

Activity 4. Count the Cubes! (15 - 20 mins)

Key Messages

- Knowing what is in drinks helps us to make healthy choices.
- Sugar is a major ingredient in many popular drinks.

Objectives

- To determine and report how many cubes/teaspoons of sugar are in various drinks.
- To use nutrition labels to find information about sugar in drinks.

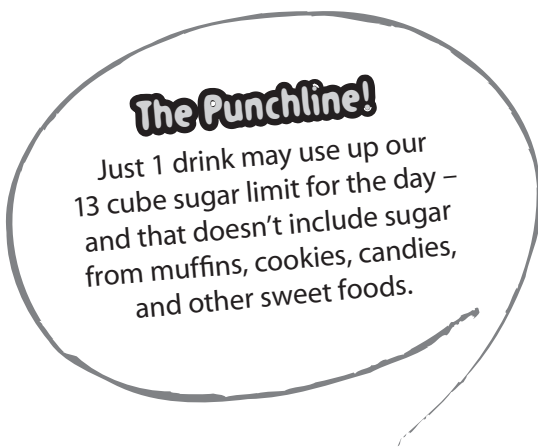
Preparation

You need

- 200 sugar cubes (2 boxes)
- 9 lunch baggies
- 9 plastic cups
- Permanent markers
- Sticky notes
- Poster: *How Much Sugar Are You Drinking?*
- **Sip Smart! BC™** Drink Cut-outs

Also:

- Make overhead copy of Overhead 5: *How to Read a Label*.
- Label the plastic cups with the names and serving size of the 9 drinks from the poster.
- Cover the sugar cubes on the poster with sticky notes.
- Review Backgrounder: *Ingredients on Labels* (page 117).
- *Optional*: find a 591 mL pop bottle with a nutrition label that lists nutritional information for a smaller serving size like 250 mL or 355 mL (or use cola *Drink Cut-out*).



Activity

Level 1 and Level 2

- Assign the 9 drinks from the poster, a bag of sugar cubes and a plastic cup to 9 groups of students.
- Explain that each cup represents the actual container size of the drink.
- Have students guess the number of sugar cubes in their designated drink and fill the labelled cup with that number.
- Have each group report their guess to the class.

10 minutes

Level 1

- Uncover the number of sugar cubes on the poster *How Much Sugar Are You Drinking?* to compare facts with the student's guess.
- Explain the concept of label reading with the help of Overhead 5: *How to Read a Label*.
- Hand out matching **Sip Smart! BC™ Drink Cut-outs** and ask students to find sugar in the ingredient list.

5 minutes

Level 2

- Explain the concept of label reading with the help of Overhead 5: *How to Read a Label*.
- Do the math for the example on the label:
12 g sugar = 3 cubes of sugar.
- Hand out the matching **Sip Smart! BC™ Drink Cut-outs** and let the students read the label and do the math.
- Uncover the number of sugar cubes on the poster *How Much Sugar Are You Drinking?* to compare facts with students' results.

Activity Tips

1 teaspoon or 1 cube sugar = 4 grams
Sugars are listed below Carbohydrates on the label.

Cubes of sugar on Poster:

Energy drink	14 cubes/500 mL
Bubble tea	21 cubes/500 mL
Iced tea	10 cubes/355 mL
Iced coffee	20 cubes/500 mL
Sports drink	10 cubes/700 mL
Cola	17 cubes/591 mL
Slushy	24 cubes/1000 mL
Store-bought smoothie	14 cubes/500 mL
Vitamin-enhanced water	8 cubes/591 mL

Cubes of sugar on additional

Sip Smart! BC™ Drink Cut-outs:

Water	0 cubes/250 mL
Chocolate milk	6 cubes/250 mL
Chocolate soy beverage	5 cubes/250 mL
100% orange juice	5 cubes/200 mL
Citrus C	10 cubes/355 mL
Coffee/tea	1+/250 mL

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HOW MUCH SUGAR ARE YOU DRINKING?



500 mL (2 cups)



500 mL (2 cups)



500 mL (2 cups)



355 mL (1 1/2 cups)



591 mL (2 1/2 cups)



500 mL (2 cups)



700 mL (2 3/4 cups)



350 mL (1 1/2 cups)



1000 mL (4 cups)

The amount of sugar in these drinks varies by product and choice. 1 sugar cube = approximately 1 teaspoon sugar.



