



Nutrition Activities in Any Classroom

For Junior and Senior High

A Teacher's Guide





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Instructions on How to Use the Teacher's Guide

This guide contains everything you need to offer interactive nutrition education to your junior high and high school students, including printable station titles, instructions, worksheets and activity materials. Each station can be completed as a stand-alone activity. They do not have to be completed in the same order as in the guide. An overview of the stations is located in **Table 1**. References available upon request.

Each station contains:

Activity Description

Key Messages

Station Materials

- Includes hand-outs and other materials needed for the students to complete the activity
- The Canada Food Guide Snapshot can be ordered <u>here</u>. It can take several weeks for the resource to arrive.

Set-Up

• It is recommended to review the hand-outs and activity materials in advance of facilitating the station.

Answer Key for the Activity

Discussion Questions and Answers

Supplementary Information and Resources

• Provides optional additional background information for the teacher to extend learning on the topic.

Ideas on How to Use the Activity Stations in your Classroom

- 1. **Semester-long stations**: Provide an overview of each station at the start of the semester. Post stations on the classroom walls for students to complete at their own pace over the semester.
- 2. **Student-directed projects**: Provide an overview of each station allowing individual students (or groups of students) to choose a station for their self-directed project. Students can present their findings back to the class.
- 3. **Complete 1 station per class**: ~45 minutes per activity and discussion. Follow 3 simple steps:
 - a. Introduce the key nutrition messages and outcomes of the station.
 - b. Have students complete the station worksheet (individually or in groups).
 - c. Go over worksheet answers (if applicable). The follow-up discussion questions can be used in class discussion, small group or individual work.





Station Title	Materials needed	Nutrition Messages and Outcomes
Food Detective	 Student Pre-work: Ask students to search for a website or ad that provides nutrition, diet, or food advice. Examples: weight loss supplements, food products, or fad diet programs. Canada's Food Guide Snapshot (1 copy) Station Title (print x 1) Station Instructions (print x 1) Answer Key Worksheet: Food Detective worksheet (print x 1 per student) Handout: How to find food and nutrition information you can trust (print x 1 per student) 	Choose and Prepare Healthy Food Students will assess the credibility of the nutrition information in the media. Students will learn where to find reliable nutrition information on-line and learn to recognize fad diet information.
Cereal Slayer	 Station Title (print x 1) Station Instructions (print x 1) Answer Key Worksheet: Cereal Slayer (print x 1 per student) Handout: Choose Whole Grains (Nutrition Bites version) (print x 5) Handout: Label Reading The Healthy Way (print x 5) Cereals labels-print and laminate (Appendix) 	Choose Whole Grains Students will learn to recognize sources of whole grains and how to determine sugar and fibre content from a Nutrition Facts table. Students will assess added sugar and fibre content of breakfast cereals.
Thirst Quencher	 Student Pre-work: (Optional) Students may bring in their own drink labels or the teacher may use the drink labels provided. Station Title (print x 1) Station Instructions (print x 1) Answer Key Worksheet: Thirst Quencher (print x 1 per student) Handout: Healthy Drinks, Healthy Kids Drink Labels-print and laminate (Appendix) 	Choose Healthy Drinks Students will review labels and become aware of the added sugar content in some popular drinks.
Ingredient Investigation	 Student Pre-work: (Optional) Students may bring in their own food labels or the teacher may use the food labels provided. Station Title (print x 1) Station Instructions (print x 1) Answer Key–print in colour and laminate (salt is in blue, sugar is in red) display upside down Ingredient Investigation Fact Sheet (print x 1) Worksheet: Ingredient Investigation (print x 1 per student) Ingredient lists print and laminate (Appendix) Dry erase markers red and blue, rag (for wiping off labels) 	Choose and Prepare Healthy Foods Students will review the ingredient lists on common packaged foods while learning about the various forms of sugar and salt found in foods.





Table 1. Overview of the Activity Stations

Station Title	Materials needed	Nutrition Messages and Outcomes
Fat Match	 Station Title (print x 1) Station Instructions (print x 1) Answer Key (display upside down) The Low Down on Fats Fact Sheet (print x 1) Fat Match Cards–print and cut each card, laminate or glue to index cards (display right side up) 	The Lowdown on Fats Students will learn the types of fats found in common foods and the effect they have on the body.
Sodium Analyzer	 Station Title (print x 1) Station Instructions (print x 1) Answer Key Worksheet: Sodium Analyzer (print x 1 per student) Display items: 1 box of salt, food packages or printed labels (Appendix) Measuring spoons, clear plastic cups or re- sealable plastic bag to hold salt, one for each nutrition label Calculator (optional) 	Hold the Salt Students will be able to determine the amount of salt in processed foods compared to the recommended daily intake.
Time Crunch! What to Eat?	 Station Title (print x 1) Station Instructions (print x 1) Worksheet: Weekly Snack Planner and List of Foods (print x 1 per student) Handout: Healthy Snacking (print x 5) 	Steps to a Healthier You Students will be able to practice their creativity and planning skills while making a weekly snack plan.
Crunchy, Juicy, or Sweet? You decide!	 Station Title (print x 1) Station Instructions (print x 1) Answer Key Worksheet: Blank Healthy Plate Optional Handout: Canada's Food Guide Snapshot (print x 5 or order copies) Handout: Eat More Vegetables and Fruit (print x 5) Photos of foods print and laminate (Appendix) Optional: If doing the food sampling the following foods are suggested: spinach, beets, zucchini, sweet potato, jicama, cassava, parsnip, and turnip. Note that none of these foods are major allergens. Hand wipes or hand sanitizer Spoons, forks, or toothpicks for tasting 	Eat More Vegetables and Fruits Students will understand the importance of eating a variety of vegetables and fruit, while developing a snack or meal and meal plan that incorporates vegetables and fruits.





Activity Station : Food Detective

Activity Description

Students will:

- Understand how to assess the credibility of the nutrition information in the media.
- Learn where to find reliable nutrition information.

