

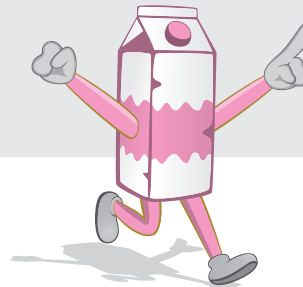
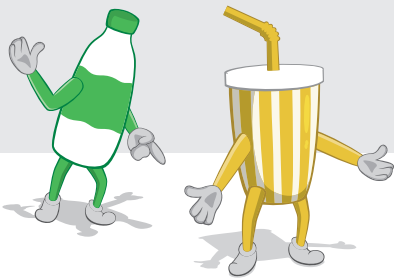
Getting to Know the Runners in the Race

Sugary Drinks Learning Activity



1

Students will develop their understanding of which drinks provide their bodies with the best fuel. By looking at various drinks as the “runners in a race”, students will learn about some of the characteristics that determine whether their drink choices will help them grow, learn, and play.



CURRICULUM CONNECTIONS



BIG IDEAS

- Knowing about our bodies and making healthy choices helps us look after ourselves.
- Good health comprises physical, mental, and emotional well-being.

CURRICULAR COMPETENCIES:

- Identify and explore a variety of foods and describe how they contribute to health.
- Identify opportunities to make choices that contribute to health and well-being.
- Recognize basic health information from a variety of sources.

CONTENT

- Relationships between food, hydration, and health.
- Practices that promote health and well-being.
- Reliable sources of health information.



FIRST PEOPLES PRINCIPLES OF LEARNING FOR ALL STUDENTS

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning involves recognizing the consequences of one's actions.

COMPREHENSIVE SCHOOL HEALTH CONNECTIONS



RELATIONSHIPS AND ENVIRONMENTS

- Use the outside school space to complete this activity (weather permitting).

TEACHING AND LEARNING

- Teaching students healthy drink choices allows them to grow, learn and play.

COMMUNITY PARTNERSHIPS

- Teaching students healthy drink choices allows them to grow, learn and play.

OUR SCHOOL POLICIES

- Students are reminded to follow school/class guidelines on how to make healthy food/drink choices.

PREPARATION

- Review the *Sugary Drink* section of the *Healthy Eating Overview* (included with this activity).
- Photocopy/print *Sip Smart! BC™ Drink Cut-outs* per student (link below).
- Provide each student with the materials to create an art project depicting their drinks in a race: scissors, pencil crayons, crayons, and/or markers.

IMPLEMENTATION IDEAS

- Provide each student with one drink cut-out (front side only), to decorate and label as one of the characters in the race.
- Group students so each group has a variety of drinks. Ask each group to put their drinks in the order that they will cross the finish line, e.g. first, second, third.

- Tell students about “The Runners”: A variety of drinks line up at the starting line, then set out in a running race. Some, the best fuel for our bodies, are able to get ahead, run the whole race, and finish in the lead. These “winners” are water and plain milk. Chocolate milk, fortified chocolate soy beverage, and 100% orange juice finish the race behind these first two, but ahead of other sugary drinks, including iced tea, sports drink, cola, and lime blast slushie.
- Actual order of finishers:

Water (250 ml)	0 cubes	FIRST
Plain Milk (250 ml)	3 cubes	FIRST
Chocolate Soy Beverage (250 ml)	5 cubes	SECOND
100% Orange Juice (200 ml)	5 cubes	SECOND
Chocolate Milk (250 ml)	6 cubes	SECOND
Iced Tea (355 ml)	10 cubes	LAST
Sports Drink (700 ml)	10 cubes	LAST
Cola (591 ml)	17 cubes	LAST
Lime Blast Slushie (1000 ml)	24 cubes	LAST



- Ask if any of the groups had the runners in the correct order. Were the students surprised by any of the results?
- Ask the students if they have any ideas on how to make healthier drink choices to help fuel their bodies (e.g. choosing smaller drink containers, using a small amount of chocolate syrup to add to plain milk or mixing half plain milk and half chocolate milk, having pop less often, etc.).
- Conclude with reminding students the importance of drinking water. Water holds a special place in many First Peoples teachings. It is valued not only for quenching thirst, but for giving life and strength. Water connects people to the earth and all living things, as well as to our ancestors and to future generations. In fact, First Peoples often conduct ceremonies for giving thanks to water and for fostering a spiritual connection to water.

