



High School Lessons - Inventory List

1. Lesson 1 – What's in Your Drink? – Curriculum
2. Learning the Facts cards – Print as many copies as needed and cut each card out. Make sure there are an equal number of pairs. Each student will get one card.
3. Learning the Facts Bingo Questions and Answer page– Copy one Bingo card for each student pair. Print one Bingo answer key that the instructor keeps for reference. Make sure not to copy the answers on the back of the student bingo cards.
4. Drink Label Cards Calculations Key and Drink Label cards - Make a copy of the calculations key for instructors only. Make copies of the juice label cards (except juice drink). Each group of 2-3 students will need 2 different cards. Don't hand out the juice drink card because that example was already done with the students.
5. How Much Sugar? Worksheet – Copy one per student
6. How Much Sugar? calculation example worksheet – Copy one per student
7. 35 Sugar cubes per each group of 2-3 students
8. Two small plastic re-sealable bags per each group of 2-3 students
9. Nutrition Facts Label Scavenger Hunt worksheet – Only needed if instructor chooses to assign this as optional homework. Copy one per student.
10. Lesson 2 – Think Before You Drink! Curriculum
11. What Are My Influences? worksheet - Copy one per student
12. Assessing My Drink Options worksheet – Mandatory homework. Copy one per student
13. Decision-Making Process worksheet - Copy one per student
14. Choose a Healthy Drink Challenge worksheet - Copy one per student. Copy 2 per student if the optional field trip will be completed.
15. Healthy Beverage Highlights - Copy one per student



Lesson 1

What's in Your Drink?

Overview

Students will learn about the effects of excessive sugar consumption on their health. Students will work in small groups to read Nutrition Facts labels and Ingredient Lists to compare and to evaluate types and amounts of sugar in the beverages.

Materials and Preparation

- *Learning the Facts* cards; *Learning the Facts Bingo* page; *Learning the Facts Bingo Answer Key*; Drink Label Cards Calculations Key; Drink Label Cards; *How Much Sugar? worksheet*; *How Much Sugar?* sample calculation worksheet; *Nutrition Facts Label Scavenger Hunt* worksheet
- 35 Sugar cubes per each group of 2-3 students
- Two small plastic re-sealable bags per each group of 2-3 students
- Teacher Preparation: 45 minutes
- Class time: 100 minutes

Learning Objectives 1A

1. Learn the effects of excessive sugar consumption on overall health.
2. Increase awareness of what beverages students and their peers choose to drink and reasons for choosing specific beverages.

Learning Objectives 1B

1. Identify the importance of accessing valid health information.
2. Use Nutrition Facts labels to compare and to contrast sugar content in a variety of beverages.
3. Use Ingredient Lists to identify the different types of sugar in sweetened beverages.
4. Measure the amount of sugar in beverages and discuss the results.

California Health Education Content Standards – High School

- Essential Concepts
 - 1.4.N - Describe dietary guidelines, food groups, nutrients, and serving sizes for healthy eating habits
 - 1.5.N - Describe the relationship between poor eating habits and chronic diseases, such as heart disease, obesity, cancer, diabetes, hypertension, and osteoporosis
- Accessing Valid Information
 - 3.3.N - Describe how to use nutrition information on food labels to compare products

*Note: For suggestions on linking this lesson to other content areas, please see **Extensions/Links** in Lessons 1A and 1B*

California Nutrition Education Competencies – Grades 9-12

- Overarching Nutrition Education Competency 1: Essential Nutrition Concepts
 - All students will know the relationship between nutrition, physiology, and health
 - 1b - Know nutrition and health guidelines
 - 1f - Explain the influence of nutrition and physical activity on health
- Overarching Nutrition Education Competency 3: Accessing Valid Nutrition Information
 - All students will demonstrate the ability to access and analyze nutrition information, products, and services to analyze the accuracy and validity of nutrition claims.

Rethink Your Drink Key Messages:

- Drink water instead of sugar-sweetened beverages (e.g., sodas, sports drinks, energy drinks, and juice drinks).
- Choose from a variety of healthy drink options, such as water, 1% milk, fat-free milk, 100% fruit juice, or unsweetened tea over sugar-sweetened beverages.
- Use the Nutrition Facts label to choose foods with less total sugars.
- Use the Ingredient List to choose foods with little or no added sugars.

Teacher Background

- Water is an essential nutrient for life and represents two-thirds of our body weight. Water is part of every living cell, a medium for all metabolic changes (digestion, absorption, and excretion), and transports nutrients. Physically active teens need fluids, preferably water, to replace those lost by sweating.
- Though not differentiated on the Nutrition Facts label, most beverages contain two types of sugar: naturally occurring sugar and added sugar. Naturally occurring sugars are found in raw or basic foods and drinks (e.g., lactose in milk and fructose in fruit and fruit juice). Added sugars are found mainly in processed foods and drinks (e.g., high fructose corn syrup, cane sugar, raw sugar, molasses, etc.).
- The *Dietary Guidelines for Americans, 2015*, emphasize drinking water instead of beverages with added sugars. The *Dietary Guidelines* also suggest choosing nutrient-dense beverages that contain vitamins and minerals such as calcium, vitamin A, and vitamin C (as well as other nutrients). Examples of nutrient-dense beverages include nonfat and low-fat milk, and 100% fruit and vegetable juices.
- Major sources of added sugar in the American diet are sugar-sweetened beverages, including soda, energy drinks, fruit drinks and sports drinks. Strong evidence shows that children and adolescents who consume more sugar-sweetened beverages have a higher body weight than those who drink less. Sugar-sweetened beverages frequently provide excess calories and often provide few essential nutrients to the diet.
- Sugar-sweetened beverages contain added sugar, water, calories, and sometimes caffeine (or other food additives). Teens that drink excessive amounts of sweetened beverages are at risk for weight gain.
- Accessing valid information is an important skill for students to develop. Students should use the Nutrition Facts label and Ingredient List to critically think about the foods they eat and beverages they drink through identifying, analyzing and comparing nutritional content, and then selecting health-promoting products.

References

1. Babey SH, Jones M, Yu H, Goldstein H. *Bubbling Over: Soda Consumption and Its Link to Obesity in California*. Los Angeles, CA: UCLA Center for Public Health Advocacy; 2009
2. Health Education Content Standards for California Public Schools, Kindergarten Through Grade Twelve. Adopted by the State Board of Education, March 2008. Retrieved from: <http://www.cde.ca.gov/be/st/ss/documents/healthstandmar08.pdf>
3. *U.S. Department of Agriculture Dietary Guidelines for Americans, 2015*. Washington, DC: U.S. Government Printing Office; December 2015
4. Gortmaker, S, Long, M, & Wang YC. The Negative Impact of Sugar-Sweetened Beverages on Children's Health, November 2009. Retrieved from: <http://www.rwjf.org/content/dam/farm/reports/reports/2009/rwjf50143>.
5. The Nutrition Source: Healthy Drinks. Retrieved from the Harvard School of Public Health website: <http://www.hsph.harvard.edu/nutritionsource/healthy-drinks/>
6. Water: The Nutrient. Retrieved from University of Nebraska - Lincoln Extension, Institute of Agriculture and Natural Resources website: <http://extensionpublications.unl.edu/assets/pdf/q918.pdf>



Lesson 1A

Learning the Facts

Lesson Overview

Time

- Teacher Preparation: 20 minutes
 - Classroom Activity: 50 minutes
-

Materials

- *Learning the Facts* cards
 - *Learning the Facts Bingo* page
 - *Learning the Facts Bingo Answer Key*
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Preparation

- Review teacher background information and additional website links, as necessary
 - Copy and cut *Learning the Facts* cards—one card per student
 - Copy *Learning the Facts Bingo* page—one copy per student pair
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Lesson Outline

- Warm-up
- *Learning the Facts* Card Match-up
- *Learning the Facts Bingo*
- Discussion
- Check for Learning

Vocabulary (See Glossary for definitions)

- Sugar-sweetened beverages
- Added sugars
- Natural sugars
- *Dietary Guidelines for Americans, 2015*

Steps for Classroom Activity

Warm-up

- Share the *Lesson 1A* learning objectives with students:
 1. Learn the effects of excessive sugar consumption on overall health.
 2. Increase awareness of what beverages students and their peers choose to drink and reasons for choosing specific beverages.
- Ask students to think about the last beverage they drank and then share with the class. Record their answers on the board, grouping similar drinks together. Then determine:
 1. How many students drank water? Soda? Sports drinks? Sweetened teas? Sweetened coffee drinks? Fruit flavored drinks? Energy drinks? (or other types of sugar-sweetened beverages)?
- Ask students to think about and then to share why they chose to drink that beverage over another one.
 1. *For example: it tastes good; it has caffeine to keep me awake; it has vitamins; my friends drink it; it was accessible/fast, etc.*
- Record on the board, the top three reasons for choosing a specific beverage.
- Ask students how they think the beverages they choose impact their health. Discuss short-term and long-term effects.