Key Messages

- Include a variety of healthy foods from <u>Canada's Food Guide</u> to help you get all the nutrients needed to maintain a healthy body.
- Fad diets and many nutrition supplements can be harmful to growing bodies. Many of these have no evidence that they work.
- Not all nutrition information in the media is accurate. Be consumer savvy!

Materials

- **Student Pre-work:** Before completing the station, ask students to search for a website or ad that provides some nutrition, diet, or food advice. Examples might include weight loss supplements, food or nutrition supplements, or fad diets.
- Food Guide Snapshot (order <u>here</u>)
- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Food Detective Worksheet (print x 1 per student)
- Handout: <u>How to find food and nutrition information you can trust</u> (print x 1 per student)

Set-Up

- Ensure students have been given the opportunity to complete the pre-work (see above). Alternatively the teacher can provide examples of ads or websites including weight loss supplements, food or nutrition supplements, or fad diets.
- Place station title, instructions, worksheets, and handouts at station.
- Students can work individually or in small groups to answer the questions on the worksheet provided.





Answer Key for the Activity

Refer to the student worksheet. The answers to this activity will depend on the examples that students provide. Students are encouraged to use critical thinking skills to create discussion around this topic.

Discussion Questions and Answers

1. What is a fad diet?

A fad diet is a popular diet that usually promises weight loss. A fad diet often sounds "too good to be true" and does not follow healthy eating guidelines that support good health.

A fad diet often has some of the following characteristics:

- Promises weight loss of more than 2 pounds (1 kg) per week.
- Restricts you to less than 800 calories a day.
- Is strict and does not fit into your lifestyle.
- Cuts out major food categories (like gluten or carbohydrates) and stops you from enjoying your favourite foods.
- Is not sustainable.
- Requires that you buy the company's foods or supplements rather than showing you how to make better choices from food bought at a grocery store.
- Uses "counsellors" who are actually salespeople. Weight management counsellors should not make a commission from anything you buy.
- Gives you nutrition advice that is based on testimonials rather than scientific evidence.
- Promotes unproven ways to lose weight such as starch blockers, fat burners, and colonic cleanses.
- Does not encourage physical activity.

Adapted from: <u>www.unlockfood.ca/en/Articles/Weight-Loss/Get-the-facts-on-fad-diets.aspx</u>

2. <u>What are some reasons you would want to avoid fad diets?</u> <u>Possible answers may include:</u>

- Ages 12–18 years is a time of rapid growth when your body requires many nutrients to help you grow and be healthy. When you don't eat well, your body does not get the nutrients and energy it needs to grow.
- While youth are growing, weight loss is not recommended. Using an unhealthy approach to weight loss can be harmful to mental and physical health. Before trying to lose weight, youth should speak to their parents or health professional.
- A nutritionally balanced diet follows Canada's Food Guide. Fad diets may restrict or exclude certain foods.





- Fad diets may promote unhealthy habits such as: skipping meals, fasting, cleansing, or weight loss that is too fast to be considered healthy.
- Fad diets may be strict and difficult to follow. Changes to your eating patterns that cannot be followed long-term are not recommended. Healthy eating is about long-term success, so dietary changes need to be practical, realistic, and support healthy habits.
- Fad diets may not offer the flexibility to meet your unique needs such as food likes and dislikes, allergies, preferences when eating out, and cultural customs/practices.
- Fad diets may cost a lot of money. You may need to buy special food, supplements, teas, or meal replacement beverages.
- Following fad diets may make you dependent on a company that sells you products, instead of teaching you how to make healthy choices from food at the grocery store.

Adapted from: <u>www.unlockfood.ca/</u>

3. What types of fad diets or supplements did you find?

Answers to this question will vary depending on the types of ads and diets the students examined. Discuss the student's answers from the checklist and discuss whether the students would or would not use the diet or product they found.

Below are examples of two diets, the gluten free diet and the paleo diet, with an explanation of why these diets are not recommended for everyone.

Gluten-Free Diet

- It is not designed to be a weight loss diet. It has no additional health benefits to those people that do not need to eliminate gluten from their diet. A gluten-free diet is restrictive and is not necessarily lower in calories.
- Weight loss when eating gluten-free may be a result from paying more attention to food intake, eating more vegetables and fruits, watching portion sizes, and avoiding unhealthy convenience foods, such as store bought cakes, cookies, pastries, crackers, pizza, etc.
- The gluten-free diet is difficult to follow. When a diet is not linked to a specific health condition, there may be little motivation to continue it over the long term.
- The gluten-free diet is limited in whole grain choices. Whole grains foods contain fibre, which helps regulate blood sugar, lower blood fats, may reduce hunger, and helps keep bowels regular.
- Vitamins and minerals, such as folate, B vitamins, iron, zinc, and magnesium are also found in whole grains.
- A gluten-free diet limits food choices. Choosing a variety of foods from the Eat Well Plate helps meet our needs for carbohydrates, protein, heart-healthy fats, vitamins and minerals.
- Without the use of gluten, bakers may use more fat to make a moist product that does not easily crumble. Gluten-free baking recipes and commercial gluten-free baking are usually high in calories, total and saturated fat, sugar, and salt.





There are some people that need to follow a gluten-free diet.

Individuals with Celiac Disease—An autoimmune disease where gluten causes damage to the small intestine.

Individuals with a Wheat Allergy—An immune response to something the body identifies as foreign.

Individuals with a Non-Celiac Gluten Sensitivity–If the person does not have celiac disease or a wheat allergy, they may have gluten sensitivity. These people show some symptoms similar to celiac disease.

