

Lesson 3 ♥ How Much Sugar Is in Your Favorite Drinks? - Teacher 411



Teacher 411: Beverages

Beverages are a significant part of some people's diets. However, the variety of available beverages—and the many options of container sizes—can make choosing a healthy beverage seem complicated. Here is important information about some of the most common beverages.

Water

Why is it important to drink adequate amounts of water?

- About 60% of the body is water.
- All parts of the body depend on water.
 - Water carries nutrients to cells.
 - Water flushes out toxins from the body.
 - Water keeps body tissue moist.
- Not drinking enough water can lead to dehydration.

Why is water the best beverage to drink?

- It's calorie-free.
- It's inexpensive.
- It's readily available.



How much water should people drink?

- Daily recommendation:
 - Men: 8–13 cups of water
 - Women: 8–9 cups of water
 - Children: 6–8 cups of water
- Drink enough water so that you rarely feel thirsty.
- If you're drinking enough water, your urine should be colorless to slightly yellow.

What can increase your water needs?

- Exercise
- Hot or humid weather
- Certain health problems

Milk

The amount of milk that children and adults drink has decreased. This is alarming since milk is one of the primary sources of some essential nutrients.



Why is it important to drink milk?

- Milk supplies protein, calcium, and vitamin D, all of which are needed for the growth of strong bones and teeth.

How much milk should people drink?

- Children 8 years old and younger should drink 2 cups per day.
- Older children and adults should drink 3 cups per day.

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How can people who can't drink milk get enough calcium?

- Soy milk or rice milk with added calcium are good choices.
- Yogurt and cheese also supply calcium.

What about other milk-based drinks?

- Flavored milks, milkshakes, floats, coffee with whole milk, and ice cream drinks should be limited. These drinks are usually high in calories and contain added fats and/or sugars.

100% Fruit Juice

How much 100% fruit juice should people drink?

- Because of the high natural sugar content, 100% fruit juice should be limited to 4 to 6 ounces per day for children between 1 and 6 years old. For children between 7 and 18 years old, 100% fruit juice should be limited to 8 to 12 ounces per day.
- For adults, 100% fruit juice should be limited to less than half of the daily recommended amount of fruit.



Soft Drinks and Other Sugar-Sweetened Beverages

There has been an increase in the number of sugar-sweetened beverages that children and adults drink. Sugar-sweetened beverages include soft drinks (sodas), sports drinks, energy drinks, coffee drinks, fruit-flavored drinks, juice drinks, and sweetened tea drinks. Most of these beverages contain a large amount of sugar and provide few or no beneficial nutrients.

Why should you limit the number of sugar-sweetened beverages?

- Beverages that contain a lot of sugar can lead to excess calorie consumption and weight gain.
- These beverages are not necessary components of a diet and should be considered as part of a discretionary calorie allowance. Discretionary calories are the balance of calories remaining in a person's "energy allowance" after meeting nutrient needs for a day. Most people have an allowance of only 100–300 extra calories each day. (For more information, visit www.choosemyplate.gov)

When is it appropriate to drink a sports drink?

- Sports drinks are appropriate to drink after you've done exercise for more than an hour, especially when you've sweated a lot.

Should children drink diet soft drinks?

- Diet soft drinks don't contain fat or sugar. However, they provide *no* beneficial nutrients. They also contain artificial sweeteners, which the Food and Drug Administration (FDA) recommends limiting in a child's diet. For these reasons, diet soft drinks are not recommended for children. Adults can include them in their daily consumption as long as these drinks do not displace their water needs.

Caffeinated Beverages

Beverages that contain caffeine are not recommended for children. Coffee and tea, as well as soft drinks and energy drinks (some of which contain caffeine), should be limited in children's diets. Adults can enjoy low-calorie coffee and tea, made with moderate amounts of low-fat milk and/or a sweetener. The addition of sugar and high-fat milk products can increase the caloric content of these beverages.