Some potential responses to the impact to their health are:

Short-term: weight gain, using sugar-sweetened beverages to replace meals (this reduces overall diet quality), tooth decay, and sleep or mood disturbances related to caffeine intake.

Long-term: obesity, heart disease, and type 2 diabetes.

1. Tip: If students don't have thoughts on the impact to their health, ask if they have seen an impact on older friends or relatives.

Activity

- Distribute a *Learning the Facts* card to each student. Explain that students will be “learning the facts” about a variety of beverages frequently consumed and how the nutrition content of these beverages relates to health.
- Tell the students that each card has a number and suit (like a deck of cards). The students need to find and pair up with the student who has the corresponding number and opposite suit of the same color. (There are only hearts and diamonds in the *Learning the Facts* cards.) *For example: The student with the ace of hearts card should find the student with the ace of diamonds card.*
 - Tip: To make it more challenging for students, have them try to locate their partner without talking.
- Once students pair up, the student with the Fact Card reads the fact aloud to their partner. The student with the Definition Card reads the corresponding definition to expound on the fact shared.
- Have pairs that are finished sharing their “Fact” and “Definition” information turn to another pair and share what they have learned as a foursome.
 - Tip: If more time is allotted for the *Learning the Facts* match-up, have each specific “Fact” and “Definition” pair continue the above process and locate another pair to share their information.
- Keep student-pairs together and pass out copies of *Learning the Facts Bingo* (one per pair). Student-pairs will continue to move around the room together and find other student-pairs that have the information needed to complete each of the eight squares on the bingo card. Student-pairs providing information will initial each square to ensure that the information recorded in the square is correct.

Cool Down

- Have students return to their seats. Ask some students to share a fact and/or definition that was new to them. Ask students if they would think more about their next drink choice knowing this information. If not, why?
 - Note: Students may not have a very elaborate response at this point. The purpose of the subsequent *Rethink Your Drink* lessons will be to help students develop skills (decision making and goal setting) to support them in practicing and applying their knowledge.
- Summarize concepts learned in the activity.

- Now that students have acquired information on the effects of excessive sugar consumption and the importance of choosing water or nutrient-dense beverages over sugar sweetened beverages, ask students how they would decide if a drink is really healthy or not. The next activity will help answer this important question.

Check for Learning

- Review the following with students:
 - What are some of the effects of excessive sugar consumption on our bodies?
 - List some of the nutrients that are found in food and used by our bodies for growth, function, and repair.
 - What is the difference between added sugar and natural sugar?

Home Connection (Optional)

- Homework Option:
 - Have students ask a family member about the beverages he/she drank that day and how he/she feels the beverages impact his/her health. Ask students to record the family member's response and bring it to class the next day. Encourage students to share the information they learned from the *Learning the Facts* activity with their family.
- Share the Key Messages for *Rethink Your Drink* with family members.

Extensions/Links

- Physical Education:
 - Teach High School Course 1 from *Tools for Learning Fuel for Moving*:
http://www.cdph.ca.gov/programs/cpns/Documents/NetworkTools%20for%20Learnin%20Fuel%20for%20MovingRev2_2010.pdf
- Science:
 - Have students describe how sugar is broken down by the body through the physiological processes of digestion, absorption, and metabolism.

Lesson 1B

Sugar Sleuths

Lesson Overview

Time

- Teacher Preparation: 25 minutes
- Classroom Activity: 50 minutes

Materials

- Drink Label Cards Calculations Key
- Drink Label Cards
- Per small group of 2-3 students:
 - Two Drink Label Cards from popular types of beverages
 - 35 Sugar cubes
 - Two small plastic re-sealable bags for sugar cubes
- *How Much Sugar?* worksheet
- *How Much Sugar?* sample calculation worksheet
- *Nutrition Facts Label Scavenger Hunt* worksheet (homework)

Preparation

- Review teacher background information and additional website links, as necessary
- Copy one per student:
 - *How Much Sugar?* worksheet

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Vocabulary (See Glossary for definitions)

- Nutrition Facts label
- Ingredient List
- Serving Size
- Sugars
- Daily Value (DV)
- % Daily Value (%DV)

Steps for Classroom Activity

Warm-up

- Share the *Lesson 1B* learning objectives with students:
 1. Identify the importance of accessing valid health information.
 2. Use Nutrition Facts labels to compare and to contrast sugar content in a variety of beverages.
 3. Use Ingredient Lists to identify the different types of sugar in sweetened beverages.
 4. Measure the amount of sugar in beverages and discuss the results.
- Ask students: Where would you look to find information on nutrients in foods and beverages? Why?
- Tell students the Nutrition Facts label and Ingredient List would be good places to start to find information on nutrient amounts and ingredients.
- Ask students: Why would it be important to consider where information comes from? What does the term *valid information* mean? (*Valid information* is well-founded and justifiable information.)
- Tell students they should consider researching and learning more about the source, purpose, and timeliness of the information when determining its validity. Questions to think about include:
 - Source: Who provided the information? What are his/her credentials? Or, what type of organization provided the information?

- Generic drink labels – 2 labels per group of 2-3 students each
- *How Much Sugar?* sample calculation worksheet
- *Nutrition Facts Label Scavenger Hunt* worksheet (homework)
- Post a list of added sugars on the board (see highlighted box on next page)
- Purpose: For what purpose is the information provided?
- Timeliness: When was the information presented? Is it updated on a continual basis?
- Explain the importance of identifying valid information in relation to health. Tell students it involves critical thinking— to seek out and to identify valid sources of information, to analyze the data from the source, and to select health-promoting products and services.
 - Note: It is important to seek out good sources of nutrition information because nutrition is a science, and just like any other science, our understanding of food, health, disease, and the ways in which nutrients affect our bodies changes quite frequently. This is why the *Dietary Guidelines for Americans* are updated every five years.

Lesson Outline

- Warm-up
- Label reading review
- Label reading activity
- Measuring sugar cubes activity
- Discussion
- Check for Learning
- The Nutrition Facts label is a valid source of information since it is regulated by the United States Food and Drug Administration (FDA) and follows the requirements of the Federal Food, Drug and Cosmetic Act and its amendments. The purpose of the Nutrition Facts label is for consumers to know what is in their food and beverages and to help them make healthy choices. When new laws and regulations are passed, the FDA incorporates them into their labeling requirements.
- Students will apply this skill of identifying and accessing valid information to reading Nutrition Facts labels to select healthier beverage choices.

Activity

- Review label reading:
 - Use the Juice Drink Label Card to review the basic label components:
 1. Number of servings in the container
 2. Grams of sugar per serving
 3. Total grams of sugar in the container
 4. Names of added sugars in the Ingredient List
 - Highlight that the Nutrition Facts label helps:
 5. Identify the nutrient content in one serving
 6. Compare calories and nutrients between similar foods/beverages
 7. Guide healthy food/beverage choices
 - Highlight that the Ingredient List notes the ingredients in order by weight, with the largest amount first and the smallest amount last.
 - Note: Typically, the first three ingredients listed comprise the largest part of the food or beverage.

- Post a list of added sugars for reference during the activity.

- Added Sugars: Anhydrous dextrose, corn syrup, corn syrup solids, dextrose, fructose, high-fructose corn syrup (HFCS), honey, invert sugar, lactose, malt syrup, maltose, maple syrup, molasses, nectars (e.g., peach nectar, pear nectar), raw sugar, sucrose, and sugar.
- Note: Other names used for added sugars, but not recognized by the Food and Drug Administration (FDA) as an ingredient name include: cane juice, evaporated corn sweetener, crystal dextrose, glucose, liquid fructose, and sugar cane juice.

