Knowing what is in drinks helps us to make healthy choices. This activity will engage students in thinking about sugary drinks, enabling them to make more informed decisions about the drinks they consume.

CURRICULUM CONNECTIONS

BIG IDEAS

• Understanding ourselves and the various aspects of health helps us develop a balanced lifestyle.
• Personal choices and social and environmental factors influence our health and well-being.

CURRICULAR COMPETENCIES:

• Explain the relationship of healthy eating to overall health and well-being.
• Identify and describe factors that influence healthy choices.
• Examine and explain how health messages can influence behaviours and decisions.
• Identify and apply strategies for pursuing personal healthy-living goals.
• Describe and assess strategies for promoting mental well-being.

CONTENT

• Practices that promote health and well-being, including those relating to physical activity, sleep, healthy eating, and illness prevention.
• Food portion sizes and number of servings.
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

- Encourage diverse ability group work to complete this activity.

TEACHING AND LEARNING

- Teach students that sugar enriches the taste, texture and sweetness of foods and drinks we consume. When we consume too much, sugar can become a health problem.

OUR SCHOOL POLICIES

- Explore with students how to boost the sale of healthy beverages that fit with the Guidelines for Food and Beverage Sales in BC Schools.

PREPARATION

- Review the Sugary Drinks section of the Healthy Eating Overview (included with this activity).
- Bring 1.2 kg sugar, 355 ml pop can, 250 ml cup/glass.
- Sugar cubes.
- Optional: If students are unfamiliar with how to calculate sugar cubes from grams of sugar, it might be helpful to do the Count the Cubes lesson, included in the Sip Smart! BC™ resource and available at http://www.bcpeds.ca/uploadfiles/documents/Sipsmart/2016/Lesson 2 by Activity/Sip_Smart_TRG_Lesson_2_Activity_4_Count_Cubes.pdf, prior to this lesson.

IMPLEMENTATION IDEAS

- Begin with students, sitting in a circle. Using the First Peoples traditional talking stick or an eagle feather, ask students to tell the class about their favourite drink, when they usually drink it, and how often they have it.
• Next show students 1.2 kg of real sugar
  • Q: How many cans of pop do you have to drink to add up to 1.2 kg of sugar? Let them guess.
  • A: 30 cans
• Show students one regular size can of pop (355 ml)
  • Q: What if you drink 1 can of pop each day for one month? (Work with the students on the calculation.)
  • A: 1 can of pop = 10 cubes of sugar
• 1 can/day x 1 month (30 days) = 300 cubes of sugar
• 1 sugar cube = 4 g
• 300 cubes of sugar x 4 g = 1.2 kg real sugar
• Show students an empty cup or glass (250 ml)
  • Q: How many cups of fluid should we drink each day to stay healthy? Let them guess.
  • A: About 8 cups of fluid (includes milk, soup, etc.).
  • Q: If you had 8 cups of sugary drinks a day, how would that make you feel?
  • A: Moody, irritable, elated, then crashing, off-balance, etc.
• Show students a sugar cube and/or teaspoon of sugar
  • Q: What is the maximum amount of sugar, added and naturally present in fruit juice, a student your age should eat or drink in a day, including drinks and food? Let them guess.
  • A: No more than 13 sugar cubes/13 teaspoons of sugar. This is about 50 grams of sugar.

Adapted from: Sip Smart! BC™

EXTENSION OF LEARNING
• Have students maintain a drink journal, using the Drink Journal extension activity, attached.

RECOMMENDED RESOURCES
• Sip Smart! BC™ Drink Cut-outs (printed - www.bcpeds.ca/sipsmart)
• Healthy Families BC (www.healthyfamiliesbc.ca) - Sugary Drink Sense
• First Nations Education Steering Committee (http://www.fnesc.ca/)
• 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)
• HealthLink BC (www.healthlinkbc.ca) Call 811 and speak with a registered dietitian

People can do different things to help keep their bodies and minds healthy. Choosing healthy drinks can be one of those things.
Drink Journal

Think back to everything you drank yesterday. Use the chart below to record what you drank, and how much.

<table>
<thead>
<tr>
<th>WHEN</th>
<th>TYPE OF DRINK</th>
<th>CIRCLE THE SIZE OF YOUR DRINK</th>
<th>HOW MANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td>Recess/Break</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td>After Lunch</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
<tr>
<td>After Dinner</td>
<td></td>
<td>S M L XL</td>
<td></td>
</tr>
</tbody>
</table>

DRINK SIZES:
- SMALL: 250 ml or less
- MEDIUM: 251-591 ml
- LARGE: 592 ml-1 litre
- EXTRA LARGE: more than 1 litre

Drink water – it’s always a great choice!

Inspired by: Sip Smart! BC™
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™*

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**References:**

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