Lesson 3 ♥ How Much Sugar Is in Your Favorite Drinks? - Answer Sheet



Sample Beverages: Answer Sheet

Beverage	grams of sugar per serving	number of servings per container	grams of sugar per container: column 1 X column 2	tsp of sugar per container: column 3 ÷ by 4
20-fl.-oz. purified water	0	2.5	0.00	0.00
20-fl.-oz. diet cherry-vanilla-flavored soft drink	0	2.5	0.00	0.00
20-fl.-oz. diet cola soft drink	0	2.5	0.00	0.00
20-fl.-oz. caramel-flavored slushy coffee drink	23.2	2.5	58.00	14.5
20-fl.-oz. sports drink	14	2.5	35.00	8.75
20-fl.-oz. lemon ice tea drink	22	2.5	55.00	13.75
20-fl.-oz. lemonade drink	24	2.5	60.00	15.00
19.2-fl.-oz. energy drink	29	2.4	69.60	17.4
20-fl.-oz. mixed fruit-flavored drink	29	2.5	72.50	18.13
20-fl.-oz. lemon-lime-flavored soft drink	31	2.5	77.50	19.38
20-fl.-oz. root beer	31	2.5	77.50	19.38
20-fl.-oz. grape-flavored soft drink	33	2.5	82.50	20.63
20-fl.-oz. cola soft drink	39	2.5	97.50	24.38
20-fl.-oz. orange-flavored soft drink	52	2.5	130.0	32.50

Lesson 3 ♥ How Much Sugar Is in Your Favorite Drinks? - Worksheet 1



Name: _____

Date: _____

Pd: _____

Hypothesis: Sugar Content



1. On your *Beverages Chart* worksheet, rank the 10 beverages according to the amount of sugar you think is in each one, from “most sugar” to “least sugar.”

2. Record your **hypothesis** for the **number of teaspoons of sugar** in the beverages you think have the most sugar and the least sugar.

I hypothesize that _____ contains the most sugar (_____ teaspoons of sugar).

I hypothesize that _____ contains the least sugar (_____ teaspoons of sugar).

3. **Test your hypothesis** by **observing** the information from the Nutrition Facts labels on the beverage containers. On your *Beverages Chart*, **record** the number of servings per container and the grams of sugar per serving.

4. Using the example in the *Nutrition Facts Label* handout as a guide, **calculate** the grams of sugar and teaspoons of sugar per beverage container. **Record** your results on your *Beverages Chart*.

5. **Interpret and report your results.** Was your hypothesis correct?

My hypothesis was correct / incorrect (*circle one*).

Using my observations and calculations, I can conclude that _____

_____.

6. **Based on your calculations**, which beverage(s) is/are the better choice(s) for a healthy diet when it comes to sugar content?

Lesson 3 ♥ How Much Sugar Is in Your Favorite Drinks? - Worksheet 2



Name: _____ Date: _____ Pd: _____

Beverages Chart

		Name of beverage	Servings per container	Grams of sugar per serving	Grams of sugar per container	Tsp. of sugar per container	Correct ranking
Most Sugar Least Sugar	1.						1.
	2.						2.
	3.						3.
	4.						4.
	5.						5.
	6.						6.
	7.						7.
	8.						8.
	9.						9.
	10.						10.

Lesson 3 ♥ How Much Sugar Is in Your Favorite Drinks? - Handout



Name: _____

Date: _____

Pd: _____

Nutrition Facts Label

Orange-Flavored Fruit Drink (20 oz.)	
Nutrition Facts	
Serving Size = 8 fl oz	
Servings Per Container = 2.5	
Amount Per Serving	
Calories = 120 Calories from fat = 0	
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
<i>Trans Fat</i> 0g	
Monounsaturated Fat 0g	
Polyunsaturated Fat 0g	
Cholesterol 0mg	0%
Sodium 200mg	8%
Total Carbohydrate 28g	10%
Dietary Fiber 0g	0%
Sugars 27g	
Protein 0g	
Vitamin A 0%	• Vitamin C 100%
Calcium 0%	• Iron 0%
Vitamin D 0%	• Phosphorus 0%
* Percent Daily Values are based on a 2,000 calorie diet.	
Ingredients: water, high fructose corn syrup and 2% or less of each of the following: concentrated juices (orange, lime, grapefruit), citric acid, ascorbic acid (Vitamin C), natural flavors, modified corn starch, canola oil, sodium citrate, xanthan gum, sodium benzoate to protect flavor, artificial colors.	

CALCULATE TEASPOONS OF SUGAR PER CONTAINER

1. Locate the number of servings per container. (Ex: 2.5)
2. Locate the number of grams of sugar per serving. (Ex: 27g)
3. Calculate the number of grams of sugar in the container by multiplying servings by grams. (Ex: $2.5 \times 27 = 67.5\text{g}$)
4. Calculate the number of teaspoons of sugar in the container by dividing the number of grams by 4. (There are 4 grams per teaspoon.)
(Ex: $67.5 \div 4 = 16.875$)
5. There are approximately **17 teaspoons of sugar** in this beverage container!