- Tell students that, for the upcoming activity, they will compare sugar amounts in different beverages and scan the Ingredient List for sugars.
- Guide students through the process of locating the amount of sugar on the Nutrition Facts label and interpreting the nutrient data by modeling the following steps, using the Juice Drink Label Card and the *How Much Sugar?* sample calculation worksheet.
 - Identify the following (using Juice Drink Label Card):
 1. Number of servings in the container (2.5 servings)
 2. Grams of sugar per serving (27 grams of sugar)
 3. Total grams of sugar in the container (67.5 grams of sugar in container)
 4. Names of added sugars in the Ingredient List (high-fructose corn syrup)
 - Explain as you fill out the *How Much Sugar?* sample calculation worksheet that the calculations are guided by the following conversions:
 - 4 grams of sugar = 1 tsp. of sugar
 - 1 tsp. of sugar may be represented as 1 sugar cube
 - After calculating the total amount of sugar in the beverage in teaspoons, then count out the number of sugar cubes and place them in the re-sealable bag to show students the amount of natural sugar in the container of the juice drink.
 - Provide students with a brief overview of the small group activity.
 - Divide students into small groups of two or three.
 - Ask each group to select two Drink Label Cards that represent a variety of beverages.
 - Ask students to predict (without studying the label in detail) which beverage will have the least amount of total sugar and which beverage will have the most amount of sugar.
 - Tip: You may also consider asking students to guess the ingredients in some of the drinks before looking at the Nutrition Facts label.
 - Ask each group to complete the *How Much Sugar?* worksheet.
 - Tip: Ask students to consider if the drinks selected contain mostly added sugars or mostly natural sugars.

Cool down

- Have each group choose the drink with the highest amount of sugar in their group and have groups stand with their drink label cards and bags of sugar in descending order from the highest to the lowest amount of sugar per drink. Then ask the following questions.
 - Were they surprised by the amount of sugar in certain drinks? Which drinks were the highest in sugar? Which drinks were the lowest in sugar? Which beverage(s) offer more nutrients? Less nutrients? Which beverages contained added sugars?
- For the healthier beverages (milk, water, 100% juice), what do these beverage choices offer that the others do not? (vitamins, minerals calcium, protein, low calories).
- How would students use the data they collected and skills they practiced to make a choice for better health?
- Remind students that accessing valid information such as the Nutrition Facts label and Ingredient List is their key to making healthier beverage choices.

Check for Learning

- Review the following questions with students:
 - What are some names of added sugars found in the beverages you drink? (high-fructose corn syrup, maltose, dextrose, etc.).
 - What helps you evaluate the amount of sugar in a beverage or food item?

Home Connection (Optional)

- Homework Option: Nutrition Facts Label Scavenger Hunt
 - Provide students with the blank *Nutrition Facts Label Scavenger Hunt* worksheet. Ask students to select two items from home, with at least one item being a beverage, then to complete the blank nutrition labels and answer the questions below each label for each item.
- Have students share the label reading and sugar activities with family members.
- Share the Key Messages for *Rethink Your Drink* with caregivers.

Extensions/Links

- Physical Education:
 - Teach High School Course 2 from the *Tools for Learning Fuel for Moving* instructional materials: http://www.cdph.ca.gov/programs/cpns/Documents/NetworkTools%20for%20Learning%20Fuel%20for%20MovingRev2_2010.pdf
- Math:
 - Use the Drink Label Cards from the small group activity. Ask students to determine the mean, median, and mode of grams of sugar per serving for each drink. Ask students to organize and to describe distributions using frequency tables and bar graphs.

A


FACT CARD

Did you know?

The average California teen consumes the equivalent of 39 pounds of sugar each year from **sugar-sweetened beverages**.

DEFINITION CARD

Sugar-sweetened beverages are drinks that are sweetened with added sugars. Added sugars are found in many processed foods, like sweets and soft drinks. Added sugars can contribute excess calories to your diet, which may result in weight gain.

A


2


FACT CARD

Did you know?

Drinking lots of sugar-sweetened beverages in place of milk can decrease your **calcium** intake.

DEFINITION CARD

Calcium is a mineral that works with vitamin D and another mineral called phosphorous to build strong bones and teeth. Sources of calcium include: almonds, calcium fortified orange juice, tofu, dark green leafy vegetables, dried beans, lowfat dairy foods, and cactus leaves (nopales).

2


3



FACT CARD

Did you know?

Decreasing the amount of added sugar consumed from food and drink can help prevent **tooth decay**.

DEFINITION CARD

Tooth decay results when plaque (or bacteria) on your teeth and gums constantly interact with the sugars in the foods and drinks you consume. This is why it is important to brush and floss your teeth daily.

3



4



FACT CARD

Did you know?

Water is an essential **nutrient** that the body needs to live. Water contains no calories. Some fruits and vegetables contain large amounts of water (such as lettuce and watermelon).

DEFINITION CARD

Nutrients are necessary for life. They are found in food and used for energy, growth, body functions, and repair. These are carbohydrates, proteins, fats, water, vitamins, and minerals.

4



5



FACT CARD

Did you know?

Physically active people need **liquids** to replace fluid losses from sweating. For most people, water is the best choice to quench thirst and to replace lost fluids.

DEFINITION CARD

Liquids and water are in beverages and foods. Thirst and normal drinking behavior, especially drinking liquids with meals, are usually adequate to meet the body's needs. People need to drink more when it is hot and during vigorous physical activity.

5



6



FACT CARD

Did you know?

Excessive intake of calories, like those from **added sugar**, can lead to weight gain—which can increase your risk for certain chronic diseases such as type 2 diabetes, certain cancers, and heart disease.

DEFINITION CARD

Added sugar means that sugar is added to the food or drink during processing, preparation, or at the table. Added sugar supplies calories but few or no essential nutrients and no dietary fiber. Examples of added sugar include: high fructose corn syrup, white sugar, honey, and molasses.

6



7



FACT CARD

Did you know?

Nutrient-dense beverages aren't created equal; drink a variety of healthy beverages. Milk contains calcium, vitamin D, and protein as its main nutrients; whereas 100% orange juice primarily contains vitamin C, potassium, and folate.

DEFINITION CARD

Nutrient-dense beverages

provide high amounts of vitamins and minerals for the serving size and calories contained per serving.

Good source: A food or drink having 10 percent or more of a daily value for a vitamin or mineral.

Excellent source: A food or drink having 20 percent or more of a daily value for a vitamin or mineral.

7



8



FACT CARD

Did you know?

The *Dietary Guidelines for Americans, 2015*, recommend drinking **water** instead of sugar-sweetened drinks, as well as making half your plate fruits and vegetables.

DEFINITION CARD

Water is vital to the body and helps control its temperature. Water helps the body use nutrients found in food, carries oxygen from the air to the rest of the body, prevents constipation, and keeps the eyes, nose, and mouth moist. The water found in fruits and vegetables helps people reach the total amount of fluids they need to drink each day.

8





Learning the Facts BINGO

Directions: Work together in pairs to find other student-pairs who have the answer(s) to the squares below. Once found, the student-pairs providing the responses should initial the bottom right hand of the square.

<p>Drinks that are sweetened with added sugars are called:</p> <p>_____</p> <p>Initials: _____</p>	<p>_____ and water are in beverages and food.</p> <p>Initials: _____</p>	<p>Drinks that provide a high amount of vitamins and minerals and are lower in calories than similar drinks are called:</p> <p>_____</p> <p>Initials: _____</p>
<p>List three of the six main categories of nutrients:</p> <p>1 _____</p> <p>2 _____</p> <p>3 _____</p> <p>Initials: _____</p>		<p>Calcium is important in building strong bones and teeth. Name two sources of calcium:</p> <p>1 _____</p> <p>2 _____</p> <p>Initials: _____</p>
<p>What main nutrient helps to control body temperature and transports other nutrients and waste in the body?</p> <p>_____</p> <p>Initials: _____</p>	<p>This can result when plaque on your teeth and gums constantly interacts with the sugars in the foods and drinks you consume:</p> <p>_____</p> <p>Initials: _____</p>	<p>High fructose corn syrup, white sugar, and molasses are types of:</p> <p>_____</p> <p>Initials: _____</p>





Learning the Facts BINGO - Answer Key

Directions: Work together in pairs to find other student-pairs who have the answer(s) to the squares below. Once found, the student-pairs providing the responses should initial the bottom right hand of the square.