Inspired by: Sip Smart! BC™

EXTENSION OF LEARNING

- Invite students to use this data to create a bar graph to display the different amounts of sugar in the drinks. Students could use a website that is designed to create graphs. After students have completed their graphs, discuss the results from the experiment as a full class. Ask students, “Based on what they found, what conclusions did you come up with about which drinks are healthy and which ones are not healthy?”
- Set up a circuit in the gymnasium for students to navigate while pretending they are driving cars. Give each student four to six healthy eating cards or objects that are safe and easy to carry. After students run one lap of the circuit, they drop off the healthy eating card in a designated spot or hoop and

keep going until their cards are all gone. This means that their fuel tank is empty and they can't go anymore. During their rest break, ask students: Can a car go without fuel? Can people grow or go without food/fuel? Repeat the activity, this time having students pick up the cards on each lap to show that they are filling up their fuel tanks so that they can keep going.

RECOMMENDED RESOURCES

- Sip Smart! BC™ Drink Cut-outs (available at <http://www.bcpeds.ca/Programs/showcontent.aspx?MenuID=3370>)
- Healthy Families BC (www.healthyfamiliesbc.ca) - *Sugary Drink Sense*
- BC Ministry of Education – Guidelines for Food and Beverage Sales in BC Schools (F) (<http://healthyschoolsbc.ca/program/395/guidelines-for-food-and-beverage-sales-in-bc-schools>)

EDUCATOR BACKGROUND

WHICH RUNNER WINS THE RACE?

In First Place, a Tie Between:

- Wonderful Water: Always a great choice! Quenches thirst and always good to sip throughout the day.
- Marvellous Milk: A healthy drink choice! Contains naturally occurring sugar, but also contains nutrients such as protein, calcium, and vitamins A and D.

Finishing After These Two Are:

- Chocolate Milk/other flavoured milk: Flavoured milk has just as much nutritional value as white milk (calcium, vitamin D, and protein), however, it does have more sugar.
- Fortified Chocolate Soy Beverage: Flavoured soy beverage has as much nutritional value as unflavoured varieties, but contains more sugar. Better yet, choose fortified, unsweetened varieties, which contain similar nutrients to cow's milk.
- 100% Juice: The healthiest juice choice! Contains naturally occurring sugar, but may also contain nutrients such as vitamin C, vitamin A, folate, potassium, antioxidants, and more.

In Last Place:

- Sports Drinks, Fruit Drinks, Chocolate Bar Milkshakes, Pops, Diet Pops, Iced Teas, Lemonades, Energy Drinks, etc. These drinks are high in sugar, and generally contain few nutrients.

Drink water – it's always a great choice! ✓

SUGARY DRINKS OVERVIEW

This section of the *Healthy Eating Overview* will explain what is meant by ‘sugary drinks’, provide tips and tools for assessing popular drinks and share information relating to the levels of caffeine found in many of these drinks. Find the complete *Healthy Eating Overview* at www.actionschoolsbc.ca/resources.

KEY MESSAGES

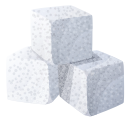
Some drinks don’t fit into the four food groups in *Eating Well with Canada’s Food Guide* or *Eating Well with Canada’s Food Guide – First Nations, Inuit and Métis*.

- Sugar is a major ingredient in many popular drinks.
- Knowing what is in drinks helps us to make healthy choices.
- The number and size of servings we drink affects the amount of sugar we consume.
- Drinking sugary drinks “bumps out” nutritious drinks.
- Some ingredients in sugary drinks other than sugar, such as acid and caffeine, may damage our health.
- Drink choices can be influenced by various factors, including family, friends, and the media.
- We can decide for ourselves to make healthy drink choices.
- Drink water – it’s always a great choice!

Adapted from: Sip Smart! BC™

What Are Sugary Drinks?

Added Sugars



- Sugary drinks are drinks (carbonated or not) that contain added sugars. These can include:
- Pop or soft drinks
- Energy drinks
- Hot chocolate
- Store-bought smoothies
- Slushes
- Fruity drinks (e.g., “punches”, “cocktails”, or “ades”)
- Sports drinks
- Flavoured or vitamin-enhanced waters

Added sugars are sugars and syrups that are added to drinks or food during processing (e.g., sugars added to soda by the manufacturer) or preparation (e.g., sugars added to a cup of coffee after it was bought at the coffee shop). Sugary drinks often have little to no nutritional value. For examples, children and adolescents who drink pop regularly are more likely to have lower intakes of calcium and other nutrients.