Paleo Diet

- This diet tries to copy the eating habits of early humans. It is based on the idea that human genetics have not changed over the past 10,000 years, since the time before the use of agriculture, and that humans are better adapted to the eating pattern and lifestyle of the paleo period.
- The diet consists of eating meat, fish, vegetables and fruit, and nuts. Foods that come from agriculture including legumes, dairy, sugar, salt, and processed foods are to be avoided.
- Those promoting the paleo diet suggest that many people's eating habits would improve with less processed foods and more vegetables. Avoiding dairy, whole grains, and legumes has not been proven by nutrition science to be a healthier way of eating.
- Very few studies have proven that the paleo diet has positive results.
- Little is known about what actual foods were eaten by our Paleolithic ancestors. The diet is based mainly on theory and opinion, not science.

4. Why is it important to eat a variety of foods every day?

Canada's Food Guide encourages people to choose a variety of foods from the Eat Well Plate so that people get all the nutrients they need. The table below shows how eating a balanced plate contributes nutrients to a healthy eating pattern.





Consider sharing the table below with students to help show the importance of eating a variety of foods.

Some Important Nutrients in the Canada's Food Guide Eat Well Plate					
			Protein Foods		
Key Nutrient	Vegetables and Fruits	Whole Grains	Milk	Meat and Plant	
	and Fruits		Products	Protein	
Protein			\checkmark	\checkmark	
Fat			\checkmark	\checkmark	
Carbohydrate	\checkmark	\checkmark	\checkmark		
Fibre	\checkmark	\checkmark			
Thiamin	•	\checkmark		\checkmark	
Riboflavin		\checkmark	\checkmark	\checkmark	
Niacin		\checkmark		\checkmark	
Folate	\checkmark	\checkmark		, i i i i i i i i i i i i i i i i i i i	
Vitamin B6	\checkmark			\checkmark	
Vitamin B12	-		\checkmark	\checkmark	
Vitamin C	\checkmark				
Vitamin A	\checkmark		\checkmark		
Vitamin D	·		\checkmark		
Calcium			\checkmark		
Iron		\checkmark	·	\checkmark	
Zinc		\checkmark	\checkmark	\checkmark	
Magnesium	\checkmark	\checkmark	\checkmark	\checkmark	
Potassium	\checkmark	\checkmark	\checkmark	\checkmark	

Health Canada, 2007. Table adapted from: Eating Well with Canada's Food Guide A Resource for Educators and Communicators.

Supplementary Information and Resources

- Be Aware of Food Marketing, Canada's Food Guide
- To find credible nutrition information, students could explore these websites:
 - Alberta Health Services
 - Dietitians of Canada

 - Diabetes Canada

- Centre for Science in the Public Interest
- Health Canada
- Canadian Cancer Society
 Heart and Stroke Foundation





Activity Station:

Food Detective





Activity Station: Food Detective

Instructions:

- Discuss with your group what type of diet, product, or supplement your advertisement is selling or recommending.
- Complete the questions on the worksheet.





Food Detective Worksheet

- 1) What claims does the supplement, product, or diet make?
- 2) Use this checklist to help you spot inaccurate nutrition information.

Question	Yes	No
Do they promise a quick fix or does it sound too good to be true?		
Are they trying to sell you products or supplements?		
Do they promote any unhealthy habits? (examples: skipping meals, restricting food groups, "cleansing" supplements)		
Do they provide information based on personal stories or testimonials rather than on facts?		
Is their promise or claim based on one single study?		
If you answer yes to any of the above que not be true.	stions, the information y	you have found may
Is the information provided by a RD (Registered Dietitian) or PDt (Professional Dietitian) or a government health institution (Health Canada) or professional organization (Dietitians of Canada)?		
If you answer no to the last question, the i	nformation may not be a	true

3) Would you use this product, supplement, or diet? Why or why not?

Remember: If it sounds too good to be true it probably is! There are no quick fixes or magic products when it comes to health. A healthy diet does not have to be complicated and you do not need to buy expensive supplements, health products, or follow restrictive fad diets to be healthy.





Activity Station: Cereal Slayer

Activity Description

Students will:

- Learn how to recognize sources of whole grains.
- Learn how to read the Nutrition Facts table to find out how much fibre and sugar are in cereals.

Key Messages

- Whole grains contain nutrients like dietary fibre, vitamins, minerals, antioxidants, and phytochemicals (plant compounds) that work together to promote good health.
- When buying grain products, choose whole grains. Look for 100% whole grain on food labels or the word "whole" in front of the type of grain on the ingredient list.
- Choose grain products that are higher in fibre and lower in sugar.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Cereal Slayer (print x 1 per student)
- Handout: <u>Choose Whole Grains</u> (Nutrition Bites version) (print x 5)
- Handout: Label Reading The Healthy Way (print x 5)
- Printed Appendix: Cereal labels (print x 1)

Set-Up

• Place station title, instructions, worksheets, handouts, and appendix: cereal labels at station.

Answer Key for the Activity

For the purpose of this activity, cereals were categorized based on these criteria:

- 100% Whole grain(s) as the first ingredient
- Less than 8 grams of sugar per serving
- <u>More than</u> 2 grams of fibre per serving

Note: When making decisions about food it's important to think of the food as a whole (amount of processing, other ingredients, etc.) and not just a single nutrient. For this activity the focus is on whole grains and sugar; however, other factors may need to be considered when choosing the best cereals (or food) for an individual (for example allergies and intolerances, cultural food restrictions, health conditions, other foods eaten in the day, etc.).







Station 4: Cereal Slayer - Answer Key Listed are mock cereal names. Health Canada is improving food labels. The labels in this module reflect common products in the marketplace as of August 2019.

