



Activity Station: Thirst Quencher

Activity Description

Students will:

- Review the Nutrition Facts tables and ingredient labels to be aware of the added sugar and caffeine content in some common beverages.

Key Messages

- Water and milk are the best choices to stay hydrated.
- Avoid drinks with added sugar, such as fruit flavoured drinks, sweetened pop, sports drinks, energy drinks, sweetened hot or cold drinks, and alcohol.
- Fruit juice is a sugary drink and should be limited.
- Caffeine may be in drinks like cola, iced tea, coffee-based drinks, and energy drinks. Children and youth may become nervous, irritable, and have problems sleeping if they consume caffeine.

Materials

- **Student Pre-work: (Optional)** Students may bring in their own drink labels or containers. For example: soft drinks, hot or cold coffee drinks, energy drinks, smoothies, juice, milk, and any other non-alcoholic beverages. **Note:** The answer key and discussion will need to be amended with this option.
- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Thirst Quencher (print x 1 per student)
- Handout: [Healthy Drinks, Healthy Kids](#)
- Printable Appendix: Sample Drink Labels (print x 1)

Set-Up

- Place station title, instructions, worksheets, handouts, and appendix at station.
- The answer key following may assist the teacher to determine which drinks are healthy choices. **Note:** It will need to be adapted if students bring in other labels.
- Discuss the answers on the instruction sheet as a class or display the answer key upside down or in a closed folder, or teachers may choose not to share the answers until all students have completed the activity.
- Students fill out the worksheet at the station. Students can compare their answers to the answer sheet once they have completed the activity.

Answer Key for Thirst Quencher

Health Canada is improving food labels. The labels in this activity reflect products in the marketplace as of August 2019. For more information go to: [Food Labelling Changes](#)

Name of Drink	Ingredients	Serving Size	Total Sugar per serving 4 g sugar = 5 mL (1 tsp)	Caffeine (mg)	When would you choose? Everyday? What drinks would you limit? Why? (Hints: serving size, added sugar, salt, caffeine, herbs, added nutrients, sugar substitutes)
Cola	Carbonated water, sugar/glucose-fructose, caramel colour, phosphoric acid, natural flavour, caffeine.	1 can (355 mL)	39 g (10 tsp)	34	Drink to limit . High in added sugar, low in nutrients, contains caffeine.
Sugar-free (Diet) Cola	Carbonated water, caramel colour, aspartame, phosphoric acid, potassium benzoate, natural flavours, citric acid, caffeine.	1 can (355 mL)	0	46	Drink to limit . Contains caffeine, sugar substitutes, low in nutrients.
Milk, 1% M.F.	Partly skimmed milk, vitamin A palmitate, vitamin D3.	1 cup (250 mL)	12 g (3 tsp)	0	Choose everyday . Contains no added sugar, contains vitamins and minerals.
Chocolate Milk, 1% M.F.	Partly skimmed milk, sugar/glucose fructose, cocoa, colour, salt, carrageenan, artificial flavour, vitamin A palmitate, vitamin D3.	1 cup (250 mL)	26 g (7 tsp)	0	Drink to limit . Higher in sugar but contains some important nutrients.



Name of Drink	Ingredients	Serving Size	Total Sugar per serving 4 g sugar = 5 mL (1 tsp)	Caffeine (mg)	When would you choose? Everyday? What drinks would you limit or avoid? Why? (Hints: serving size, added sugar, salt, caffeine, herbs, added nutrients, sugar substitutes)
Energy Drink	Carbonated water, sucrose, glucose, taurine, citric acid, sodium citrate, caramel colour, l-carnitine, l-tartrate, caffeine, potassium sorbate, sodium benzoate, niacinamide, natural and artificial flavour, sucralose, sodium chloride, panax ginseng root extract, inositol, d-glucuronolactone, pyridoxine hydrochloride, riboflavin, guarana seed extract, cyanocobalamin.	1 can (240 mL)	25 g (6 tsp)	79	Drink to limit . High in added sugar, contains caffeine, contains variety of added vitamins and herbs (see additional info in discussion section).
Sports Drink-Ice Blast	Water, sugar, dextrose, citric acid, salt, sodium citrate, monopotassium phosphate, modified corn starch, colour, ester gum	355 mL	22 g (5 tsp)	0	Drink to limit . High in added sugar, contains added salt, contains variety of added vitamins and minerals.
Mixed Berry Fruit Juice	Fruit juices from concentrate (apple, grape, raspberry and blackberry), natural flavour, grape skin extract, ascorbic acid (vitamin C), citric acid.	1 package (200 mL)	23 g (6 tsp)	0	Drink to limit . High in sugar, high in vitamin C, does not contain caffeine.