<p>Drinks that are sweetened with added sugars are called:</p> <p><u>Sugar-sweetened beverages</u></p>	<p><u>Liquids</u> and water are in beverages and food.</p>	<p>Drinks that provide a high amount of vitamins and minerals and are lower in calories than similar drinks are called:</p> <p><u>Nutrient-dense drinks</u></p>
<p>List three of the six main categories of nutrients:</p> <p>Carbohydrates, Fats, Protein, Vitamins, Minerals, and Water</p>		<p>Calcium is important in building strong bones and teeth. Name two sources of calcium:</p> <p>Almonds, dark green leafy vegetables, calcium fortified orange juice, tofu, lowfat dairy products, dried beans, and cactus leaves (nopales)</p>
<p>What main nutrient helps to control body temperature and transports other nutrients and waste in the body?</p> <p><u>Water</u></p>	<p>This can result when plaque on your teeth and gums constantly interacts with the sugars in the foods and drinks you consume:</p> <p><u>Tooth decay</u></p>	<p>High fructose corn syrup, white sugar, and molasses are types of:</p> <p><u>Added sugars</u></p>





Calculations Key Drink Label Cards

Drink	Container Size	Sugar Type	Calories per Container	Teaspoons (tsp) of Sugar per Container
Water	20 fl. oz. bottle	Sugar-Free	0 calories	0 tsp.
1% Milk	16 fl. oz. bottle	Natural Sugar	260 calories	8 tsp.
100% Orange Juice	16 fl. oz. bottle	Natural Sugar	244 calories	11 tsp.
Soda	12 fl. oz. can	Added Sugar	136 calories	8 tsp.
Soda	20 fl. oz. bottle	Added Sugar	227 calories	14 tsp.
Sports Drink	20 fl. oz. bottle	Added Sugar	125 calories	9 tsp.
Energy Drink	16 fl. oz. can	Added Sugar	240 calories	15 tsp.
Sweetened Tea	20 fl. oz. bottle	Added Sugar	213 calories	14 tsp.
Fruit-flavored Soda	12.5 fl. oz. bottle	Added Sugar	165 calories	11 tsp.
Juice Drink	20 fl. oz. bottle	Added & Natural Sugar	305 calories	17 tsp.
Fruit Nectar	11.5 fl. oz. can	Added & Natural Sugar	196 calories	11 tsp.
Vitamin-added Water	20 fl. oz. bottle	Added & Natural Sugar	125 calories	8 tsp.



This material was produced by the California Department of Public Health with funding from USDA SNAP-Ed, known in California as CalFresh. These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious food for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.CaChampionsForChange.net.

Adapted from the California WIC Program.



Nutrition Facts	
Serving Size 20 fl oz (591 mL)	
Servings Per Container 1	
Amount Per Serving	
Calories 0	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 0g	0%
Sugars 0g	
Protein 0g	
Not a significant source of other nutrients.	
*Percent Daily Values (DV) are based on a 2,000 calorie diet.	
INGREDIENTS: PURIFIED WATER.	



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2

Amount Per Serving

Calories 130 Calories from Fat 20

	% Daily Value*
Total Fat 2.5g	4%
Saturated Fat 1.5g	8%
Trans Fat 0g	
Cholesterol 15mg	5%
Sodium 160mg	7%
Total Carbohydrate 16g	5%
Dietary Fiber 0g	0%
Sugars 15g	
Protein 11g	22%
Vitamin A	10%
Calcium	40%
Vitamin D	25%

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: LOWFAT MILK, FAT FREE MILK, VITAMIN A PALMITATE, VITAMIN D3.



Nutrition Facts	
Serving Size 8 fl oz (240 mL)	
Servings Per Container 2	
Amount Per Serving	
Calories 122	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Sodium 5mg	0%
Potassium 443mg	13%
Total Carbohydrate 29g	10%
Sugars 21g	
Protein 2g	4%
Vitamin C	139%
Thiamin	17%
Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, calcium and iron.	
*Percent Daily Values (DV) are based on a 2,000 calorie diet.	
INGREDIENTS: 100% PURE ORANGE JUICE NOT FROM CONCENTRATE.	



Nutrition Facts

Serving Size 1 can – 12 fl oz (360 mL)

Amount Per Serving

Calories 136 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Sodium 15mg 0%

Total Carbohydrate 35g 11%

Sugars 33g

Protein 0g

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP, CARAMEL COLOR, PHOSPHORIC ACID, NATURAL FLAVORS, CAFFEINE.



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2.5

Amount Per Serving

Calories 50 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Sodium 110mg 4%

Potassium 30mg 1%

Total Carbohydrate 14g 5%

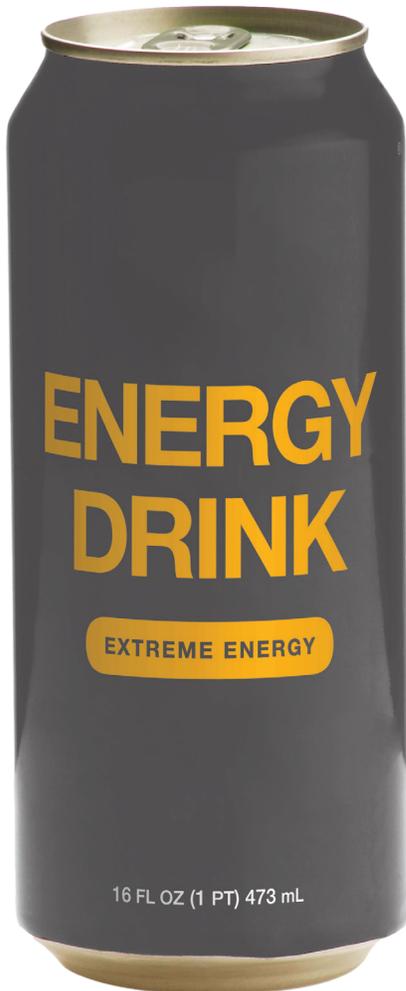
Sugars 14g

Protein 0g

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: WATER, SUCROSE, DEXTROSE, CITRIC ACID, NATURAL FLAVOR, SALT, SODIUM CITRATE, MONOPOTASSIUM PHOSPHATE, BLUE COLORING, GLYCEROL ESTER OF ROSIN, CARAMEL COLOR.



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2

Amount Per Serving

Calories 120 Calories from Fat 0

	% Daily Value*
Total Fat 0g	0%
Sodium 70mg	3%
Total Carbohydrate 30g	10%
Sugars 30g	
Protein 0g	
Riboflavin	100%
Niacin	100%
Vitamin B6	100%
Vitamin B12	100%

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: CARBONATED WATER, GLUCOSE, CITRIC ACID, NATURAL FLAVORS, TAURINE, SODIUM CITRATE, PANAX GINSENG ROOT EXTRACT, L-CARNITINE, CAFFEINE, NIACINAMIDE, SODIUM CHLORIDE, INOSITOL, PYRIDOXINE HYDROCHLORIDE, SUCRALOSE, RIBOFLAVIN, MALTODEXTRIN, CYANOCOBALAMIN.



Nutrition Facts	
Serving Size 8 fl oz (240 mL)	
Servings Per Container 2.5	
Amount Per Serving	
Calories 85	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Sodium 30mg	1%
Total Carbohydrate 23g	8%
Sugars 23g	
Protein 0g	
Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.	
*Percent Daily Values (DV) are based on a 2,000 calorie diet.	
INGREDIENTS: FILTERED WATER, SUGAR, CITRIC ACID, TEA, NATURAL FLAVORS.	



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2.5

Amount Per Serving

Calories 122 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Sodium 25mg 1%

Total Carbohydrate 27g 9%

Sugars 27g

Protein 0g

Vitamin A 0%

Vitamin C 100%

Calcium 0%

Iron 0%

Contains 10% juice.