Cereal Name	Whole grain is the first ingredient? ✓ If yes	Total fibre per serving (g)	2 grams or more of fibre? ✓ If yes	Total sugar per serving (g)	Less than 8 grams of sugar? ✓ If yes	What would you choose? Most often = 3 checkmarks Sometimes = 2 checkmarks Least Often = 1 or no checkmarks
Bran Flakes	\checkmark	5	\checkmark	5	\checkmark	Most often
Bran Pops		11	\checkmark	7	\checkmark	Sometimes
Corn Bran Stamps		5	\checkmark	5	\checkmark	Sometimes
Corn Puff Crunch		3	\checkmark	12		Least often
Fruity RainbO's		2	\checkmark	12		Least often
Lucky Grains Porridge	✓	3	\checkmark	0	\checkmark	Most often
Mini-Gold Wheat Bites	✓	6	\checkmark	11		Sometimes
Multi-Grain Hot Cereal	✓	5	\checkmark	0	\checkmark	Most often
Quick Oats	✓	3	\checkmark	0	\checkmark	Most often
Raisin Bran	✓	6	\checkmark	15		Sometimes
Rice Crisps		0		3	\checkmark	Least Often
Toasted Oats	✓	3	\checkmark	1	\checkmark	Most often
Wheat Bites	✓	6	\checkmark	2	\checkmark	Most often

Note - These are examples only and the information will change as products are reformulated.



Discussion Questions and Answers

1. What is the difference between whole grains and refined grains?

Whole grains are made of the entire grain kernel, which has three layers: bran, endosperm, and germ. Each part has different nutrients. Refined grains have all or part of the bran and germ removed. This causes important vitamins and minerals to be lost.

2. Which cereals are healthier choices and why?

The healthier cereal choices are those that are made with whole grains, are higher in fibre, and have no added sugar or a small amount of sugar.

3. What are the benefits of eating more whole grain foods?

Whole grains increase fibre intake and have a lot of nutrients working together to promote health. Whole grains give your body carbohydrates, fibre and protein. They also provide B vitamins, iron, zinc, magnesium, and plant compounds called phytonutrients.

Supplementary Information and Resources

Canada's Food Guide - Eat Whole Grain Foods

Sugar Shocker Education Kit: The kit provides tools to teach children and youth how to make healthy drink choices. It includes ready to use lesson plans and activities.

Gluten-free diet (if teachers get questions)

- Following a gluten-free diet is required for individuals diagnosed with celiac disease, and is also recommended for those people with a wheat allergy and non-celiac gluten sensitivity.
- Using a gluten-free diet as promoted by the media is generally a fad diet trend. It is not based on a medical diagnosis. Using a gluten-free diet for a non-medical reason is not recommended.
- A gluten-free diet is challenging to follow and provides no additional health benefits to someone who does not need it. There can be some nutrition concerns when using a gluten-free diet following it such as;
 - May be low in fibre, folate, B vitamins, and iron,
 - Gluten-free baking is usually high in fat, sugar, salt, and low in fibre,
 - Limits food choices.





Appendix for Activity Station: Cereal Slayer Sample Cereal labels

Listed are mock names based on common breakfast cereals.

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

13 Labels Provided:

- Bran Flakes
- Bran Pops
- Corn Bran Stamps
- Corn Puff Crunch
- Fruity RainbO's
- Lucky Grains Porridge
- Mini-Gold Wheat Bites
- Multigrain Hot Cereal
- Quick Oats Oatmeal
- Raisin Bran
- Rice Crisps
- Toasted Oats
- Wheat Bites





Bran Flakes

Nutrition Per 1 cup (3		5	
Amount		% Dail	y Value
Calories 12	20		
Fat 1 g			2 %
Saturated	0 g		0 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 21	0 mg		9 %
Carbohydr	ate 28	g	9 %
Fibre 5 g			20 %
Sugars 5	g		
Protein 4 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	30 %



INGREDIENTS

WHOLE GRAIN WHEAT, WHEAT BRAN, SUGAR, CORN AND BARLEY MALT EXTRACT, SALT.

CONTAINS WHEAT AND BARLEY INGREDIENTS.





Bran Pops

Nutrition F Per 1/3 cup (
Amount		% Daily	Value
Calories 70			
Fat 1 g			2 %
Saturated 0 + Trans 0 g	g		0 %
Cholesterol	0 mg		
Sodium 170	mg		7 %
Carbohydra	t e 22 g	J	7 %
Fibre 11 g			44 %
Sugars 7 g			
Protein 3 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	25 %



INGREDIENTS

WHEAT BRAN, SUGAR, PSYLLIUM SEED HUSK, SALT, BAKING SODA, COLOUR, BHT.

CONTAINS WHEAT INGREDIENTS.





Corn Bran Stamps

Nutrition Per 1 cup (3			
Amount		% Daily	Value
Calories 12	20		
Fat 1.5 g			2 %
Saturated	0.5 g		3 %
+ Trans 0	g		
Cholestero	0		
mg			
Sodium 25	0 mg		10 %
Carbohydr	ate 25		9.0/
g			8 %
Fibre 5 g			20 %
Sugars 5 g	3		
Protein 2 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	30 %



INGREDIENTS

CORN FLOUR, CORN BRAN FLOUR, SUGAR, WHOLE GRAIN OATS, COCONUT OIL, SALT, SODIUM BICARBONATE, COLOUR.

CONTAINS OAT INGREDIENTS. MAY CONTAIN WHEAT.





Corn Puff Crunch

Nutrition I Per 1 cup (3			
Amount		% D	aily Value
Calories 12	0		
Fat 0 g			0 %
Saturated 0 + Trans 0 g	0		0 %
Cholesterol	0 mg		
Sodium 180	mg		8 %
Carbohydra	t e 29 g)	10 %
Fibre 3 g			12 %
Sugars 12	g		
Protein 1 g			
Vitamin A	2 %	Vitamin	C 0%
Calcium	0 %	Iron	30 %



INGREDIENTS

CORN MEAL, SUGAR, CORN BRAN, CORN SYRUP, SALT, FANCY MOLASSES, WHOLE GRAIN OAT FLOUR, BAKING SODA, COLOUR, BHT.

CONTAINS OAT INGREDIENTS. MAY CONTAIN SOY.