Sugary drinks are heavily marketed, available in many locations, and often displayed at the eye level of children. These drinks can contribute to unhealthy weight, which puts a child at increased risk of high blood pressure, heart disease, type 2 diabetes, cancer and other health problems. A healthy weight, on the other hand, supports the mental, physical and social health and well-being of individuals, families and communities.

Naturally Occurring Sugars

Naturally occurring sugars are no different from added sugars in terms of their effects on the body. However, because drinks with naturally occurring sugars often contain important nutrients, they can be consumed in moderation as part of healthy eating. Some drinks with naturally occurring sugar are 100% fruit juice (contains fructose), and plain milk (contains lactose).

Hidden Sugars



Hidden sugars are other names for added sugars that might not sound or look like sugar. These include: sucrose, dextrose, maltose, galactose, liquid glucose-fructose, invert sugar, raw cane sugar, brown sugar, corn sweetener, high-fructose corn syrup, rice syrup, fruit juice concentrates, honey, malt syrup, and molasses.

Juice and Fruity Drinks



The difference between 100% fruit juices and “fruity drinks” (e.g., “fruit beverages”, “fruit drinks”, “fruit cocktails”) can be a difficult concept for students to grasp, but is a very important teaching point. Although the majority of added sugar consumed by students often comes from these drinks, they – and often their parents – may not know the difference between 100% fruit juice and fruity drinks.

100% fruit juice contains some of the natural vitamins (such as vitamin C, potassium and B-vitamins) found in fruit. However, fruit juice still contains a lot of concentrated sugar, and has the same effect on teeth as other sugary drinks. For this reason, children should have no more than 1 serving (125ml, 1/2 cup) of 100% fruit juice daily. A healthier alternative to 100% fruit juice would be a glass of water and a piece of fresh fruit, which provides all the vitamins, minerals, and fibre naturally present, but with much less sugar. Juice is not a necessary part of a healthy diet. Fruits and vegetables are!

What About Artificial Sweeteners?



In keeping with the Guidelines for Food and Beverage Sales in B.C. Schools, drinks sweetened with artificial sweeteners such as aspartame, acesulfame potassium and sucralose are not allowed for sale in elementary and middle schools. Just like sugary drinks, artificially sweetened drinks get children used to sweet-tasting, non-nutritious items. They provide none of the nutrients that a child’s growing body needs to be healthy and strong, and can bump healthy foods and drinks out of a child’s diet. These drinks may also contain artificial sweeteners in amounts that exceed the acceptable daily intake (ADI) for children.

Energy Drinks



Energy drinks contain as much or more added sugar than cola, are high or very high in caffeine, and often contain potentially harmful additives. Energy drinks are often marketed with images of extreme sports such as competitive downhill skiing, biking, snowboarding and skateboarding, with the implication that these drinks boost performance. Others, with flashy packaging and enticing names are designed to directly target the youth market.

Energy drinks are very high not only in sugar, but also in caffeine. For example, a 500mL can of a typical energy drink contains 160mg of caffeine. That is more than double the suggested daily caffeine maximum for a 7-12 year-old child.

Many energy drinks also contain stimulant herbs or other substances such as guarana and taurine. These additives are often listed misleadingly as “medicinal ingredients” on energy drinks, when in fact they are untested and potentially harmful, especially for children. Like sports drinks, energy drinks also tend to contain artificial flavours and/or colours.

When consumed in large amounts, or when combined with alcohol, energy drinks have been linked to serious health effects such as irregular heart function, nausea and vomiting, and electrolyte disturbances. Energy drinks can also interact with some medications.¹

Milk, Flavoured Milk and Other Beverages Made With Milk



Milk and milk alternatives (e.g. unsweetened fortified soy beverage) are the main source of calcium and Vitamin D in most Canadian diets. Both calcium and vitamin D help build and maintain strong bones and teeth. Plain milk is also a source of protein, vitamin A and riboflavin.

One cup (250mL) of plain milk = 1 serving from the Milk and Alternatives food group in *Eating Well with Canada's Food Guide* and in *Eating Well With Canada's Food Guide – First Nations, Inuit and Métis*. Children aged 4-13 should aim for 2 to 4 Food Guide Servings of Milk and Alternatives each day.

Adding vanilla, chocolate, strawberry and other flavours to plain milk can add a lot of extra sugar. It is best to offer children plain (not flavoured) milk regularly so they learn to enjoy it. If making flavoured milk at home, add a small amount of syrup or powder. Less is best.

Drink water – it's always a great choice!

Adapted from: *Sip Smart! BC™*



References:

1. Sip Smart! BC™ (<http://healthyschoolsbc.ca/program/298/sip-smart-bc>)