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP, ORANGE JUICE CONCENTRATE, CITRIC ACID, POTASSIUM BENZOATE (PRESERVES FRESHNESS), NATURAL FLAVOR, YELLOW COLORING, GLYCEROL ESTER OF WOOD ROSIN, CALCIUM DISODIUM EDTA (TO PROTECT FLAVOR).

Vitamin-added Water



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2.5

Amount Per Serving

Calories 50 Calories from Fat 0

	% Daily Value*
Total Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 13g	4%
Sugars 13g	
Protein 0g	
Vitamin C	50%
Vitamin B3	10%
Vitamin B6	10%
Vitamin B12	4%
Vitamin B5	10%
Zinc	5%

Contains less than 1% juice.

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: WATER, CRYSTALLINE FRUCTOSE, CITRIC ACID, VEGETABLE JUICE (COLOR), NATURAL FLAVOR, ASCORBIC ACID (VITAMIN C), VITAMIN E ACETATE, MAGNESIUM LACTATE (ELECTROLYTE), CALCIUM LACTATE (ELECTROLYTE), ZINC PICOLINATE, MONOPOTASSIUM PHOSPHATE (ELECTROLYTE), NIACIN (B3), PANTOTHENIC ACID (B5), PYRIDOXINE HYDROCHLORIDE (B6), CYANOCOBALAMINE (B12).



Nutrition Facts

Serving Size 1 Can – 11.5 fl oz (340 mL)

Amount Per Serving

Calories 196 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Sodium 50mg 2%

Total Carbohydrate 49g 16%

Sugars 45g

Protein 0g

Vitamin C 100%

Contains 20% juice.

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, calcium and iron.

*Percent Daily Values are based on a 2,000 calorie diet.

INGREDIENTS: WATER, HIGH FRUCTOSE CORN SYRUP, FRUIT PUREE CONCENTRATE, APPLE JUICE CONCENTRATE, CITRIC ACID, ASCORBIC ACID (VITAMIN C).



Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container about 1.5

Amount Per Serving

Calories 110

% Daily Value*

Total Fat 0g 0%

Sodium 25mg 1%

Total Carbohydrate 28g 9%

Sugars 28g

Protein 0g

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values are based on a 2,000 calorie diet.

INGREDIENTS: CARBONATED WATER (WATER, CARBON DIOXIDE), NATURAL SUGAR, CITRIC ACID, NATURAL AND ARTIFICIAL FLAVORS AND RED COLORING.

How Much Sugar?

Juice Drink Calculation Example

Helpful Hints:

4 grams of sugar = 1 teaspoon of sugar

Added Sugars List: Anhydrous dextrose, corn syrup, corn syrup solids, dextrose, fructose, high-fructose corn syrup (HFCS), honey, invert sugar, lactose, malt syrup, maltose, maple syrup, molasses, nectars (e.g., peach nectar, pear nectar), raw sugar, sucrose, and sugar.

Sample Juice Drink Label

Nutrition Facts

Serving Size 8 fl oz (240 mL)
Servings Per Container 2.5

Amount Per Serving

Calories 122 Calories from Fat 0

% Daily Value*

Total Fat	0g	0%
Sodium	25mg	1%
Total Carbohydrate	27g	9%
Sugars 27g		
Protein	0g	
Vitamin A		0%
Vitamin C		100%
Calcium		0%
Iron		0%

Contains 10% juice.

Not a significant source of calories from fat, saturated fat, trans fat, cholesterol, dietary fiber, vitamin A, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.

INGREDIENTS: CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP, ORANGE JUICE CONCENTRATE, CITRIC ACID, POTASSIUM BENZOATE (PRESERVES FRESHNESS), NATURAL FLAVOR, YELLOW COLORING, GLYCEROL ESTER OF WOOD ROSIN, CALCIUM DISODIUM EDTA (TO PROTECT FLAVOR).

This example will show you how to calculate the total number of teaspoons of sugar in a drink. Looking at the Juice Drink Label Card (left):

1. Identify the name(s) of added sugars in the ingredient list. *Answer: High fructose corn syrup*
2. Identify the number of servings in the container. *Answer: 2.5 servings*
3. Identify the grams (g) of sugar per serving. *Answer: 27 grams*
4. Calculate the amount of Total Sugar (in grams) in the drink

$$\begin{array}{ccc} \boxed{27 \text{ grams}} & \times & \boxed{2.5} & = & \boxed{67.5 \text{ grams}} \\ \text{Sugar per} & & \text{Number of servings} & & \text{Total grams} \\ \text{-serving} & & \text{per container} & & \text{of sugars} \end{array}$$

5. Round 67.5 68

6. Calculate the amount of Total Sugar (in teaspoons) in the drink

$$\begin{array}{ccc} \boxed{4} & \sqrt{\quad} & \boxed{68 \text{ grams}} & = & \boxed{17 \text{ tsp}} \\ & & \text{Total grams} & & \text{Teaspoons of Total} \\ & & \text{of sugars} & & \text{Sugar per container} \end{array}$$



How Much Sugar?

Name: _____ Date: _____

Directions: Use this worksheet to calculate the total sugar (in teaspoons) for each beverage.

Helpful Hints: 4 grams of sugar = 1 teaspoon of sugar
1 sugar cube represents 1 teaspoon of sugar

Added Sugars List: Anhydrous dextrose, corn syrup, corn syrup solids, dextrose, fructose, high-fructose corn syrup (HFCS), honey, invert sugar, lactose, malt syrup, maltose, maple syrup, molasses, nectars (e.g., peach nectar, pear nectar), raw sugar, sucrose, and sugar.

Beverage #1 Name: _____

1. Calculate the Total Sugar (in teaspoons) for each drink:

a. Sugar per serving X Number of servings in drink = **Grams of Total Sugar**
_____ gm _____ gm

b. **Grams of Total Sugar** ÷ 4 gm per teaspoon = **Teaspoons of Total Sugar per drink**
_____ gm of sugar _____ tsps

2. Using sugar cubes, count the number of teaspoons of sugar per drink container and place sugar cubes in a plastic bag.

3. Label the bag with the name of your drink.

4. Review the Ingredients List and write down forms of added sugar:

Beverage #2 Name: _____

1. Calculate the Total Sugar (in teaspoons) for each drink:

a. Sugar per serving X Number of servings in drink = **Grams of Total Sugar**
_____ gm _____ gm

b. **Grams of Total Sugar** ÷ 4 gm per teaspoon = **Teaspoons of Total Sugar per drink**
_____ gm of sugar _____ tsps

2. Using sugar cubes, count the number of teaspoons of sugar per drink container and place sugar cubes in a plastic bag.

3. Label the bag with the name of your drink.

4. Review the Ingredients List and write down forms of added sugar:





Nutrition Facts Scavenger Hunt

Name: _____ Date: _____

Directions:

1. Select two foods or beverages (at least one item being a beverage) from your refrigerator or pantry.
2. Copy the product information from the Nutrition Facts label into the sample labels below.
3. Answer the questions below each label.
4. Bring your labels back to class for discussion.

Product Name: _____

Nutrition Facts	
Serving Size	
Servings Per Container	
Amount Per Serving	
Calories	Calories from Fat
% Daily Value*	
Total Fat g	%
Saturated Fat g	%
Trans Fat g	
Cholesterol mg	%
Sodium mg	%
Total Carbohydrates g	%
Dietary Fiber g	%
Sugars g	
Protein g	
Vitamin A %	Vitamin C %
Calcium %	Iron %
*Percent Daily Values (DV) are based on a 2,000 calorie diet.	

Product Name: _____

Nutrition Facts	
Serving Size	
Servings Per Container	
Amount Per Serving	
Calories	Calories from Fat
% Daily Value*	
Total Fat g	%
Saturated Fat g	%
Trans Fat g	
Cholesterol mg	%
Sodium mg	%
Total Carbohydrates g	%
Dietary Fiber g	%
Sugars g	
Protein g	
Vitamin A %	Vitamin C %
Calcium %	Iron %
*Percent Daily Values (DV) are based on a 2,000 calorie diet.	

1. How many servings are in the product? _____

2. Calculate the total calories in this product: _____

Calories per serving X Number of servings = Total calories

3. Calculate the total grams of sugar in this product: _____

g Sugar per serving X Number of servings = Total sugar

_____g _____g

1. How many servings are in the product? _____

2. Calculate the total calories in this product: _____

Calories per serving X Number of servings = Total calories

3. Calculate the total grams of sugar in this product: _____

g Sugar per serving X Number of servings = Total sugar

_____g _____g





Lesson 2

Think Before You Drink!

