



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.

Learning Objectives

Students will:

1. Learn the effects of excessive sugar consumption on overall health.
2. Identify the importance of accessing valid health information.
3. Use Nutrition Facts labels to compare and to contrast sugar content in a variety of beverages.
4. Use Ingredient Lists to identify the different types of sugar in sweetened beverages.
5. 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.

Prior Knowledge

Students should be able to read a Nutrition Facts label and Ingredient List. Suggested lessons to prepare students:

- *The Power of Choice — Helping Youth Make Healthy Eating and Fitness Decisions*
 - *Topic 4: Are You Label Able?*
- *Nutrition Essentials*
 - *Lesson 3: Choose Foods for Their Nutrients*

Looking for the above instructional resources? Visit the California Healthy Kids Resource Center website at <http://www.californiahealthykids.org> or call toll free at 888-318-8188.

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, 2010*, emphasizes 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 lowfat 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.

Additional Teacher Background

- Sugar-sweetened beverages contain added sugar, water, calories, and sometimes caffeine (or other food additives). Teens who 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, 2010. Washington, DC: U.S. Government Printing Office; December 2010*
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://www.ianrpubs.unl.edu/pages/publicationD.jsp?publicationId=296>



LESSON 1A

Learning the Facts

Lesson Overview

Time

- Teacher Preparation: 20 minutes
- Classroom Activity: 40 minutes

Materials

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

Preparation

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

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, 2010*

Steps for Classroom Activity

Warm-up:

- Share lesson objectives with students.
- 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:
 - 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.
 - *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.
 - Tip: Keep this record of the top reasons for choosing specific beverages, since it will be a part of the discussion in *Lesson 2: Think Before You Drink!*
- Ask students how they think the beverages they choose impact their health. Discuss short-term and long-term effects.

- 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?
 - Tip: Keep a record of student responses to the “why” question. This will be helpful information to tie in to Lessons 2 and 3.
 - 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

- 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.
 - Ask students to save empty drink containers (for the Nutrition Facts label and Ingredient List) and bring to class time for *Lesson 1B: Sugar Sleuths*.
- Encourage parents and family members to learn more about and participate in the local *Rethink Your Drink (RYD) Campaign*.
- 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%20Learning%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: 60 minutes
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Materials

- Per small group of 2-3 students:
 - Three Drink Label Cards from popular types of beverages
 - 50 Sugar cubes
 - Three small plastic re-sealable bags for sugar cubes
 - *How Much Sugar?* worksheet
 - *Nutrition Facts Label Scavenger Hunt* worksheet
 - 100% Orange Juice Drink Label Card
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Preparation

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

Continued on page 2

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:

- 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?
 - 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

Scavenger Hunt worksheet

- Generic drink labels
- Post a list of added sugars on the board (see highlighted box)

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 Fact labels to select healthier beverage choices.

Activity:

- Review label reading:
 - Use the 100% Orange 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.
- 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 100% Orange Juice Drink Label Card.

- 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.

- Tip: Use the How Much Sugar? worksheet to show students how to analyze the information on the label.
- Identify the following (using 100% Orange Juice Drink Label Card):
 1. Number of servings in the container (two servings)
 2. Grams of sugar per serving (23 grams of sugar)
 3. Total grams of sugar in the container (46 grams of sugar in container)
 4. Names of added sugars in the Ingredient List (no added sugars)
- Explain as you fill out the How Much Sugar? 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 sugar in the container of 100% orange juice.
- 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 three 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 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 categorize the drinks into those that contain mostly added sugars versus mostly natural sugars. You may consider incorporating a graphic organizer such as a T-chart.
 - Note: Students can also compare total sugar per serving across the selected beverages versus the total sugar in the can and/or bottle.
- To do this, ask students to enter a “1” after “Number of servings per drink” in the first step of the How Much Sugar? worksheet calculations. This will provide them with the Total Sugar per serving versus Total Sugar per drink.

Cool down:

- Ask the class if they were surprised by the amount of sugar in certain drinks. Which drinks were the highest in sugar? Which drinks were the lowest in sugar? Compare these findings to the 100% orange juice modeled earlier. Which beverage(s) offer more nutrients? Less nutrients? Which one(s) contained fewer added sugars? More added sugars?
- 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.)
 - How would you evaluate the amount of sugar in a beverage or food item?

Home Connection

- 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. Discuss findings with students.
- 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.

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

...

Excessive intake of calories, like those from **added sugar**, can lead to weight gain—which can increase your risk for certain chronic diseases.

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, 2010*, 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 

A 

DATO

¿Sabías que...?

El adolescente promedio de California consume el equivalente a 39 libras de azúcar cada año provenientes de **bebidas endulzadas con azúcar**.

