**Topic of Lesson:** Sugar  
**Subject:** Science, Physical and Health Education  
**Grade:** 3-7

| Big Idea or Guiding Question: | How much sugar is in common foods and beverages, and how does it compare to the maximum daily recommended intake? |

This lesson is a fun and interactive way to learn about the sugar content in various foods and drinks, and how they compare to the recommended maximum daily intake. In this lesson students are given ten different examples of sugar content, and a list of ten different products. They are to make inferences and match the sugar content to the product. This lesson can take place outside or inside the classroom.

| Lesson Objectives: | During the lesson, students will:  
• Differentiate between free sugars and naturally occurring sugars  
• Become familiar with the maximum recommended daily intake of sugar and how it compares to the amount of sugar found in common food and drink  
• Use their previous understandings of various products to infer the sugar content of each provided  
• Be self-reflective about their sugar intake, eating choices, and health implications associated with diets high in sugar |

| Link to Curriculum: PLOs/IRPs | Science Education:  
Curricular Competencies  
• Grade 3-4: Make predictions based on prior knowledge  
• Grade 3-7: Transfer and apply learning to new situations  
Content:  
• Grade 5: Know basic structures and functions of the digestive system  

Physical and Health Education  
Big Ideas  
• Grade 5: Understanding ourselves and the various aspects of health helps us develop a balanced lifestyle  
• Grade 6 & 7: Healthy choices influence our physical, emotional, and mental well-being  
Curricular Competencies  
• Grade 3: Healthy and Active Living: explore and describe strategies for making healthy eating choices in a variety of settings  
• Grade 4: Explain the relationship of healthy eating to overall health and well-being  
• Grade 6: Explore and plan food choices to support personal health and well-being |
<table>
<thead>
<tr>
<th>Grade 7: Identify and apply strategies to pursue personal healthy-living goals</th>
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</thead>
<tbody>
<tr>
<td>Content</td>
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<tr>
<td>Grade 3: Know nutrition and hydration choices to support different activities and overall health</td>
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<td>Grade 4: practices that promote health and well-being, including those relating to physical activity, sleep, healthy eating, and illness prevention</td>
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<td>Grade 5: know food choices to support active lifestyles and overall health</td>
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**Materials**
- List of common food and beverages
- Jars with measured sugar labelled with amount
- Worksheet

**Lesson**

**Opening**
- Ask students how they feel when they consume foods high in sugar
- Ask students what foods they think are high in sugar
- Differentiate between free sugars and naturally occurring sugars
- Discuss how our body processes sugar and different health implications that result from a high sugar diet

**Activity**
- Distribute worksheets and list of foods/beverages
- Explain to students that there are various jars of sugar around the room- each labeled with a sample # and weight in grams
- Students are to complete the worksheet by recording the amount of sugar in each sample, and inferring which food/beverage it aligns with based on sugar content

**Closing**
- Go over the results
- Ask students what they found most surprising
- Ask students what foods they consume most/least often and whether they should make any changes to their diet and what changes those could be
- Discuss alternatives to foods/beverages high in sugar (eg. sweetening yogurt with fresh or dried fruit instead of flavoured yogurts high in free sugars)

**Extension**
To extend this lesson, students could:
- Record their food intake for a set period of time (1-7 days) and record their energy levels, moods, hunger to see if what they eat is correlated

**Additional Resources**
- [https://www.youtube.com/watch?v=EFInlGx0B5U](https://www.youtube.com/watch?v=EFInlGx0B5U)
- [https://www.youtube.com/watch?v=IEXBxjQREo](https://www.youtube.com/watch?v=IEXBxjQREo)

Developed by Georgia Campbell
Sugar

- Examine the jars of sugar around the room
- Each contains the amount of sugar of a common food or drink
- Using your worksheet, attempt to match the jar of sugar with a food or drink from the list provided below

<table>
<thead>
<tr>
<th>Sample</th>
<th>Weight (g)</th>
<th>My guess</th>
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<tbody>
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I think the product with the most amount of sugar is: ________________

I think the product with the least amount of sugar is: ________________
Landed Learning Project

Name:_____________________

To Think About...

1. When I eat sugar I feel ______________________________.

2. I was most surprised by the amount of sugar in ________________, because ________________________________

3. I should avoid excess sugar because ________________________________
   ________________________________
   ________________________________

4. How could you change your eating habits? What could you consume less of, or instead of something high in sugar? I could consume less sugar by:
   ________________________________
   ________________________________
   ________________________________
Food and Drinks

Nutella: 30mL (2 Tbsp)

Simply Orange Juice: 240 mL

Vitamin Water: 1 bottle (240mL)

Kraft Smooth Peanut Butter: 15 mL (1 Tbsp)

YOP: Raspberry Flavour Yogurt Drink (1 bottle)

Chocolate Milk: 250 mL (1 cup)

Recommended Daily Intake

Coca-Cola: 1 can

Strawberry Yogurt: 175g (3/4 cup)

Plain Yogurt: 175g (3/4 cup)
Sugar ANSWER KEY

Sample A: __22__ g. I think it is: **Recommended Maximum Daily Sugar Intake**

Sample B: __21__ g. I think it is: **Nutella**

Sample C: __32.5__ g. I think it is: **Vitamin Water**

Sample D: __20__ g. I think it is: **Strawberry Yogurt**

Sample E: __25__ g. I think it is: **Chocolate Milk**

Sample F: __23__ g. I think it is: **Simply Orange Juice**

Sample G: __39__ g. I think it is: **Coca-Cola**

Sample H: __1__ g. I think it is: **Kraft Peanut Butter**

Sample I: __5__ g. I think it is: **Plain Yogurt**

Sample J: __22__ g. I think it is: **Yop**