SIP SMART! BC™

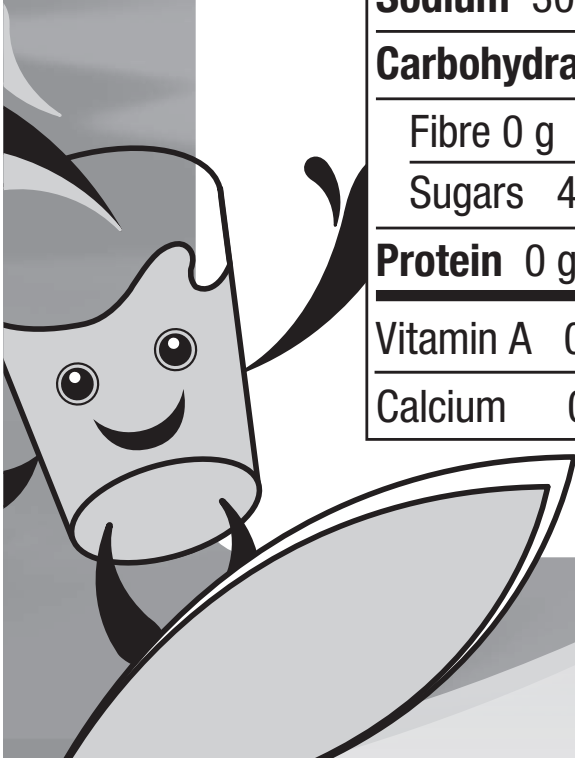
HOW TO READ A LABEL

Nutrition Facts

Per 1 can (355 mL)

Amount	% Daily Value
Calories 160	
Fat 0 g	0 %
Saturated 0 g + Trans 0 g	0 %
Cholesterol 0 mg	
Sodium 30 mg	1 %
Carbohydrate 40 g	10 %
Fibre 0 g	0 %
Sugars 40 g	
Protein 0 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 0 %	Iron 0 %

INGREDIENTS: CARBONATED WATER, GLUCOSE-FRUCTOSE, SODIUM CITRATE, CAFFEINE



Overhead 5: How to Read a Label

Ingredients on Labels

A food additive is any substance that is added to a food or drink in order to preserve it, maintain its quality or make it more appealing. More than 850 additives are authorized by Health Canada for use in Canada. Below are some examples of common food additives you can find on the **Sip Smart! BC™ Drink Cut-outs**. **Sip Smart! BC™ Drink Cut-outs** represent some of the most common drinks consumed by Grade 4-6 students in BC.

Food Additive	Examples
Gelling and thickening agent: thicken drinks to give body and texture	carageenan, ester gum, maltodextrin
Anti-caking agent: allows powders to run freely	trisodium phosphate, disodium phosphate, tricalcium phosphate, monopotassium phosphate
Vitamins and amino acids: nutrients that are needed in small amounts for growth and good health. Because the body cannot make them, you need to get them from what you eat and drink	pantothenic acid (vitamin B5), vitamin A palmitate, taurine
Naturally occurring substances: may have health benefits but little to no quality research exists to prove this claim	glucoronolactone, inositol
Phytochemicals: compounds that are produced by plants	lutein
Sweeteners: sweeten food without adding calories	acesulfame-potassium, aspartame, mannitol, sorbitol, xylitol
Acids: give a sharp flavour and act as a preservative	citric acid, sodium citrate
Oils: thicken foods to give texture and body	vegetable oil
Plant extracts: may have some health benefits but are not tested in children for safety, may contain caffeine	ginseng, guarana, yerba mate

What about % Daily Value?

The % Daily Value represents the percentage of a recommended daily amount that 1 serving of this food or drink provides.

For example, a label may show that a serving of a drink provides 15% of the daily recommended amount of vitamin C. This means you still need another 85% to meet the recommended goal. The % Daily Value is based on a 2,000-calorie diet for adults older than 18.

References

Eat Right Ontario. Table adapted from: *Facts on Food Additives*, 2016

Health Canada, *Frequently Asked Questions About Nutrition Labelling*, December 2009

Health Canada, *Lists of Permitted Food Additives*, 2013