







## It All Adds Up

### Objectives:

Students will:

- Observe how much sugar is in the foods they eat and practice math concepts related to sugar quantities
- Explore the health consequences of consuming too much sugar

### Materials:

- 5-pound bag of sugar, teaspoons, clear plastic baggies
- Food labels (students may use actual food packaging or research the labels online)
- “It All Adds Up” handout

### Class Time:

- 45 minutes

### Activity:

How much sugar is in those cookies you ate after school? How about the soft drink you washed them down with? Let’s find out. Get the food labels for a favorite snack and a drink, and locate the total grams of sugar for each. Be sure to pay attention to serving size!) Remember: **4 grams of sugar equals 1 teaspoon**. So how many teaspoons are in each of your items? Measure the total amount of teaspoons of sugar into a baggie. Is that more or less than you thought? Discuss your findings as a class. Which snacks and drinks have the most sugar? Which have the least? Use the “It All Adds Up” handout to solve some sugar math problems.

### Extensions:

1. Create a bar graph showing the class’s findings.
2. Sugar may taste good, but too much of it isn’t healthy. Write a paragraph explaining why.
3. Be a sugar detective! In an ingredient list, sugar can hide under at least 50 other names (high-fructose corn syrup, sucrose, lactose, maltose, dextrose, syrup, and cane juice, to name a few). Circle the hidden sugars on food labels.

## Reproducible Materials

### Handout: A Tale of Two Foods

[KidsHealth.org/classroom/3to5/personal/nutrition/food\\_labels\\_handout1.pdf](http://KidsHealth.org/classroom/3to5/personal/nutrition/food_labels_handout1.pdf)

### Handout: It All Adds Up

[KidsHealth.org/classroom/3to5/personal/nutrition/food\\_labels\\_handout2.pdf](http://KidsHealth.org/classroom/3to5/personal/nutrition/food_labels_handout2.pdf)

### Quiz: Food Labels

[KidsHealth.org/classroom/3to5/personal/nutrition/food\\_labels\\_quiz.pdf](http://KidsHealth.org/classroom/3to5/personal/nutrition/food_labels_quiz.pdf)

### Answer Key: Food Labels

[KidsHealth.org/classroom/3to5/personal/nutrition/food\\_labels\\_quiz\\_answers.pdf](http://KidsHealth.org/classroom/3to5/personal/nutrition/food_labels_quiz_answers.pdf)



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

Date: \_\_\_\_\_

## A Tale of Two Foods

Instructions: Use the worksheet below to compare the nutritional information of two foods.

### Food 1 \_\_\_\_\_

Serving Size \_\_\_\_\_

Servings Per Container \_\_\_\_\_

**Calories**

**Sugars** \_\_\_\_\_ grams

**Total Fat** \_\_\_\_\_ grams

**Protein** \_\_\_\_\_ grams

**Dietary Fiber** \_\_\_\_\_ grams

**Vitamins and/or Minerals (most to least):**

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

**First 3 Ingredients:**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

### Food 2 \_\_\_\_\_

Serving Size \_\_\_\_\_

Servings Per Container \_\_\_\_\_

**Calories**

**Sugars** \_\_\_\_\_ grams

**Total Fat** \_\_\_\_\_ grams

**Protein** \_\_\_\_\_ grams

**Dietary Fiber** \_\_\_\_\_ grams

**Vitamins and/or Minerals (most to least):**

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

\_\_\_\_\_, % Daily Value \_\_\_\_\_

**First 3 Ingredients:**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

- Which food has more calories? \_\_\_\_\_
- Which has more sugar? \_\_\_\_\_
- Which has more fat? \_\_\_\_\_
- Which has more protein? \_\_\_\_\_
- Which has more fiber? \_\_\_\_\_
- Which is the healthier choice? \_\_\_\_\_



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

Date: \_\_\_\_\_

## It All Adds Up

Instructions: Find out how much sugar is in your favorite snack and drink, and then solve the word problems below.

**Snack** \_\_\_\_\_

Serving Size \_\_\_\_\_

Servings Per Container \_\_\_\_\_

Sugar (Grams) in 1 Serving \_\_\_\_\_

**Drink** \_\_\_\_\_

Serving Size \_\_\_\_\_

Servings Per Container \_\_\_\_\_

Sugar (Grams) in 1 Serving \_\_\_\_\_

**How much sugar would you be eating or drinking if you:**

1. Ate the entire snack and drank all of the drink?

\_\_\_\_\_

2. Ate three servings of the snack and drank two servings of the drink?

\_\_\_\_\_

3. Split one serving of the snack and one serving of the drink with a friend?

\_\_\_\_\_

4. Had two servings of the snack and of the drink every day for a week?

\_\_\_\_\_

**If 1 teaspoon of sugar has 16 calories, how many calories from sugar is in your snack and in your drink?**

\_\_\_\_\_



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

Date: \_\_\_\_\_

## Quiz

Instructions: Answer each question.

1. True or false: If something is listed as one of the first three ingredients on a Nutrition Facts food label, it means the food probably contains a lot of it.
2. On a food label, most nutrients are written in grams (g) or milligrams (mg). There are \_\_\_\_\_ milligrams in 1 gram.
3. True or false: Because food labels are written according to the calorie needs of adults, they are not useful to kids.
4. Sugar is a kind of:
  - a. protein
  - b. fat
  - c. carbohydrate
  - d. cholesterol
5. There are three kinds of fats typically listed on a food label: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.



## Quiz Answer Key

1. True or false: If something is listed as one of the first three ingredients on a Nutrition Facts food label, it means the food probably contains a lot of it.
2. On a food label, most nutrients are written in grams (g) or milligrams (mg). There are 1,000 milligrams in 1 gram.
3. True or false: Because food labels are written according to the calorie needs of adults, they are not useful to kids.
4. Sugar is a kind of:
  - a. protein
  - b. fat
  - c. carbohydrate
  - d. cholesterol
5. There are three kinds of fats typically listed on a food label: saturated, unsaturated, and trans fat.