Fruity RainbO's

Nutrition Per 3/4 cup		5	
Amount		% Dail	y Value
Calories 11	0		
Fat 1 g			2 %
Saturated + Trans 0	0		3 %
Cholestero	l 0 mg		
Sodium 10	5 mg		4 %
Carbohydra	ate 24	g	8 %
Fibre 2 g			8 %
Sugars 12	g		
Protein 1 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	25 %



INGREDIENTS

SUGAR, WHOLE GRAIN CORN FLOUR, WHEAT FLOUR, WHOLE GRAIN OAT FLOUR, OAT HULL FIBRE, CORN BRAN, HYDROGENATED COCONUT AND VEGETABLE OIL, SALT, COLOUR, NATURAL FRUIT FLAVOURING, BHT.

CONTAINS WHEAT AND OAT INGREDIENTS. MAY CONTAIN SOY.





Lucky Grains Porridge

Nutrition Per 1/4 cup			
Amount		% Dai	ly Value
Calories 14	10		
Fat 2.5 g			4 %
Saturated	0 g		0 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 0 r	ng		0 %
Carbohydr	ate 29	g	10 %
Fibre 3 g			12 %
Sugars 1 g	3		
Protein 6 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	8 %



INGREDIENTS

OATS, BROWN RICE, CORN, SOYBEANS, MILLET, SORGHUM, OAT BRAN, SUNFLOWER SEEDS AND FLAXSEED.

MANUFACTURED IN A FACILITY THAT USES TREE NUTS, SOY, WHEAT, AND MILK.





Mini-Gold Wheat Bites

Nutrition Per 20 bisc			
Amount		% Daily	Value
Calories 19	90		
Fat 1 g			2 %
Saturated	0.2 g		1 %
+ Trans 0	g		
Cholestero	0		
mg			
Sodium 5 r	ng		0 %
Carbohydr	ate 46	g	15 %
Fibre 6 g			24 %
Sugars 11	g		
Protein 5 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	50 %



INGREDIENTS

WHOLE GRAIN WHEAT, SUGAR, GLYCERIN, BLACKSTRAP MOLASSES, GELATIN, COLOUR, BHT.

CONTAINS WHEAT INGREDIENTS.





Multigrain Hot Cereal

Nutrition Per 1 cup d		-	
Amount		% Dail	y Value
Calories 14	10		
Fat 2.5 g			4 %
Saturated	•		1 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 2 n	ng		0 %
Carbohydra	ate 27	g	9 %
Fibre 5 g			20 %
Sugars 0 g)		
Protein 5 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	10 %



INGREDIENTS

STEEL CUT WHOLE WHEAT, STEEL CUT WHOLE RYE, CRACKED AND WHOLE FLAX.

MAY CONTAIN BARLEY, MUSTARD, OAT, SESAME SEED, SOYBEAN, AND TRITICALE INGREDIENTS.





Quick Oats

Nutrition Per 1/3 cup		5	
Amount		% Dail	y Value
Calories 12	20		
Fat 2 g			3 %
Saturated	0.4 g		2 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 0 r	ng		0 %
Carbohydr	ate 20	g	7 %
Fibre 3 g			12 %
Sugars 0	g		
Protein 4 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	8 %



INGREDIENTS

100% ROLLED OATS, NATURALLY CONTAINS OAT BRAN.

CONTAINS OAT INGREDIENTS. MAY CONTAIN WHEAT.





Raisin Bran

Nutrition Per 1 cup (8	
Amount		% Dail	y Value
Calories 1	80		
Fat 1 g			2 %
Saturated + Trans 0	0		1 %
Cholester	ol 0 mg		
Sodium 24	0 mg		10 %
Carbohydr	ate 44	g	15 %
Fibre 6 g		24 %	
Sugars 15	5 g		
Protein 4 g)		
Vitamin A	0%	Vitamin C	0 %
Calcium	2 %	Iron	50 %



INGREDIENTS

WHOLE GRAIN WHEAT, RAISINS (RAISINS, SUGAR, MODIFIED PALM OIL), WHEAT BRAN, SUGAR, CORN AND BARLEY MALT EXTRACT, SALT.

CONTAINS WHEAT AND BARLEY INGREDIENTS.





Rice Crisps

Nutrition Per 1 cup (2			
Amount		% Daily	v Value
Calories 11	0		
Fat 0 g			0 %
Saturated + Trans 0	0		0 %
Cholestero	l 0 mg		
Sodium 19		8 %	
Carbohydra	9	8 %	
Fibre 0 g			0 %
Sugars 3 g)		
Protein 2 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	25 %



INGREDIENTS

RICE, SUGAR, SALT, MALT (CORN AND BARLEY MALT EXTRACT), BHT.

CONTAINS BARLEY INGREDIENTS.





Toasted Oats

Nutrition Per 1 cup (2			
Amount		% Daily	Value
Calories 10	00		
Fat 2 g			3 %
Saturated	0.4 g		2 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 17	0 mg		7 %
Carbohydr	ate 20 g)	7 %
Fibre 3 g			12 %
Sugars 1 g	3		
Protein 3 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	4 %	Iron	30 %



INGREDIENTS

WHOLE GRAIN GLUTEN-FREE OATS, CORN STARCH, SUGAR, SALT, TRISODIUM PHOSPHATE, CALCIUM CARBONATE, MONOGLYCERIDES, TOCOPHEROLS.





Wheat Bites

Nutrition Per 1 cup (5	
Amount		% Daily	Value
Calories 1	90		
Fat 1 g			2 %
Saturated	0 g		0 %
+ Trans 0	g		
Cholester	ol 0 mg		
Sodium 5 r	ng		0 %
Carbohydr	g ·	13 %	
Fibre 6 g		2	24 %
Sugars 2	g		
Protein 6 g	ļ		
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	6 %



INGREDIENTS

ORGANIC WHOLE GRAIN WHEAT, NATURAL VITAMIN E.

CONTAINS WHEAT.





