

Sugar Sense Display, Facilitator's Guide: Key Messages for School Age Children



Materials Needed

Recommended Uses

1. This display can be used with school age children, in a classroom or group setting, to generate discussion about sugar sweetened beverages. Use the Suggested Presentation Outline below to guide a group discussion.

2. This display can stand alone in a library, at a school health fair or other venue deemed appropriate.

General Overview

This display can be used to increase student's knowledge and awareness about the amount of sugar found in common drinks and how it can affect their overall health. The visual impact of this display may increase awareness of this issue and cause people to "rethink" their drink choices.

- 1. Sugar Sense Display; print and assemble.
- 2. Sugar Shocker Matching Game Handout, located at the end of the facilitator's guide; print copies for all participants. Print one answer key.
- 3. Label Reading for Sugar Content Activity Cards (contains images of drink containers and nutrition facts tables), located at the end of the facilitator's guide; print one of each and cut on the line for 8 cards total.

Optional Materials

- 1. Sugar (at least 1 cup), 1 teaspoon and a 1 cup glass measuring cup for Optional Activity i) 24 hour Sugar Meter
- 2. One large bag of sugar for Optional Activity ii) A Year's Supply of Pop

Background Information for the Presenter

Drinking sweetened beverages on a regular basis can displace nutritious foods and beverages from the diet. Drinks like pop provide lots of sugar but do not contain any important nutrients such as protein, fat, vitamins or minerals. The best source of hydration is water.

Regularly consuming drinks that are high in sugar and low in nutrients can be related to weight gain, obesity and increased risk of chronic disease and tooth decay.

Many drinks that are high in sugar may also contain caffeine. Too much caffeine is associated with nausea, anxiety, muscle tremors, and sleeplessness.

Many drinks that are high in sugar contain phosphoric or citric acids. These acids lower the pH in the mouth, which contributes to dental erosion and can lead to tooth decay.

Research indicates that children and youth who drink a lot of sugary beverages tend not to drink enough healthy beverages such as milk. They may miss out on key nutrients required for healthy growth and development.

Suggested Presentation Outline

1. Presenter introduces self and topic

- Today we're going to look at the amount of sugar in some common drinks.
- Do you see any of your favorite drinks here?

2. Activity: Sugar Shocker Matching Game

- See handout, located at the end of the facilitator's guide. You will need to make copies for students in advance.
- Engage audience/capture attention by starting with this activity to get the group thinking.
- Hand out matching game and allow a couple minutes for participants to complete.
- Discuss answers and hold up the corresponding card featuring each drink container and the corresponding bottle of sugar for the group to see.

Discuss key messages for each of the beverage cards. Note: you may want to add in some of the points listed below under 'Other Key Messages.'

- Pop, slush, sweetened fruit beverages:
 - High in added sugar with no nutritional value.
 - Dark colas contain caffeine.
 - May replace healthier beverages.

• Diet Pop

- Does not contain sugar or calories but does not have any nutritional value either.
- Contains sugar substitutes which are not recommended for children.
- May contain caffeine.
- May replace healthier beverages.

• Sports Drinks

- High in sugar. Also contain added electrolytes (sodium and potassium).
- Water is the best form of hydration during and after physical activity.
- Extra carbohydrate (sugar) and electrolytes from sports drinks aren't needed, even after short physical activity or exercise.
- A sports drink may be useful if children and teenagers have exercised intensively or for a long period of time.

• Energy Drinks

- High in sugar and high in caffeine.
- Contain added amino acids such as Taurine, and added herbal ingredients such as Ginseng and Gingko Biloba.
- Health Canada does not recommend these drinks for children under the age of 16.

• Unsweetened 100% Fruit Juice

- Source of vitamin C and other nutrients.
- Sugar is naturally occurring but still need to limit to ½-1 cup per day as it contains as much sugar as pop.
- Whole fruit contains more nutrients as well as fibre and is a better choice.

• Plain Milk

- Good source of calcium, vitamin D and protein.
- Recommended intake is 2 cups per day for children under the age of 8, and 3 cups a day for children ages 9-18.
- Contains lactose, a naturally occurring sugar, but compared to other beverages milk is low in sugar.

