

# Investigating Your Health: Surprising Sugar

Name: \_\_\_\_\_

**Objective:** Investigate sugar by comparing the nutrition facts of a soda and 100% juice. Determine how much added sugar you are consuming and describe ways you can reduce your intake in your diet.

**Added sugars** in the diet are one major source of extra calories. They are sugars added to food or drinks during preparation or processing. Some sugars are found naturally in foods like fruit and milk products. However, the majority of sugars in our diet are added to make food taste better or to make the food last longer. Unlike sugars naturally found in foods, many of the foods with added sugars provide additional calories in your

diet, but no essential nutrients or fiber. This can put you at risk for becoming overweight and developing weight related diseases like diabetes. Added sugars can be found in soda, energy drinks, sports drinks, and desserts. Consuming too much sugar, either natural or added, increases your risk for dental cavities. You can drink water or milk instead of drinking soda. You can also choose fresh fruit for dessert. In general, girls should have no more than 80-240 calories a day from added sugars and fats, while boys should have no more than 90-270 calories a day from added sugars and fats. The exact amount depends on your energy needs. Use the *Try This at Home* recipe to make a healthy juice with fruit!



## PART A: Sugary Liquids

1. Find and look at the Nutrition Facts labels for a soft drink (e.g. pop, soda) and juice. Choose a regular soft drink (not diet), and a regular 100% juice. If you are unable to find Nutrition Facts labels, use the handout provided by your teacher or access the nutrient database on USDA's website: <http://ndb.nal.usda.gov/ndb/search/list>. Complete the Nutrition Facts labels and calculate the number of calories per fluid ounce for each and record below.

**Soft Drink:**

*Dr. Peppy*

Calories ÷ Fluid Ounce = 12.5

**100% Juice:**

*Orange Juice*

Calories ÷ Fluid Ounce = 13.75

<b>Nutrition Facts</b>	
<b>Serving Size</b>	_____
<b>Calories</b>	_____
<b>Total Fat</b>	_____
<b>Sodium</b>	_____
<b>Total Carbohydrates</b>	_____
Dietary Fiber	_____
Sugars	_____
<b>Protein</b>	_____
Vitamin A ____%	Vitamin C ____%
Vitamin E ____%	Calcium ____%
Iron ____%	Thiamin ____%
Niacin ____%	Folate ____%
Vitamin B <sub>12</sub> ____%	Zinc ____%
Magnesium ____%	

<b>Nutrition Facts</b>	
<b>Serving Size</b>	_____
<b>Calories</b>	_____
<b>Total Fat</b>	_____
<b>Sodium</b>	_____
<b>Total Carbohydrates</b>	_____
Dietary Fiber	_____
Sugars	_____
<b>Protein</b>	_____
Vitamin A ____%	Vitamin C ____%
Vitamin E ____%	Calcium ____%
Iron ____%	Thiamin ____%
Niacin ____%	Folate ____%
Vitamin B <sub>12</sub> ____%	Zinc ____%
Magnesium ____%	

2. Complete the nutrition facts label below for your favorite non-diet drink and calculate the number of calories per fluid ounce for each and record below.

Answers to some questions may vary.

Favorite Drink: \_\_\_\_\_

Calories ÷ Fluid Ounce = \_\_\_\_\_

<b>Nutrition Facts</b>	
Serving Size	_____
<hr/>	
Calories	_____
<hr/>	
Total Fat	_____
Sodium	_____
Total Carbohydrates	_____
Dietary Fiber	_____
Sugars	_____
Protein	_____
<hr/>	
Vitamin A ____%	Vitamin C ____%
Vitamin E ____%	Calcium ____%
Iron ____%	Thiamin ____%
Niacin ____%	Folate ____%
Vitamin B <sub>12</sub> ____%	Zinc ____%
Magnesium ____%	

3. Calculate the calorie amounts and % Daily Value of the listed nutrients for drinking each drink 3 times a week. Compare calorie amounts and % Daily Value of the listed nutrients in each drink. Multiply the calories and nutrients in each drink by 3.

**Soft Drink:** 150 calories  $\times$  3 times/week = 450 calories/week; 0% Daily Value for all nutrients

**100% Juice:** 110 calories  $\times$  3 times/week = 330 calories/week; 12% Vitamin A, 6% Iron, 9% Niacin, 21% Magnesium, 41% Vitamin C, 105% Calcium, 54% Thiamin, and 45% Folate

**Favorite Drink:** (Sweetened Tea) 70 calories  $\times$  3 times/week = 210 calories/week; 0% Daily Value for all nutrients

4. Which drink is the best option? Why?

Juice has more vitamins and minerals than both soda and sweetened iced tea; it is the best option.

## PART B: Consuming Sugar

5. Over the next week, record how many times you drink a sugar sweetened drink (e.g. soft drink, juice, sweet tea). Be sure to record the name of the beverage and how much you consumed (in ounces).

BEVERAGES CONSUMED				
DAY	Breakfast	Lunch	Dinner	Snack

6. Determine how many added calories you are drinking each week by consuming these beverages. (*HINT*: Determine how many fluid ounces you consumed in one week for each beverage. Multiply your intake by the calories/fluid ounce determined in question 1).

*Assume I drank 2 Dr. Peppy's and 2 sweetened iced teas this week.*

*Dr. Peppy:  $150 \text{ calories} \times 2 = 300 \text{ calories}$*

*Sweetened Tea:  $70 \times 2 = 140 \text{ calories}$*

*$300 \text{ calories} + 140 \text{ calories} = 440 \text{ total added calories}$*

7. Determine how many added calories you are drinking each day by consuming these beverages. (*HINT*: Divide your total added calories by 7 to get your daily average.)

*$440 \text{ calories} \div 7 \text{ days} = 63 \text{ calories/day}$*

8. Identify 3 healthier drink options and explain why they are a better choice.

*Water because it doesn't have any added calories. Water because it is the simplest form of hydration for our body. Milk because it has calcium, which is good for me. No sugar added green tea because it provides antioxidants. 100% fruit juice because it has beneficial vitamins. No sugar added 100% juice because it provides hydration as well as vitamins and minerals (moderate amounts). Note, you can consume all the necessary vitamins and minerals from a healthy diet without needing to add No-Sugar Added 100% Juice to your diet.*