Overview

Students will identify and analyze internal and external influences that impact their food and beverage choices. Students will assess their environment and evaluate healthier beverage options as part of the decision-making process.

Materials and Preparation

- *What Are My Influences?* worksheet; *Decision- Making Process* worksheet; *Assessing My Drink Options* homework; *Choose a Healthy Drink Challenge* worksheet; *Healthy Beverage Highlights*
- Teacher Preparation: 40 minutes
- Class time: 100 minutes

California Health Education Content Standards – High School

- Essential Concepts
 - 1.5.N - Describe the relationship between poor eating habits and chronic diseases, such as heart disease, obesity, diabetes, hypertension, and osteoporosis
- Analyzing Influences
 - 2.1.N - Evaluate internal and external influences on food choices
- Practicing Health-Enhancing Behaviors
 - 7.1.N - Select healthy foods and beverages in a variety of settings

California Nutrition Education Competencies – Grades 9-12

- Overarching Nutrition Education Competency 1: Essential Nutrition Concepts
 - All students will know the relationship between nutrition, physiology, and health
 - 1f - Explain the influence of nutrition and physical activity on health

- Overarching Nutrition Education Competency 2: Analyzing Nutrition Influences
 - All students will demonstrate the ability to analyze internal and external factors influencing food choices and health outcomes
- Overarching Nutrition Education Competency 5: Decision Making for Nutrition Choices
 - All students will demonstrate the ability to use decision-making skills to optimize food choices and health outcomes
- Overarching Nutrition Education Competency 7: Practicing Nutrition Enhancing Behaviors
 - All students will demonstrate the ability to practice nutrition-related behaviors that reduce risk and promote health

*Note: For suggestions on linking this lesson to other content areas, please see **Extensions/Links** in Lessons 2A and 2B.*

Rethink Your Drink Key Messages:

- Drink water instead of sugar-sweetened beverages (e.g., sodas, sports drinks, energy drinks, and juice drinks).
- Choose from a variety of healthy drink options, such as water, fat-free milk, 1% milk, 100% fruit juice or unsweetened tea over sugar-sweetened beverages.
- Use the Nutrition Facts label to choose foods with less total sugars.
- Use the Ingredient List to choose foods with little or no added sugars.

Learning Objectives 2A

1. Identify influences that affect their food and beverage choices.
2. Evaluate internal and external influences and their impact on health enhancing choices and behaviors.

Learning Objectives 2B

1. Learn the steps of the decision-making process.
2. Choose healthier beverage options using the decision-making process.

Teacher Background

- The *Dietary Guidelines for Americans, 2015*, emphasize balancing calorie intake with physical activity along with making healthier choices. This includes limiting calorie intake from added sugars, choosing whole or cut-up fruit more often than juice, and cutting back on foods and drinks with added sugars and caloric sweeteners.
- Making smart beverage choices involves analyzing the Nutrition Facts label and choosing drinks that have more nutrients and less calories and added sugars.
- Major sources of added sugar in the American diet come from soda and energy and sports drinks. Strong evidence shows that children and adolescents who consume more sugar-sweetened beverages have higher body weights compared to those who drink fewer sugar-sweetened beverages. Sugar-sweetened beverages provide excess calories and few other nutrients to the diet.
- Adolescents should be concerned about the amount of sugar-sweetened beverages they drink. These drinks often contain empty calories, caffeine, and added sugar. Increased consumption of these drinks is linked to tooth decay and weight gain. Obesity is linked to multiple chronic diseases like type 2 diabetes and heart disease.

Additional Teacher Background

- For more information on sugar-sweetened beverages and their link to overweight and obesity, as well as county-specific information on teenage sugar-sweetened beverage consumption, read: *Bubbling Over: Soda Consumption and Its Link to Obesity in California* Fact Sheet (See References).
- There are many influences—internal and external—that factor into making decisions regarding personal, family, and community health. Identifying and analyzing these influences are important skills in preventing behaviors that can negatively impact health.
 - **Internal influences** include: knowledge, interests, likes, dislikes, desires (e.g., feel accepted), and curiosity.
 - **External influences** include: media and advertising, setting, location, culture, parents, family, peers, friends, and role models.
- The decision-making process is an important skill to develop and to practice when supporting teens in making health-enhancing choices. Steps in the decision-making process include:
 - a. State the situation
 - b. List the options
 - c. Weigh the possible consequences and benefits
 - d. Consider values
 - e. Make a decision and act
 - f. Evaluate the decision

References

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3. U.S. Department of Agriculture Dietary Guidelines for Americans, 2015. Washington, DC: U.S. Government Printing Office; December 2015
4. Gortmaker, S, Long, M, & Wang YC. The Negative Impact of Sugar-Sweetened Beverages on Children's Health, November 2009. Retrieved from: <http://www.rwjf.org/content/dam/farm/reports/reports/2009/rwjf50143>.
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Lesson 2A

What Influences Your Health?

Lesson Overview

Time

- Teacher Preparation: 20 minutes
- Classroom Activity: 50 minutes total

Materials

- *What Are My Influences?* worksheet
- *Assessing My Drink Options* homework

Preparation

- Review teacher background information and additional website links, as necessary
- Copy the following worksheets (one per student):
 - *What Are My Influences?* worksheet
 - *Assessing My Drink Options* homework

Continued on page 2

Vocabulary (See Glossary for definitions)

- External influences
- Internal influences

Steps for Classroom Activity

Warm-up

- Summarize lessons learned from *Lesson 1: What's in Your Drink?*
 - Sugar-sweetened beverages provide excess calories and often provide few essential nutrients to the diet. Drink water and other healthy beverage options (e.g., fat-free milk, 100% fruit juice) instead of sugar-sweetened beverages.
 - Accessing valid health information is an important skill to develop and to practice that involves critically evaluating the source, purpose, and timeliness of information we seek and/or receive.
 - Evaluating the Nutrition Facts labels and Ingredient Lists on food and beverage packaging is an important first step in identifying the amount of added sugars contained in a product.
- Share the *Lesson 2A* learning objectives with students:
 1. Identify influences that affect their food and beverage choices.
 2. Evaluate internal and external influences and their impact on health enhancing choices and behaviors.
- Ask students: What comes to mind when they hear the word *influence*? Record answers on the board. (*Influence* means to be able to produce effects on the actions, behavior, or opinions of yourself or another.)

Lesson Outline

- Warm-up
 - *What Are My Influences?* activity
 - Discussion
 - Assign homework
 - Check for Learning
- Provide a brief example for students to apply the definition of an influence to a day-to-day activity.
 - Define two types of influences — *internal* and *external*:
 - *Internal influences* are influences that come from within yourself.
 - For example: personal preference, values, knowledge, interests, likes/dislikes, desires (e.g. feel accepted), and curiosity
 - *External influences* are influences that come from others.
 - For example: media, friends, family, setting, location, environment, culture, and role models
 - Introduce this example and categorize the influences into internal and external influences (see chart below).

STEP 1: Ask students the following question...	STEP 2: Possible student responses...	STEP 3: Identify the influence from the responses...	STEP 4: Identify influence as internal or external...
Think about the last drink that you purchased. What were some factors that influenced your choice?	"I like the way it tastes" → "My friends were drinking it" → "I only had \$1.00" → "My favorite athlete drinks it" →	Personal preference → Trends, friends → Cost, availability → Media, marketing →	Internal influence External influence External influence External influence

- Discuss with students the influences that impact their everyday choices—whether they are internal or external. Influences are important to recognize because they can indirectly impact our health.
 - Share the following example with students: On the way home from school, I stop at the convenience store because I am thirsty. I end up choosing a soda because the packaging looks more appealing to me. I end up not eating a balanced meal for dinner because the drink filled me up.
 - What are my influences? Discuss with students. Influences include: accessibility, since the store is close by (external); thirst (internal); media and marketing through the packaging (external).

- All of the above leads to me not eating a balanced meal for dinner and, therefore, impacts my health.
- Tell students that they will now take a look at internal and external influences on their own beverage choices and will discuss how they can, and do, impact their health.