• Flavoured Milk

- Good source of calcium, vitamin D and protein.
- Contains added sugar and is higher in sugar than plain milk. This is a better choice then pop or other sweetened beverages but best to choose plain milk more often.

Other Beverages:

• Specialty Coffee Drinks

- Many specialty coffees (with added flavour, syrups and toppings) can be very high in sugar and caffeine.
- Decaffeinated coffee beverages made with plain milk such as decaffeinated lattes can be a good source of Calcium, vitamin D, and protein.

Vitamin Water

- Often high in added sugar.
- Contains some added vitamins and minerals.
- Some types contain added amino acids (taurine) or caffeine.
- Some types contain sugar substitutes which are not recommended for children.
- Whole fruit and vegetables will provide similar vitamins and minerals without the added sugar, taurine, or caffeine.

• Water

 Best source of hydration and best way to quench thirst. Flavour with lemon, lime or other fresh fruit. Try sparkling water with lemon or lime as an alternative to pop. Carry a water bottle to make it easy to stay hydrated.

Other Key Messages

- Discuss added vs. naturally occurring sugars
 - Added Sugar = all sugars that are added to food and beverages during processing. On the label look for words ending in 'ose' to indicate sugar. Also look for syrups, juice concentrates, molasses, etc.
 - Naturally occurring sugar = sugars that are in whole foods that were put there by nature (not during processing). For example there are natural sugars in fruit (fructose) and in milk (lactose).
 - Whole foods containing natural sugar such as an apple and orange or glass of plain milk are healthy ways to consume sugar which provides energy for our bodies. These foods also contain other nutrients that are good for us, for example milk is a good source of calcium, vitamin D and protein (builds strong bones).

 Need to be aware of and limit added sugars that are easily consumed in large quantities from pop and sweetened beverages.

Discuss 100% fruit juice vs 'fruit drink', 'fruit beverage'

- It is important to know that there is a difference between 100% fruit juice and fruit drink, fruit beverage or fruit punch. Fruit drinks are less healthy as they are not made purely from fruit juice and often have sugar (glucose/fructose) as the first or second ingredient.
- The sugar in real fruit juice is naturally occurring sugar and in small quantities this is a more nutritious choice as it also contains other vitamins such as vitamin C.

• Discuss portion size of 100% fruit juice

- Even though the sugar is natural the drink bottles are large, providing too much liquid sugar. A 500ml bottle of apple juice would provide as much sugar as 3 or 4 apples but you don't get any fiber or feel full from the juice.
- Best choice = whole piece of fruit or a small portion (1/2 cup) of 100% fruit juice.

• Discuss recommended maximum daily intake for added sugar

- There are differing expert opinions on what is an acceptable daily intake of added sugar. The BC Healthy Families Initiative recommends limit added sugar to 13 teaspoons or less from all sources.
- Remember this does not include naturally occurring sugars in whole fruits, starchy vegetables, plain milk, etc.

3. Activity: Label Reading for Sugar Content

Materials needed: Activity Cards containing images of beverage containers and associated nutrition facts tables.

Working in pairs or small groups, ask participants to:

- 1. Find the Nutrition Facts Table on the beverage label.
- Compare the serving size: Does the serving size match the size of the container? (TIP: If you have the Starbucks beverage, assume you are drinking a grande. If you have the Tim Hortons beverage, assume you are drinking a small.)
- 3. How many grams of sugar are in each serving of this beverage?
- 4. How many grams of sugar are in the whole container? How many teaspoons are in the whole container? Divide the grams of sugar by 4 to get the number of teaspoons (4 grams = 1 teaspoon of sugar = 1 sugar cube).

Example: 1 cup of orange juice has 32 grams of sugar. 32 divided by 4 = 8 teaspoons of sugar per cup.