Name of Drink	Ingredients	Serving Size	Total Sugar per serving 4 g sugar = 5 mL (1 tsp)	Caffeine (mg)	When would you choose? Everyday? What drinks would you limit or avoid? Why? (Hints: serving size, added sugar, salt, caffeine, herbs, added nutrients, sugar substitutes)
Vita Water PLUS	Reverse osmosis water, crystalline fructose, cane sugar, ascorbic acid (vitamin C), citric acid, natural flavours, dragon fruit extract, vegetable juice (colour), magnesium lactate and calcium lactate, taurine, calcium pantothenate (vitamin B5), zinc gluconate, pyridoxine hydrochloride (vitamin B6), cyanocobalamin (vitamin B12), chromium polynicotinate.	1 bottle (591 mL)	32 g (8 tsp)	0	Drink to limit . High in added sugar, contains variety of added vitamins (see additional information in discussion section).
Iced Tea	Filtered water, sugar/glucose-fructose, citric acid, concentrated tea from tea leaves, potassium citrate, natural lemon flavour.	1 bottle (500 mL)	43 g (11 tsp)	23	Drink to limit . High in added sugar, low in nutrients, contains caffeine.
Blended Iced Coffee Drink	Iced coffee mix (water, sugar, coffee extract, caramel colour, natural and artificial flavour), cream.	1 small (380 mL)	33 g (8 tsp)	90	Drink to limit . High in added sugar, low in nutrients, contains caffeine, high in added fat from cream/whipped topping.



Answers may vary depending on whether the sample labels were used or whether students brought in their own labels.

1. Which drink did you decide was the best choice? Why?

Of the drink choices available, the best choice is milk 1% . Water is also a healthy choice. Drink water throughout the day to meet fluid needs and to quench thirst. The Mixed Berry Fruit Juice is 100% fruit juice, unsweetened but is still high in sugar, so it is recommended as a drink to avoid.

All of the other drinks at this station should be avoided as these are low in nutrients and high in sugar and/or fat. These drinks do not support healthy growth and may replace healthy drinks such as milk and water.

Energy drinks are not recommended for children and youth because of their high levels of caffeine, large quantities of vitamins and minerals and other ingredients such as herbal extracts.

Vitamin enhanced waters are expensive and not necessary. Vitamin enhanced waters typically contain vitamin C and several B vitamins. Most people can meet their needs for these vitamins by eating a variety of vegetables, fruits and grain foods each day. Flavoured and enhanced vitamin or mineral waters may contain added sugar, sugar substitutes and herbal ingredients such as ginseng, chamomile, etc. There is little evidence to support the effect and safety of herbals ingredients in these products.

2. Which drinks have added sugar in the ingredient list?

The following drinks have added sugar in the ingredient list:

- Cola, Chocolate Milk, Energy Drink, Sports Drink, Vita Water PLUS, Iced Tea, Blended Iced Coffee drink
- Names for added sugar in these drinks include: sugar/glucose-fructose, sucrose, sugar, dextrose, cane sugar
- Milk 1% and Mixed Berry Fruit Juice have naturally occurring sugars, with no added sugars, so they should not be answers to this question.

3. Which 3 drinks had the most added sugar per container?

The Sports Drink, Energy Drink, and Iced Tea.

4. Which 3 drinks had the most caffeine?

Blended Iced Coffee Drink, Energy Drink, and Sugar-free (diet) Cola.

Appendix: Thirst Quencher Sample Drinks Labels

Health Canada is improving food labels. The labels in this module reflect products in the marketplace as of August 2019.

11 Labels Provided:

- Cola – can of pop
- Sugar-free (diet) Cola– can of diet pop
- Milk, 1% M.F. – bottle of milk
- Chocolate Milk, 1% M.F. – cup of flavoured milk
- Energy Drink – can of energy drink
- Sports Drink-Ice Blast – bottle of sports drink
- Mixed Berry Fruit Juice – juice box of 100% fruit juice
- Vita Water PLUS – bottle of enhanced water beverage
- Iced Tea – bottle of iced tea
- Blended Iced Coffee Drink, small – cup of iced coffee

Cola

Nutrition Facts			
Per 1 can (355 mL)			
Amount	% Daily Value		
Calories 140			
Fat 0 g	0 %		
Saturated 0 g + Trans 0 g			
Cholesterol 0 mg			
Sodium 45 mg	2 %		
Carbohydrate 39 g	13 %		
Sugars 39 g			
Protein 0 g			
Vitamin A 0 %	Vitamin C 0 %		
Calcium 0 %	Iron 0 %		



INGREDIENTS

CARBONATED WATER, SUGAR/GLUCOSE-FRUCTOSE, CARAMEL COLOUR, PHOSPHORIC ACID, NATURAL FLAVOUR, CAFFEINE.