Activity

- Ask students to individually think about influences on their personal daily food or beverage choices. As they reflect, pass out *What Are My Influences?* worksheet.
- Have students complete the worksheet by listing up to three beverages they've consumed over the past few days. Students will record when they usually drink these beverages, the main reason(s) for choosing them, and the influence(s) —either internal or external.
- After completing the *What Are My Influences?* worksheet, students list the top three influences on their beverage choices and what they can do to make healthier choices.

Beverage	Time of day you consume the beverage	Reasons (an explanation of a belief or action)	Influences (the capacity to produce effects on the actions of another)
Soda	Afternoon — after school	All my friends were buying one	Peer pressure (external)
Orange juice	Breakfast — morning	It tastes good, and it is tangy	Personal preference (internal)

Cool down

- As a class, discuss beverage consumption habits and influences.
 - What are some of the beverages commonly consumed?
 - In looking at where these beverages are consumed, are there different influences at home, school, or after school?
 - Note: Environment can influence beverage intake (beverages in refrigerator at home, beverages in vending machines, lack of options).
 - What are some of the top influences? Are they internal or external?
- Discuss with students that analyzing internal and external influences helps them to become more aware of their actions and the choices they make. Tell students that, in the next activity, they will practice analyzing their influences and take a closer look at the decision-making process.

Assign Mandatory Homework

- Pass out *Assessing My Drink Options* worksheet and ask students to complete it prior to the next lesson.

Check for Learning

- Completed worksheet: *What Are My Influences?*
- Review the following questions with students:
 - Describe an example where the same influence could encourage both healthy and unhealthy choices depending on the situation (e.g. media).
 - What choices do you have—other than sugar-sweetened beverages—to drink at home, at school, and with friends?

Home Connection (Optional)

- Share Key Messages for *Rethink Your Drink* with family members.

Extensions/Links

- English Language Arts
 - Ask students in the small groups to select one beverage and to create an advertisement that showcases its impact on health (examples of types of advertisements: song or slogan, star power and using someone famous, bandwagon, or comparison of products).
 - Tip: Prior to starting their advertisement, ask students to write down a list of pros and cons to drinking the beverage and encourage them to assess their motivations for consumption of this product if they have done so in the past.
 - Have small groups vote on which advertisement was most convincing in influencing their future beverage choices.
- Youth Engagement
 - Consider participating in a photovoice project. Photovoice is a technique in which students and other community members use photographs of their community to identify problems and work towards a solution. Images and stories that are captured serve to persuade others, residents and decision-makers alike, to get involved to make healthy environmental change. For example, students can photograph the condition of school water fountains and tell a story about the availability of clean drinking water.

Lesson 2B

Choosing Drinks for Health

Lesson Overview

Time

- Teacher Preparation: 20 minutes
 - Classroom Activity: 50 minutes total
-

Materials

- *Decision-Making Process* worksheet
 - *Assessing My Drink Options* worksheet
 - *Choose a Healthy Drink Challenge* worksheet
 - *Healthy Beverage Highlights*
-

Preparation

- Review teacher background information and additional website links, as necessary
- Copy the following worksheets (one per student):
 - *Decision-Making Process* worksheet
 - *Choose a Healthy Drink Challenge* Worksheet (2 copies if doing the optional field trip)
 - *Healthy Beverage Highlights*

Continued on page 2

Vocabulary (See Glossary for definitions)

- Decision-making
- Values

Steps for Classroom Activity

Warm-up

- Share the *Lesson 2B* learning objectives with students:
 1. Learn the steps of the decision-making process.
 2. Choose healthier beverage options using the decision-making process.
- Share with students that we've all had to make decisions—easy and difficult. Ask students to consider internally some decisions that were easy or difficult for them to make.

Activity

- Provide and review the *Decision-Making Process* worksheet. Tell students that decision-making is a skill that we need in order to make health-enhancing choices.
 1. State the situation.
 2. List the options.
 3. Weigh the possible consequences and benefits.
 4. Consider values.
 5. Make a decision and act.
 6. Evaluate the decision.
- Walk students through the decision-making process by using an example of an easy decision and a difficult decision. Have students complete the chart on the *Decision-Making Process* worksheet as a class using either the easy or difficult decision.

Lesson Outline

- Warm-up
 - Decision-Making Process activity
 - Assessing My Drink Options activity
 - Choose a Healthy Drink Challenge activity
 - Healthy Beverage Highlights review
 - Discussion
 - Check for Learning
-

Activity

- In pairs or small groups, ask students to discuss findings of *Assessing My Drink Options* worksheet (assigned as homework prior to starting the lesson). Were there similar drink options across locations? What drink options were different?
- Discuss the drink options that students circled as their drinks of choice for each location. Ask students to share their influences on these choices and identify trends.
- Tell students there are many options, and ask how can they make healthy choices. Tell students that they will be asked to take on the “Choose a Healthy Drink Challenge.”

Activity

- Using the completed *Assessing My Drink Options* worksheet, have students complete the *Choose a Healthy Drink Challenge* worksheet.
- Students will focus on the two beverages of choice that they selected at the school location.
- Discuss the consequences and benefits to their health of choosing a particular drink.
- Have students complete their decision on what beverage they will choose and develop a decision plan.

Class Trip (Optional)

- Distribute a second copy of the *Choose a Healthy Drink Challenge* worksheet. Tell students they will be taking a “class trip” to review, as a group, the available beverage options in one school location such as the vending machine, student store, etc.
 - Note: Other options to explore and visit could include fast food restaurants or convenience stores near the school site, as school policies allow.
 - Tip: Depending on the proximity of the locations, the instructor may want to keep the number of locations to a minimum to keep the group more manageable.
- Review the worksheet with the students.
- Instruct students to complete all sections except *Step 6: Evaluate the Decision*. This section is a homework option and asks students to review their decision plan.

Cool Down

- Ask students to share some of their final decisions with the class.
 - Was it a challenge to arrive at this decision? What made the decision challenging?
 - Which reasons and influences had the strongest impact on your decision to make a healthy beverage choice?
 - What are some of the positive or negative impacts of your beverage choice on your health?
 - If your final decision was a not-so-healthy beverage choice, what steps can you take to balance this choice with a healthy choice in the future? For example, make healthier options available, set a goal, reconsider influences, balance diet and beverage options for the remainder of the day, or decrease serving sizes.
- Reference back to *Lesson 2A: What Influences Your Health?* Discuss looking at external influences and how students can shape these to help support healthy decisions. For example, locate and visit healthy vending machines, ask friends or family to support making healthy choices (e.g. hydration stations).
- Remind students that reflecting on decisions is an important part in identifying factors they didn't consider or might change next time.
- Keep in mind that together many small choices have a big impact. Dietary choices, like which beverage to drink or foods to eat, are made in the broader context of the day, and even week or month. Balancing energy intake and expenditure, with an emphasis on healthy choices, is the key to meeting the *Dietary Guidelines for Americans*. This is especially important to keep in mind as students try to make changes in their food and beverage choices.

Check for Learning

- Review key messages from all four lessons using *Healthy Beverage Highlights*. Distribute a copy to each student to keep for reference.
- Completed worksheet: *Choose A Healthy Drink Challenge*
- Ask students to describe the relationship between analyzing internal and external influences and the decision-making process.

Home Connection (Optional)

- Homework option:
 - Students complete *Evaluate the Decision* section on *Choose a Healthy Drink Challenge* worksheet. Share and discuss findings with class.
- Ask students to share their decision to make a healthy choice at school with their family. Use the *Choose a Healthy Drink Challenge* worksheet to make a healthy decision at home.

Extensions/Links

- English Language Arts
 - Students can partner to brainstorm ways to improve healthy beverage options. Write letters to the principal, food service staff, and fast food store manager about including healthy beverage options.

- Math
 - Track the amount of money spent on sugar-sweetened beverages.



What Are My Influences?

Name: _____ Date: _____

Directions: List up to three beverages you have consumed within the past 24-48 hours. Include when you usually consume this beverage, the main reason(s) for choosing them, the influence, and if the influence is internal or external.

BEVERAGE <i>Name, Where Consumed, Time Consumed</i>	REASONS <i>for choosing the beverage</i>	INFLUENCES <i>(I) Internal & (E) External</i>
1.		
2.		
3.		