DEFINICIÓN

Las **bebidas endulzadas con azúcar** son las bebidas que se endulzan añadiéndoles azúcares. Los azúcares agregados se encuentran en muchos alimentos procesados como dulces y refrescos.

A 

2 

DATO

¿Sabías que...?

Tomar muchas bebidas endulzadas con azúcar en lugar de leche puede disminuir tu consumo de **calcio**.

DEFINICIÓN

El **calcio** es un mineral que junto con la vitamina D y otro mineral llamado fósforo ayuda a desarrollar huesos y dientes fuertes. Las fuentes de calcio incluyen: almendras, jugo de naranja fortificado con calcio, tofu, verduras de hoja de color verde oscura, frijoles, productos lácteos bajos en grasa y nopales.

2 

3 

DATO

¿Sabías que...?

Reducir la cantidad de azúcar agregada que se consume por medio de las comidas y las bebidas puede ayudar a prevenir las **caries dentales**.

DEFINICIÓN

Las **caries dentales** son el resultado de la interacción constante de la placa (o bacteria) que se forma en los dientes y las encías con los azúcares de la comida y la bebida que consumes. Por eso es importante cepillar los dientes y usar el hilo dental todos los días.

3 

4 

DATO

¿Sabías que...?

El agua es un **nutriente** esencial que necesita el cuerpo para vivir. El agua no contiene calorías. Algunas frutas y verduras contienen grandes cantidades de agua (como la lechuga y la sandía).

DEFINICIÓN

Los **nutrientes** son necesarios para vivir. Se encuentran en la comida y ayudan para tener energía, para crecer y para las funciones corporales. Estos son los carbohidratos, proteínas, grasas, agua, vitaminas y minerales.

4 

5 

DATO

¿Sabías que...?

Las personas que son físicamente activas necesitan líquidos para reemplazar la pérdida de líquidos corporales al sudar. Para la mayoría de las personas, el agua es la mejor opción para satisfacer la sed y reemplazar los **líquidos** corporales que se pierden.

DEFINICIÓN

Los **líquidos** se encuentran en las bebidas y los alimentos. La sed y los hábitos de beber normales, especialmente los líquidos que se toman con las comidas, bastan normalmente para satisfacer la necesidad de líquidos del cuerpo. Las personas necesitan tomar más líquidos cuando hace calor y durante la actividad física de intensidad vigorosa.

5 

6 

DATO

¿Sabías que...?

El consumo excesivo de calorías, como las que provienen de **azúcar agregada**, pueden provocar aumento de peso – lo cual puede aumentar tu riesgo de padecer algunas enfermedades crónicas.

DEFINICIÓN

Azúcar agregada significa que se agrega azúcar a la comida y a las bebidas durante su procesamiento, preparación o en la mesa. El azúcar agregada aporta calorías pero muy pocos, o ningún nutriente esencial, y nada de fibra dietética. Ejemplos de azúcar agregada incluyen: Jarabe de maíz de alta fructuosa, azúcar blanca, miel y melaza.

6 

7 

DATO

¿Sabías que...?

Todas las **bebidas ricas en nutrientes** no se elaboran igual así que toma una variedad de bebidas saludables. La leche contiene calcio, vitamina D y proteína como nutrientes principales, mientras que el jugo de naranja 100% natural contiene principalmente vitamina C, potasio y folato.

DEFINICIÓN

Las **bebidas ricas en nutrientes** aportan grandes cantidades de vitaminas y minerales para el tamaño de la porción y las calorías que contiene cada porción.

Buena fuente: Un alimento o bebida que contiene 10 por ciento o más del valor recomendado diariamente de una vitamina o mineral.

Fuente excelente: Un alimento o bebida que contiene 20 por ciento o más del valor recomendado diariamente de una vitamina o mineral.

7 

8 

DATO

¿Sabías que...?

Las *Guías Alimentarias para los Estadounidenses, 2010*, recomiendan tomar **agua** en lugar de bebidas endulzadas con azúcar, además de recomendar que la mitad de tu plato contenga frutas y verduras.

DEFINICIÓN

El **agua** es vital para el cuerpo y ayuda a controlar tu temperatura. El agua ayuda al cuerpo a usar los nutrientes que se encuentran en la comida, lleva oxígeno del aire al resto del cuerpo, evita el estreñimiento y mantiene húmedos los ojos, la nariz y la boca. El agua que contienen las frutas y verduras ayuda a las personas a satisfacer la cantidad de líquidos que necesitan tomar cada día.

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>





BINGO de ¡Entérate!

Instrucciones: Trabaja con otra persona para encontrar a otras parejas de estudiantes que tengan la(s) respuesta(s) en los cuadros siguientes. Una vez que la(s) encuentres, los estudiantes que den las respuestas deben anotar sus iniciales en la parte de abajo, a la derecha del cuadro.