CAFFEINE CONTENT: 34 mg

Sugar-free (diet) Cola

Nutrition Facts			
Per 1 can (355 mL)			
Amount		% Daily Value	
Calories 0			
Fat 0 g		0 %	
Saturated 0 g + Trans 0 g			
Cholesterol 0 mg			
Sodium 40 mg		2 %	
Carbohydrate 0 g		0 %	
Sugars 0 g			
Protein 0 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	0 %



INGREDIENTS

CARBONATED WATER, CARAMEL COLOUR, ASPARTAME, PHOSPHORIC ACID, POTASSIUM BENZOATE, NATURAL FLAVOURS, CITRIC ACID, CAFFEINE.

CAFFEINE CONTENT: 46 mg

Milk, 1% M.F.

Nutrition Facts			
Per 1 cup (250 mL)			
Amount		% Daily Value	
Calories 110			
Fat 2.5 g		4 %	
Saturated 1.5 g + Trans 0 g		8 %	
Cholesterol 10 mg			
Sodium 120 mg		5 %	
Carbohydrate 12 g		4 %	
Sugars 12 g			
Protein 9 g			
Vitamin A		10 %	Vitamin C 0 %
Calcium		30 %	Iron 0 %



INGREDIENTS

PARTLY SKIMMED MILK, VITAMIN A PALMITATE, VITAMIN D3.

Chocolate Milk, 1% M.F.

Nutrition Facts			
Per 1 cup (250 mL)			
Amount		% Daily Value	
Calories 170			
Fat 2.5 g			4 %
Saturated 1.5 g + Trans 0 g			8 %
Cholesterol 10 mg			
Sodium 180 mg			8 %
Carbohydrate 26 g			9 %
Sugars 26 g			
Protein 9 g			
Vitamin A	10 %	Vitamin C	0 %
Calcium	30 %	Iron	2 %



INGREDIENTS

PARTLY SKIMMED MILK, SUGAR/GLUCOSE FRUCTOSE, COCOA, COLOUR, SALT, CARRAGEENAN, ARTIFICIAL FLAVOUR, VITAMIN A PALMITATE, VITAMIN D3.

Energy Drink

Nutrition Facts			
Per 1 cup (240 mL)			
Amount	% Daily Value		
Calories 100			
Fat 0 g	0 %		
Saturated 0 g + Trans 0 g			
Cholesterol 0 mg			
Sodium 180 mg	8 %		
Carbohydrate 25 g	8 %		
Sugars 25 g			
Protein 0 g			
Vitamin A 0 %	Vitamin C 0 %		
Calcium 0 %	Iron 0 %		



INGREDIENTS

CARBONATED WATER, SUCROSE, GLUCOSE, TAURINE, CITRIC ACID, SODIUM CITRATE, CARAMEL COLOUR, L-CARNITINE, L-TARTRATE, CAFFEINE, POTASSIUM SORBATE, SODIUM BENZOATE, NIACINAMIDE, NATURAL AND ARTIFICIAL FLAVOUR, SUCRALOSE, SODIUM CHLORIDE, PANAX GINSENG ROOT EXTRACT, INOSITOL, D-GLUCURONOLACTONE, PYRIDOXINE HYDROCHLORIDE, RIBOFLAVIN, GUARANA SEED EXTRACT, CYANOCOBALAMIN.

CAFFEINE CONTENT (1 serving): 79 mg

Sports Drink – Ice Blast

Nutrition Facts			
Per 12 fl.oz (355 mL)			
Amount		% Daily Value	
Calories 80			
Fat 0 g		0 %	
Saturated 0 g + Trans 0 g			
Cholesterol 0 mg			
Sodium 160 mg		7 %	
Carbohydrate 22 g		7 %	
Sugars 22 g			
Protein 0 g			
Vitamin A 0 %		Vitamin C 0 %	
Calcium 0 %		Iron 0 %	



INGREDIENTS

WATER, SUGAR, DEXTROSE, CITRIC ACID, SALT, SODIUM CITRATE, MONOPOTASSIUM PHOSPHATE, MODIFIED CORN STARCH, COLOUR ESTER GUM.