Activity Station:

Cereal Slayer





Activity Station: Cereal Slayer

Instructions:

- Check the ingredient lists on cereal boxes to find those that are made with whole grains.
- Next look at the Nutrition Facts table.
 - Look for the total grams of fibre per serving for each cereal.
 - Look for the total grams of sugar per serving for each cereal.
- Record this information on the worksheet.
- Consider what makes a 'healthier' choice.

Hint: Look at the '*Choose Whole Grains*' and '*Label Reading the Healthy Way*' handouts to help you complete the worksheet.





Cereal Slayer – Worksheet

Cereal Name	Whole grain is the first ingredient? ✓ If yes	Total Fibre per serving (g)	2 grams or more of fibre? ✓ If yes	Total Sugar per serving (g)	Less than 8 grams of sugar? ✓ If yes	What would you choose? Most often = 3 checkmarks Sometimes = 2 checkmarks Least Often = 0-1 checkmark
Bran Flakes						
Bran Pops						
Corn Bran Stamps						
Corn Puff Crunch						
Fruity RainbO's						
Lucky Grains Porridge						
Mini-Gold Wheat Bites						
Multi-Grain Hot Cereal						
Quick Oats						
Raisin Bran						
Rice Crisps						
Toasted Oats						
Wheat Bites						





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: <u>Healthy Drinks, Healthy Kids</u>
- 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.







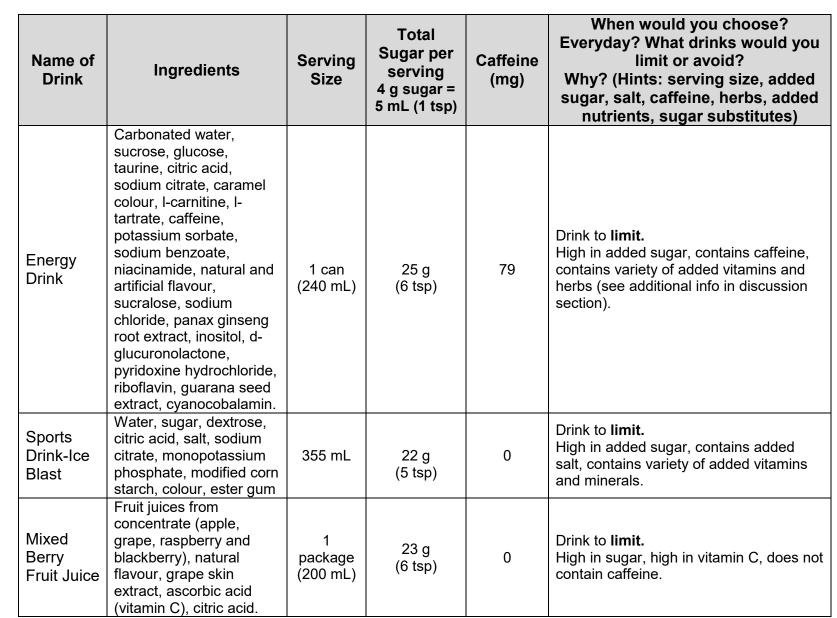
Answer Key for Thirst Quencher

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: <u>Food Labelling Changes</u>

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)
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. <u>Which 3 drinks had the most added sugar per container?</u> The Sports Drink, Energy Drink, and Iced Tea.
- 4. <u>Which 3 drinks had the most caffeine?</u> Blended Iced Coffee Drink, Energy Drink, and Sugar-free (diet) Cola.





Discussion Questions and Answers

 Sarah is 14 years old and weighs 105 lbs (47.7kg). She drinks a blended iced coffee drink for breakfast and has 2 sugar-free (diet) colas, one with her lunch and one after school. <u>How much caffeine did she consume from these beverages?</u> (If the students brought in their own drink labels this question may need to be adapted to use the labels brought in.)

90 mg + 46 mg + 46 mg = 182 mg Blended Iced Coffee drink = 90 mg Sugar-free (diet) Cola = 46 mg

Use caffeine equation below to determine how much caffeine Sarah should limit herself to a day. *Equation taken from <u>Government of Canada: Caffeine and Kids</u>. For more information on caffeine see the supplemental resources section.*

(weight in lbs) x (1.1) = maximum amount of caffeine per day in milligrams

(weight in kilograms) x (2.5) = maximum amount of caffeine per day in milligrams

Sarah should limit herself to about 116 mg of caffeine per day.

 $(105 \text{ lbs}) \times (1.1) = 116 \text{ mg or } (47.7) \times (2.5) = 119 \text{ mg}$

Take home activity: If students are interested in knowing their own limit per day, they can use the equation above. The above equation is for children aged 13 years and older.

Note: Health Canada's daily limit on caffeine for children age 10–12 years old is 85 mg caffeine per <u>day.</u>

- Did Sarah exceed the daily recommended caffeine limit based on her weight? Yes, she is above the limit of 116 mg that was calculated based on her weight. She drank 182 mg of caffeine.
- 3. Why should youth limit their caffeine intake?

Answer from *Healthy Drinks Healthy Kids* handout: Caffeine has side effects such as nervousness, faster heart rate, and problems sleeping.

Additional information: Having too much caffeine may cause undesirable effects such as headache, drowsiness, fatigue, irritability, anxiety and depression. Studies have shown that consuming too much caffeine may lead to inability to concentrate and increased restlessness. Consuming large amounts of caffeine may lead to serious







health effects, such as irregular heart function, nausea, vomiting and electrolyte disturbances.

Supplemental Information and Resources

- <u>Sport Nutrition for Youth: A Handbook for Coaches</u> Evaluate your Sports Drink Activity, pg 98 Caffeine, pg 72-75
- Sugar Shocker Education Kit
- <u>Energy Drink Buzz</u> provides information on energy drinks and why they should be avoided.
- <u>Healthy Drinks, Healthy Kids</u> provides guidance for choosing drinks. It recommends you and your family drink water throughout the day and drink milk at meals.
- <u>Make water your drink</u> of choice includes information for youth on water.