<p>Las bebidas endulzadas con azúcar agregada se llaman:</p> <p>_____</p> <p>Iniciales: _____</p>	<p>Los _____ se encuentran en las bebidas y en los alimentos.</p> <p>Iniciales: _____</p>	<p>Las bebidas que aportan una cantidad alta de vitaminas y minerales y tienen menos calorías que las bebidas similares se llaman:</p> <p>_____</p> <p>Iniciales: _____</p>
<p>Anota tres de las seis categorías principales de nutrientes:</p> <p>1 _____</p> <p>2 _____</p> <p>3 _____</p> <p>Iniciales: _____</p>		<p>El calcio es importante para desarrollar huesos y dientes fuertes. Nombra dos fuentes de calcio:</p> <p>1 _____</p> <p>2 _____</p> <p>Iniciales: _____</p>
<p>¿Qué nutriente principal ayuda a controlar la temperatura de tu cuerpo y transportan el oxígeno del aire al resto del cuerpo?</p> <p>_____</p> <p>Iniciales: _____</p>	<p>Este puede ser el resultado cuando la placa que se forma en los dientes y encías interactúa constantemente con los azúcares de la comida y la bebida que consumes:</p> <p>_____</p> <p>Iniciales: _____</p>	<p>El jarabe de maíz de alta fructuosa, azúcar blanca y melaza son tipos de:</p> <p>_____</p> <p>Iniciales: _____</p>





BINGO de ¡Entérate! (Respuestas)

Instrucciones: Trabaja con otra persona para encontrar a otras parejas de estudiantes que tengan la(s) respuesta(s) en los cuadros siguientes. Una vez que la(s) encuentres, los estudiantes que den las respuestas deben anotar sus iniciales en la parte de abajo, a la derecha del cuadro.

<p>Las bebidas endulzadas con azúcar agregada se llaman:</p> <p>Bebidas endulzadas con azúcar</p>	<p>Los líquidos se encuentran en las bebidas y en los alimentos.</p>	<p>Las bebidas que aportan una cantidad alta de vitaminas y minerales y tienen menos calorías que las bebidas similares se llaman:</p> <p>Bebidas ricas en nutrientes</p>
<p>Anota tres de las seis categorías principales de nutrientes:</p> <p>Carbohidratos, Grasas, Proteína, Vitaminas, Minerales, Agua</p>		<p>El calcio es importante para desarrollar huesos y dientes fuertes. Nombra dos fuentes de calcio:</p> <p>Almendras, verduras de hoja verde oscura, jugo de naranja fortificado con calcio y tofu, productos lácteos bajos en grasa, frijoles secos y nopales</p>
<p>¿Qué nutriente principal ayuda a controlar la temperatura de tu cuerpo y transportan el oxígeno del aire al resto del cuerpo?</p> <p>Agua</p>	<p>Este puede ser el resultado cuando la placa que se forma en los dientes y encías interactúa constantemente con los azúcares de la comida y la bebida que consumes:</p> <p>Caries</p>	<p>El jarabe de maíz de alta fructuosa, azúcar blanca y melaza son tipos de:</p> <p>Azúcares agregados</p>





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:

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 #3 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:

List your beverages, from lowest to highest, in total grams of sugar per container:

1. Lowest: _____

2. _____

3. Highest: _____





¿Cuánta azúcar?

Nombre: _____ Fecha: _____

Instrucciones: Usa esta hoja de trabajo para calcular el azúcar total (en cucharaditas) de cada bebida.

Consejos útiles: 4 gramos de azúcar = 1 cucharadita de azúcar
1 cubo de azúcar representa 1 cucharadita de azúcar

Lista de azúcares agregadas (en inglés): *Anhydrous dextrose, brown sugar, confectioner's powdered sugar, 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), pancake syrup, raw sugar, sucrose, sugar, y white granulated sugar.*

Nombre de la bebida #1:

1. Calcula el total de azúcar (en cucharaditas) de cada bebida:

a. Azúcar por porción X Número de porciones = **Gramos de azúcar total**
_____ g _____ _____ g

b. **Gramos de azúcar total** ÷ 4 g por cucharadita = **Cucharaditas de azúcar total por bebida**
_____ g de azúcar _____ cucharaditas

2. Usando los cubos de azúcar, cuenta el número de cucharaditas de azúcar en cada bebida y coloca los cubos de azúcar en una bolsa de plástico.

3. Marca en la bolsa con el nombre de tu bebida.

4. Revisa la lista de ingredientes y escribe las diferentes formas de azúcar agregada:

Nombre de la bebida #2:

1. Calcula el total de azúcar (en cucharaditas) de cada bebida:

a. Azúcar por porción X Número de porciones = **Gramos de azúcar total**
_____ g _____ _____ g

b. **Gramos de azúcar total** ÷ 4 g por cucharadita = **Cucharaditas de azúcar total por bebida**
_____ g de azúcar _____ cucharaditas

2. Usando los cubos de azúcar, cuenta el número de cucharaditas de azúcar en cada bebida y coloca los cubos de azúcar en una bolsa de plástico.