Mixed Berry Fruit Juice

Nutrition Facts			
Per 1 package (200 mL)			
Amount	% Daily Value		
Calories 100			
Fat 0 g	0 %		
Saturated 0 g + Trans 0 g			
Cholesterol 0 mg			
Sodium 15 mg	1 %		
Carbohydrate 25 g	8 %		
Sugars 24 g			
Protein 0.5 g			
Vitamin A	0 %	Vitamin C	100 %
Calcium	0 %	Iron	0 %



INGREDIENTS

FRUIT JUICES FROM CONCENTRATE (APPLE, GRAPE, RASPBERRY AND BLACKBERRY), NATURAL FLAVOUR, GRAPE SKIN EXTRACT, ASCORBIC ACID (VITAMIN C), CITRIC ACID.

Vita Water PLUS

Nutrition Facts			
Per 1 bottle (591 mL)			
Amount	% Daily Value		
Calories 120			
Fat 0 g	0 %		
Saturated 0 g			
+ Trans 0 g			
Cholesterol 0 mg			
Sodium 0 mg	0 %		
Carbohydrate 32 g	11 %		
Sugars 32 g			
Protein 0 g			
Vitamin A	0 %	Vitamin C	150 %
Calcium	0 %	Iron	0 %



INGREDIENTS

REVERSE OSMOSIS WATER, CRYSTALLINE FRUCTOSE, CANE SUGAR, ASCORBIC ACID (VITAMIN C), CITRIC ACID, NATURAL FLAVOURS, DRAGON FRUIT EXTRACT, VEGETABLE JUICE (COLOUR), MAGNESIUM LACTATE AND CALCIUM LACTATE, TAURINE, CALCIUM PANTOTHENATE (VITAMIN B5), ZINC GLUCONATE, PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), CYANOCOBALAMIN (VITAMIN B12), CHROMIUM POLYNICOTINATE.

Iced Tea

Nutrition Facts			
Per 1 bottle (500 mL)			
Amount	% Daily Value		
Calories 160			
Fat 0 g	0 %		
Saturated 0 g			
+ Trans 0 g			
Cholesterol 0 mg			
Sodium 50 mg	2 %		
Carbohydrate 43 g	14 %		
Sugars 43 g			
Protein 0 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	0 %



INGREDIENTS

FILTERED WATER, SUGAR/GLUCOSE-FRUCTOSE, CITRIC ACID, CONCENTRATED TEA FROM TEA LEAVES, POTASSIUM CITRATE, NATURAL LEMON FLAVOUR.

CAFFEINE CONTENT: 23 mg

Blended Iced Coffee Drink

Nutrition Facts			
Per 1 small (380 mL)			
Amount	% Daily Value		
Calories 250			
Fat 11 g		17 %	
Saturated 6 g		30 %	
+ Trans 0 g			
Cholesterol 45 mg			
Sodium 50 mg		2 %	
Carbohydrate 33 g		11 %	
Sugars 33 g			
Protein 2 g			
Vitamin A	8 %	Vitamin C	0 %
Calcium	10 %	Iron	2 %



INGREDIENTS

ICED COFFEE MIX (WATER, SUGAR, COFFEE EXTRACT, CARAMEL COLOUR, NATURAL & ARTIFICIAL FLAVOUR), CREAM.

CAFFEINE CONTENT: 90 mg

Activity Station:

Thirst Quencher

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Instructions:

- The school fountain is covered with gum and the vending machine is out of water. You're thirsty but only have the drinks in front of you to choose from. You know water is the best choice but it just isn't available.
- Review the Nutrition Facts table and ingredient list of common drinks to help you decide which one you would choose.
- Use the worksheet to answer the questions.
Calculate (to the nearest teaspoon) how many teaspoons of sugar are in the drink.
4 g sugar = 1 tsp (5 mL)

Hint: Look at the '***Healthy Drinks, Healthy Kids***' Handout.

Thirst Quencher – Worksheet

Name of Drink	Ingredients (list all)	Serving Size	Total Sugar and Teaspoons per serving (g)	Caffeine (mg)	Which would you choose? Everyday? Which would you limit or avoid? Why? (Hints: serving size, added sugar, salt, caffeine, herbs, added nutrients, sugar substitutes)
			4 g = 1 teaspoon (5 mL)		

Thirst Quencher – Worksheet

Name of Drink	Ingredients (list all)	Serving Size	Total Sugar and Teaspoons per serving (g) 4 g = 1 teaspoon (5 mL)	Caffeine (mg)	Which would you choose? Everyday? Which would limit or you avoid? Why? (Hints: serving size, added sugar, salt, caffeine, herbs, added nutrients, sugar substitutes)

1. Which drink did you decide was the best choice? Why?
2. Which drinks contain added sugar in the ingredient list?
3. Which 3 drinks had the most added sugar per serving?
4. Which 3 drinks had the most caffeine?