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 Per 1 can (3		-	
Amount		% Da	aily Value
Calories 14	0		
Fat 0 g			0 %
Saturated 0	g		
+ Trans 0 g	-		
Cholestero	I 0 mg		
Sodium 45	mg		2 %
Carbohydra	ate 39 g)	13 %
Sugars 39 g	1		
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 Per 1 can (3			
Amount		%	Daily Value
Calories 0			
Fat 0 g			0 %
Saturated 0	g		
+ Trans 0 g	-		
Cholestero	l 0 mg		
Sodium 40	2 %		
Carbohydr	ate 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 11	0					
Fat 2.5 g			4 %			
Saturated 1. + Trans 0 g	5 g		8 %			
Cholesterol	10 mg					
Sodium 120	mg		5 %			
Carbohydra	t e 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 17	0						
Fat 2.5 g			4 %				
Saturated 1. + Trans 0 g	5 g		8 %				
Cholesterol	10 mg						
Sodium 180) mg		8 %				
Carbohydra	ite 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 (24	0 mL)		
Amount		% Daily	v Value
Calories 100			
Fat 0 g			0 %
Saturated 0 g			
+ Trans 0 g			
Cholesterol () mg		
Sodium 180	mg		8 %
Carbohydrat	e 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 F Per 12 fl.oz (35			
Amount		% Daily	Value
Calories 80			
Fat 0 g			0 %
Saturated 0 g			
+ Trans 0 g			
Cholesterol 0	mg		
Sodium 160 m	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		% Da i	ily Value			
Calories 10	0					
Fat 0 g			0 %			
Saturated 0	g					
+ Trans 0 g	-					
Cholestero	I 0 mg					
Sodium 15	mg		1 %			
Carbohydra	ate 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 Per 1 bottle		-	
Amount		% Da	ily Value
Calories 12	20		
Fat 0 g			0 %
Saturated 0	g		
+ Trans 0 g	-		
Cholestero	l 0 mg		
Sodium 0 n	ng		0 %
Carbohydra	ate 32 ()	11 %
Sugars 32 g	l		
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 Per 1 bottle		-	
Amount		% Dai	ly Value
Calories 16	0		
Fat 0 g			0 %
Saturated 0	g		
+ Trans 0 g	-		
Cholesterol	0 mg		
Sodium 50	mg		2 %
Carbohydra	t e 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		% Dail	y Value			
Calories 25	0					
Fat 11 g			17 %			
Saturated 6 + Trans 0 g	g		30 %			
Cholesterol	45 mg					
Sodium 50	mg		2 %			
Carbohydra	t e 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





Activity Station: Thirst Quencher

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) 4 g = 1 teaspoon (5 mL)	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)





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?





Activity Station: Ingredient Investigation

Activity Description

Students will review the ingredient lists on common packaged foods while learning about the various names of sugar and salt found in foods.

Key Messages

- Nutrition information is found in three different places on food labels: ingredient list, nutrition claims, and Nutrition Facts table.
- Ingredients are listed in order by weight from highest to lowest.
- Sodium and sugar can be listed under many different names in the ingredients list.
- Prepare meals and snacks from fresh, frozen, or pre-packed foods that have little or no added fat, sugar, salt, or additives.

Materials

- **Student Pre-work: (Optional)** Students may bring in their own food labels or the teacher may use the food labels provided (see set-up for more information).
- Station Title and Instructions (print x 1)
- Ingredient Investigation Fact Sheet (print x 1)
- Worksheet: Ingredient Investigation (print x 1 per student)
- Printable Appendix: Food labels print and laminate if possible, display in no particular order.
- Answer Key
- Dry erase markers red and blue, rag (for wiping off labels)

Set-Up

- Place station title, instructions, ingredient investigation fact sheet, worksheets posters, and laminated ingredient lists at station. Decide if students will compare their answers to the answer key at the station (place the answer key in a folder or display upside down) or if you will discuss the answers as a class.
- Teachers can choose to use the ingredient lists provided or can ask students to bring in food labels. You may want to laminate these labels.
- If using the labels brought in by the students (**pre-work**), you will need to photocopy the ingredient lists and then make an answer key for each ingredient list. In the answer key, circle salt in red and sugar in blue.
- Examples of ingredient lists students may bring include: chips, pretzels, fast food packages, candy wrappers, granola bars, and ready-made lunch foods such as mini pizzas, soup cups, frozen dinners, or pre-made store bought sandwiches. They may also bring pictures of nutritional information from company websites.





• Students will fill out their worksheet at the station.

Answer Key for Worksheet

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

Sugar is highlighted in **blue**. **Sodium** is highlighted in red.

