounds of sugar they get each year in their sodas and other drinks.
- Modify the activity by using the *Nutrient Scavenger Hunt* which includes milk.

SITUATIONS:

- You are a scientist, about to conduct an experiment. You are asked to first come up with a hypothesis about the amount of sugar in this item.
- You are participating in a game show. If you guess the correct number of teaspoons of sugar in this item, you will be eligible to win a prize.
- You are a food technologist. You want to recreate this product. Your first step is to determine the amount of sugar in this product.

TASKS:

Assign a different person to do each of the following:

- take notes;
- read the Nutrition Facts Label;
- measure sugar;
- make sure the group stays on task.
- Using the Nutrition Facts Label, find out how many grams of sugar are in one serving.
- Determine the number of teaspoons of sugar in the entire product. A teaspoon of sugar has 15 calories.
- Pour that amount of sugar into the empty bowl and write down the amount on the paper or note card. 4 grams of simple sugars (listed under carbohydrate on the Food Label) = 1 teaspoon of sugar.
- Based on the ingredients list, what is the first ingredient listed? Write this down.
- Empty the sugar back into the sugar bowl.

EXAMPLES OF BEVERAGES:

- 8-ounce, 12-ounce, 16-ounce, 20-ounce, and 32 ounce soda containers
- Unsweetened tea
- Sweetened coffee drink
- Low-fat milk
- Sweetened tea
- 100 percent orange juice
- Big Gulp™ cup
- Fruit drinks
- Sports drinks
- Bottled water
- Flavored water

EXAMPLES OF VISUAL AIDS:

- Picture of dental caries/cavities
- A tooth soaked in soda for a few weeks

SHARE:

- What new skills did you learn?

PROCESS:

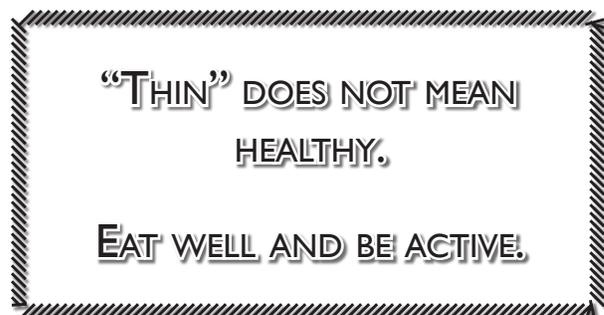
- What did you learn from this that you did not know before?
- Why is it important to learn how much sugar is in common drinks?
- What will you tell your parents about this exercise when you get home tonight? ‘
- Where are sodas placed in the MyPlate?
- How will you use this information to select a beverage?

GENERALIZE:

- What are other ingredients besides sugar in beverages that may have negative consequences?
- What are some reasons you should choose healthy drinks?
- What are some healthy beverage choices that do not have a lot of added sugar or other unhealthy ingredients? Where would these beverages be placed in the MyPlate? Why?

APPLY:

- What will you tell your parents about this exercise when you get home tonight?



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