What are the top three influences on your beverage choices?

1. _____
2. _____
3. _____

Now that you are aware of these influences, what can you do differently to make healthier choices?



For CalFresh information, call 1-877-847-3663. Funded by USDA SNAP, an equal opportunity provider and employer. Visit www.cachampionsforchange.net for healthy tips.



Assessing My Drink Options

Name: _____ Date: _____

1. What are my drink options?

You make choices about what you drink every day. There are plenty of options available at school, at home, and at your favorite hangouts. Assess your environment and explore your options. List a variety of drink options for each location.

AT SCHOOL (e.g. cafeteria, vending machines, school store, class celebrations, school events, water fountains, etc.)	AT HOME	OTHER: _____ (e.g. neighborhood store, fast food, recreation center, mall, movies, gas station, etc.)

2. Which drinks am I choosing?

Circle the two drink options you most often choose for each location.

Continued on the next page



3. What are some factors influencing these choices?

For each location, list both the internal and external influences on your beverage choices:

- *Internal influences* are influences that come from within yourself.
 - For example: personal preference, values, knowledge, interests, likes/dislikes, desires (e.g. feel accepted), and curiosity
- *External influences* are influences that come from others.
 - For example: media, friends, family, setting, location, environment, culture, and role models

LOCATION	INTERNAL INFLUENCES	EXTERNAL INFLUENCES
At School		
At Home		
Outside School & Home		





Decision-Making Process

Name: _____ Date: _____

Steps in the Decision-Making Process:

1. State the situation.
2. List the options.
3. Weigh the possible consequences and benefits.
4. Consider values.
5. Make a decision and act.
6. Evaluate the decision.

Class Example: _____

1. State the situation.		
2. List the options.		
3. Weigh the possible consequences and benefits.	Consequences	Benefits
4. Consider values.		
5. Make a decision and act.		
6. Evaluate the decision.		

Included with permission from the California After School and Healthy Kids Resource Centers' training: Raisins or Roll-Ups, What's Better for Me? (2009)



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Choose a Healthy Drink Challenge

Name: _____ Date: _____

To drink or not to drink...that is the question

It can be difficult to make healthy choices—especially when there are so many options available and so many influences. Taking care of your body is important to your overall health, and fueling it with healthier food and drinks is the place to start. The Challenge: Choose A Healthy Drink.

Make a healthier choice

Step 1: State the situation

- I would like to choose a healthy drink option at school.
- Reference *Assessing My Drink Options* homework focusing on the school location.

Step 2: List the options

- Complete the chart below for your 2 top beverages of choice at school using the *Assessing My Drink Options* homework.

Step 3: Weigh the possible consequences and benefits

- Complete the remainder of the chart.

Location visited: _____

Beverage of choice at school	Primary Influence	Consequences — of choosing this drink on my health	Benefits — of choosing this drink on my health
1.			
2.			

Step 4: Consider values

- Think about what is important to your family, health, image, and appearance. Weigh each of the benefits and consequences.

Note: Are there other options that were overlooked or not available?

Step 5: Make a decision and act

My Decision...

I choose to drink _____ instead of _____
[Insert beverage name.] [Insert beverage name.]

because _____
[Insert reason(s) for choosing drink.]

[Insert impact of choosing drink on health.]

My Decision Plan:

How will you carry out your decision? (Include your action, timeframe, additional support)

**Home Connection:
Evaluate the decision**

How did it go? After carrying out your decision, take a moment to reflect on the choice you made. Would you make a different choice next time?





Healthy Drink Highlights

Sugary Drinks and Your Health

- Most drinks contain two kinds of sugar; natural sugar (e.g. lactose in milk and fruit in fruit juice) and added sugar. Many processed foods, like sweets and sodas, have added sugars.
- Sugary drinks are drinks that are sweetened with added sugars. Sugary drinks add more calories to your diet but not many nutrients.
- Too much added sugar can lead to tooth decay and weight gain. Being overweight can lead to chronic diseases such as type 2 diabetes, certain cancers, and heart disease. Sugary drinks may also have caffeine which can cause problems with sleep or changes to your mood.

Action Steps:

- Drink water instead of sugary drinks like sodas, coffee drinks (e.g. caramel macchiato or frappuccino) sports drinks, energy drinks, and juice drinks.
- Choose healthy drinks, such as water, 1% milk, fat-free milk, 100% fruit juice, or unsweetened tea instead of sugary drinks.

The Nutrition Facts Label and Ingredient Lists

- When learning about health information, it is important to consider where the information comes from. Consider *who* provided the information, *why* the information was provided, and *when* the information was provided.
- Reading the Nutrition Facts labels and Ingredient Lists on food and drink packaging can help you find out how much sugar is in a food or drink.
- Names for added sugars include: corn syrup, corn syrup solids, dextrose, fructose, high-fructose corn syrup (HFCS), honey, malt syrup, maltose, maple syrup, molasses, nectars (e.g., peach nectar, pear nectar), raw sugar, sucrose, and sugar.

Action Steps:

- Read the Nutrition Facts label to choose foods and beverages with less total sugars.
- Read the Ingredient List to choose foods and beverages with little or no added sugars.

Internal and External Influences on Health

- Understanding internal and external influences is an important skill that will help you make healthier choices about food and drinks.
 - **Internal influences:** knowledge, interests, likes, dislikes, desires (e.g., feel accepted), and curiosity.
 - **External influences:** media and advertising, setting, location, culture, parents, family, peers, friends, and role models.

Action Step:

- Identify the internal and external influences that impact your food and drink choices. Then, decide what you can do to make healthier choices.

Decision-Making

- The decision-making process is an important skill to develop and to practice in order to make healthier choices.
- Steps in the decision-making process include:
 - a. State the situation
 - b. List the options
 - c. Weigh the possible consequences and benefits
 - d. Consider values
 - e. Make a decision and act
 - f. Evaluate the decision

Action Step:

- Use the *Choose a Healthy Drink Challenge* worksheet to practice decision-making.



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Lesson 1A	
Sugar-sweetened beverages (SSBs)	Includes all sodas, fruit drinks, sport drinks, low-calorie drinks and other beverages that contain added caloric sweeteners, such as sweetened tea, rice drinks, bean beverages, sugar cane beverages, horchata, and many types of energy and coffee drinks as well as nonalcoholic wines and malt beverages.
Added sugars	Sugars and syrups that are added to foods or beverages during processing or preparation.
Natural sugars	Sugars that naturally occur in milk and fruits.
<i>Dietary Guidelines for Americans, 2015</i>	Nutritional guidance from the federal government provided to promote health, reduce the risk of chronic diseases, and reduce the prevalence of overweight and obesity through improved nutrition and physical activity.
Lesson 1B	
Nutrition Facts label	The section of a food label that shows the Serving Size, Calories, and key nutrients by % Daily Value in one measured amount of food.
Ingredient List	The listing of each ingredient in descending order of predominance.
Serving Size	A term that indicates a fixed amount of food, such as 1 cup or 1 ounce, shown on Nutrition Facts label. It is useful in determining how much of that food you eat and what amount of nutrients you are getting, and making comparisons among foods.

Sugars	Sugars are the simple form of carbohydrates that usually taste sweet and are quickly absorbed. There are many forms of sugars; their names often end in “ose,” as in sucrose (table sugar), lactose (milk sugar), and fructose (fruit sugar).
Daily Value (DV)	DVs are the recommended amounts of key nutrients, based on 2,000 calories a day. The amounts shown for the DV nutrient levels for 2,000 and 2,500 calories are provided on many Nutrition Facts labels.
% Daily Value (% DV)	Shows the specific amounts of nutrients for each food. The % DVs make it easier to compare the amount of nutrients in a food to the amount of nutrients people need each day. Between 10 and 20 percent is considered a good source and 20 percent or more is considered an excellent source.
Lesson 2A	
External influences	Influences that come from others or external environment.
Internal influences	Influences that come from within you.
Lesson 2B	
Decision-making	The process of making choices or reaching conclusions. The process involves: stating the situation, listing the options, weighing possible consequences, considering values, acting on the decision, and evaluating the decision.
Values	Strongly held beliefs about what is valuable, important, or acceptable.