Optional Activities

i) 24 Hour Sugar Meter

Supplies: sugar, 1 teaspoon and a 1 cup glass measuring cup

- Invite a participant to assist you in measuring sugar into a cup
- Read out what might be an example of someone's 'typical day':
 - 1 cup (250ml) juice with breakfast = 7 tsp
 - Stop at vending machine for a bottle pop (591 ml) at lunch =16.5 tsp
 - Meet friends at coffee shop after school/work and grab iced cappuccino = 15.5 tsp
 - Glass of milk with dinner (1 cup/250ml) = 4 tsp
 - **Daily total** = 43 tsp (172 grams) of sugar

Discuss:

- Which sugars are naturally occurring and which are added?
 - Juice and milk have naturally occurring sugars and provide nutrients.
 The pop and the iced cappuccino have added sugar.
- What would be a better choice than juice in the morning?
 - Whole fruit like an orange, grapefruit, or banana
- How many cups of milk are recommended each day to meet calcium and vitamin D needs?
 - Children under age 8: 2 cups
 - Children 9-18: 3 cups
- ii) A Year's Supply of Pop (optional: 1 large bag of sugar for comparison sake)
 - Tell students the statistic that drinking 591 ml bottle of pop every day for a year will provide 26 kg of sugar (405,000 calories JUST from sugar).
 - Hold up bag of sugar to compare.
 - Discussion: Although diet pop doesn't contain sugar, it has other additives that have no nutritional value and could cause side effects, such as caffeine and artificial sweeteners. When we choose to drink pop, we have less room for healthy drinks such as milk or water.

Sugar Sense Matching Game

Directions: Match the beverage with the amount of sugar it contains.



Sugar Sense Matching Game

ANSWER KEY

(Only print one copy for facilitator)

Beverage

Sugar Content

Apple Juice 473 mL	14 teaspoons			
Chocolate Milk 500 mL	13 teaspoons			
Cola 591 mL	17 teaspoons			
Energy Drink 473 mL	14 teaspoons			
Large Slush 1000 mL	24 teaspoons			
Sports Drink 700mL	10 teaspoons			
Water 500 mL	0 teaspoons			
White Milk 2% 500 mL	6 teaspoons			

Label Reading Activity – Image 1 – Gatorade



Label Reading Activity – Image 2 – Juice Box



Label Reading Activity – Image 3 – Pop



Nutrition Valeur n Per 355 mL / p	utritive	
Amo unt Teneur	% Daily % valeur quotid	
Calories / Cal	ories 150	
Fat / Lipides 0)g	0 %
Sodium / Sodi	ium 15 mg	1%
Carbohydrate	/ Glucides 42 g 1	3 %
Sugars / Suc	res 41 g	
Protein / Prote	éines 0 g	
Not a significant so trans fat, cholester vitamin C, calcium	ource of saturated fat, ol, fibre, vitamin A, or iron.	
Source négligeable	de lipides saturés,	Ą
	EN CAFÉINE : 38 mg/355 mL	

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Label Reading Activity – Image 4 – Energy Drink





Label Reading Activity – Image 5 – Carbonated Water



	CONTAINS 16% JUICE
	Nutrition Facts Serving Size: 1 can (330mL)
R Children	alories 140 Calories from Fat 0
10-100	% Daily Value* Total Fat 0g 0% Sodium 0 0%
ľ	Sodium Omg0%Total Carb. 34g11%Sugars 32g
N	Not a significant desturated
1	iber, vitamin A, vitamin C, calcium
Ľ	Percent Daily Values are based on a 2,000 calorie diet.

Label Reading Activity – Image 6 – Vitamin Water





Label Reading Activity – Image 7 – Flavoured Latte

starbucks[®] beverage details

Caramel Macchiato Espresso, vanila and caramel mark the foamed milk



nutrition facts tal	ble	(customize			
Serving Size	16 fl. oz. Amt Per Serving	Size Tal Grande Venti®			
Calories	310	0			
Fat Calories	110	1000			
Total Fat (g) Saturated Fat (g)	12	Milk			
	7	Nonfat			
Trans Fat (g)	0	Whole			
Cholesterol (mg)	40	Breve			
Sodium (mg)	160	<u> </u>			
Total Carbohydrates (g)	37	O Soy (US)			
Fiber (g)	0	Soy (CD)			
Sugars (g)	34	- men			
Protein (g)	12	(manin data			
Yitamin A	8%	recalculate			
Vitamin C	0%				
Calcium	35%				
Iron	0%				

Label Reading Activity – Image 8 – Iced Cappuccino



Calories	Fat	Saturated Fat	Trans Fat	Cholesterol	Sodium	Carbohydrates	Fibre	Sugar	Protein
250	11g	6g	0.4g	45mg	50mg	33g	0g	33g	2g