3. Marca en la bolsa con el nombre de tu bebida.

4. Revisa la lista de ingredientes y escribe las diferentes formas de azúcar agregada:

Consejos útiles: 4 gramos de azúcar = 1 cucharadita de azúcar
1 terrón de azúcar representa una cucharadita de azúcar

Lista de azúcares agregadas (en inglés): *Anhydrous dextrose, brown sugar, confectioner's powdered sugar, 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), pancake syrup, raw sugar, sucrose, sugar, y white granulated sugar.*

Nombre de la bebida #3:

1. Calcula el total de azúcar (en cucharaditas) de cada bebida:

a. Azúcar por porción X Número de porciones = **Gramos de azúcar total**

_____ g _____ _____ g

b. **Gramos de azúcar total** ÷ 4 g por cucharadita = **Cucharaditas de azúcar total por bebida**
_____ g de azúcar _____ cucharaditas

2. Usando los cubos de azúcar, cuenta el número de cucharaditas de azúcar en cada bebida y coloca los cubos de azúcar en una bolsa de plástico.

3. Marca en la bolsa con el nombre de tu bebida.

4. Revisa la lista de ingredientes y escribe las diferentes formas de azúcar agregada:

Haz una lista de tus bebidas en orden de menor a mayor cantidad de gramos de azúcar por bebida:

1. menor cantidad de azúcar: _____

2. _____

3. mayor cantidad de azúcar: _____





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





En busca de los datos de nutrición

Nombre: _____ Fecha: _____

Instrucciones:

1. Elige dos comidas o bebidas (al menos una tiene que ser una bebida) de tu refrigerador o despensa.
2. Copia la información del producto de la etiqueta de información nutricional en las muestras de etiquetas que aparecen abajo.
3. Responde a las preguntas bajo cada etiqueta.
4. Trae tus etiquetas a la clase para hablar de ellas.

Nombre del producto: _____

Nombre del producto: _____

Nutrition Facts/Datos de nutrición	
Serving Size/Tamaño de porción	
Servings Per Container/Porciones por envase	
Amount Per Serving/Cantidad por porción	
Calories/Calorías	Calories from Fat/Calorías de grasa
% Daily Value/% Valor diario*	
Total Fat/Grasas	g %
Saturated Fat/Grasa saturada	g %
Trans Fat/Grasa trans	g
Cholesterol/Colesterol	mg %
Sodium/Sodio	mg %
Total Carbohydrate/Carbohidratos	g %
Dietary Fiber/Fibra dietética	g %
Sugars/Azúcares	g
Protein/Proteínas	g
Vitamin A/Vitamina A	% • Vitamin C/Vitamina C %
Calcium/Calcio	% • Iron/Hierro %
*Percent Daily Values (DV) are based on a 2,000 calorie diet. * El porcentaje de valores diarios (VD) está basado en una dieta de 2,000 calorías.	

Nutrition Facts/Datos de nutrición	
Serving Size/Tamaño de porción	
Servings Per Container/Porciones por envase	
Amount Per Serving/Cantidad por porción	
Calories/Calorías	Calories from Fat/Calorías de grasa
% Daily Value/% Valor diario*	
Total Fat/Grasas	g %
Saturated Fat/Grasa saturada	g %
Trans Fat/Grasa trans	g
Cholesterol/Colesterol	mg %
Sodium/Sodio	mg %
Total Carbohydrate/Carbohidratos	g %
Dietary Fiber/Fibra dietética	g %
Sugars/Azúcares	g
Protein/Proteínas	g
Vitamin A/Vitamina A	% • Vitamin C/Vitamina C %
Calcium/Calcio	% • Iron/Hierro %
*Percent Daily Values (DV) are based on a 2,000 calorie diet. * El porcentaje de valores diarios (VD) está basado en una dieta de 2,000 calorías.	

1. ¿Cuántas porciones contiene el producto? _____
2. Calcula el total de calorías en este producto: _____

$$\text{Calorías por porción} \times \text{Número de porciones} = \text{Total de calorías}$$

1. ¿Cuántas porciones contiene el producto? _____
2. Calcula el total de calorías en este producto: _____

$$\text{Calorías por porción} \times \text{Número de porciones} = \text{Total de calorías}$$

3. Calcula el total de gramos de azúcar en este producto: _____

$$\text{g de azúcar por porción} \times \text{Número de porciones} = \text{Total de azúcar}$$

_____g _____g

3. Calcula el total de gramos de azúcar en este producto: _____

$$\text{g de azúcar por porción} \times \text{Número de porciones} = \text{Total de azúcar}$$

_____g _____g