Buttery Microwave	100% WHOLE GRAIN POPPING CORN, PALM OIL (CONTAINS
Popcorn	TBHQ, CITRIC ACID), SALT , POTASSIUM CHLORIDE,
Fopcom	NATURAL AND ARTIFICIAL BUTTER FLAVOUR, BUTTER,
	COLOUR (ANNATTO, TURMERIC, PAPRIKA).
Chicken Nuggets	BONELESS SKINLESS CHICKEN BREAST MEAT, WATER,
	100% VEGETABLE OIL (CANOLA OIL, CORN OIL, SOYBEAN
	OIL, HYDROGENATED SOYBEAN OIL [TBHQ], CITRIC ACID,
	DIMETHYLPOLYSILOXANE), WHEAT FLOUR, YELLOW CORN
	FLOUR, MODIFIED CORN STARCH, RICE STARCH, SALT,
	BAKING POWDER, SEASONING (WHEAT STARCH, YEAST
	EXTRACT, SALT, NATURAL FLAVOUR, SAFFLOWER OIL,
	DEXTROSE, CITRIC ACID, ROSEMARY), SPICES, CANOLA
	OIL, SODIUM ALUMINUM PHOSPHATE, DEXTROSE, WHEAT
	STARCH, CORN STARCH
	CONTAINS WHEAT.
Chocolate Chip	GRANOLA (ROLLED OATS, ROLLED WHOLE WHEAT, BROWN
Granola Bar	SUGAR, BARLEY FLAKES, SUNFLOWER OIL, INULIN, HONEY,
	NATURAL FLAVOUR, MODIFIED MILK INGREDIENTS),
	GLUCOSE, CHOCOLATE CHIPS (SUGAR, CHOCOLATE
	LIQUOR, COCOA BUTTER, SOY LECITHIN, SALT, VANILLIN),
	WHOLE GRAIN BROWN RICE CRISPS (WHOLE GRAIN BROWN
	RICE FLOUR, SUGAR, BARLEY MALT, SALT, MIXED
	TOCOPHEROLS, GLYCERIN, SHORTENING (CANOLA OIL,
	MODIFIED PALM AND PALM KERNEL OILS), BROWN SUGAR,
	SORBITOL, INULIN, SALT, NATURAL AND ARTIFICIAL
	FLAVOUR, SOY LECITHIN, BHT (PRESERVATIVE).
	CONTAINS OAT, WHEAT, BARLEY, MILK, AND SOY
	INGREDIENTS.
Glazed Cinnamon	CINNAMON ROLL:
Bun	ENRICHED WHEAT FLOUR, WATER, SHORTENING (PALM OIL,
	MODIFIED PALM OIL, WITH TBHQ AS PRESERVATIVE),





PHOSPHATE, GUAR GUM, ENZYMES (AMYLASE, XYLANASE, WHEAT FLOUR, SALT , DEXTRIN), SUNFLOWER OIL. GLAZE: SUGAR , WATER, GUAR GUM, MODIFIED POTATO STARCH, POTASSIUM SORBATE (PRESERVATIVE), CITRIC ACID (PH CONTROL) AGAR, XANTHAN GUM. NOODLE:
ENRICHED WHEAT FLOUR, PALM OIL, MODIFIED STARCH, SUGAR, SALT, GUAR GUM, GARLIC POWDER. VEGETABLES: TEXTURED SOY PROTEIN, DEHYDRATED CABBAGE, DEHYDRATED GREEN ONION, DEHYDRATED CARROTS, FREEZE DRIED CORN, FREEZE DRIED PEAS.
SOUP BASE: ARTIFICIAL CHICKEN FLAVOUR, SALT, MONOSODIUM GLUTAMATE, SUGAR, SOY SAUCE POWDER (SOYBEANS, SALT, WHEAT), YEAST EXTRACT POWDER (DRIED BREAD YEAST, WATER), DISODIUM INOSINATE AND DISODIUM GUANYLATE, PAPRIKA EXTRACT, WHITE PEPPER POWDER, DRIED LEEK, CARAMEL. CONTAINS WHEAT, SOY.
CRUST: WHEAT FLOUR, WATER, EXTRA-VIRGIN OLIVE OIL, SALT, SUGAR, YEAST, MALTED BARLEY FLOUR). TOPPING: MOZZARELLA CHEESE (MILK, BACTERIAL CULTURES, SALT, MICROBIAL ENZYMES, CELLULOSE), SAUCE (WATER, TOMATO PASTE, BASIL, EXTRA-VIRGIN OLIVE OIL, GARLIC PURÉE, SALT, SUGAR, OREGANO, VINEGAR, THYME,





	[MUSTARD], DEXTROSE , LACTIC ACID STARTER CULTURE, FLAVOURS, SODIUM ASCORBATE , GARLIC POWDER, SODIUM NITRITE , PORK STOCK, CITRIC ACID), EXTRA-VIRGIN OLIVE OIL, DEHYDRATED PARSLEY. CONTAINS WHEAT.
The Original Potato Chips	SPECIALLY SELECTED POTATOES, VEGETABLE OIL, SALT.
Vegetable Beef Canned Soup	BEEF BROTH (WATER, BEEF STOCK), CARROTS, POTATOES, SEASONED BEEF, BARLEY, GREEN BEANS, FLAVOUR, CORN, PEAS, MODIFIED CORN STARCH, YEAST EXTRACT, SUGAR , SALT , MONOSODIUM GLUTAMATE , WHEAT FLOUR, ONION POWDER, HYDROLYZED PROTEIN (SOY, CORN, WHEAT), CARAMEL, PARSLEY FLAKES, DEHYDRATED GARLIC.

1. In what order are ingredients listed?

Ingredients are listed in order of weight, beginning with the ingredient that weighs the most and ending with the ingredient that weighs the least. This means that a food contains *more* of the ingredients found at the beginning of the list, and *less* of the ingredients at the end of the list.

- List all the names which mean sodium that you can find on the ingredient lists: Examples: Salt, Baking Powder, Sodium Aluminum Phosphate, Sea Salt, Sodium Acid Pyrophosphate, Sodium Bicarbonate, Sodium Stearoyl-2-Lactylate, Monosodium Glutamate, Disodium Inosinate, Disodium Guanylate, Sodium Ascorbate, Sodium Nitrite.
- List all the names which mean sugar that you can find on the ingredient lists: Examples: Dextrose, Brown Sugar, Honey, Glucose, Sugar. Health Canada is improving food labels. The labels in this module reflect products in the marketplace as of August 2019. The improved label, when in place will group sugar-based ingredients in brackets, after the name 'Sugars.'
- 4. <u>Without using the ingredient list, where else on a food package can you find nutrition</u> information to help you make healthier choices?

The Nutrition Facts table provides information on the nutrient amounts in foods. It also helps you to compare products and make healthier food choices.

- How do you tell if there is a little or a lot of a nutrient in a food? The % Daily Value (DV) on the Nutrition Facts label can help you decide if there is a little or a lot of a nutrient in a food.
 - Foods with 5 % or less % DV of a nutrient have **a little**.
 - Foods with 15 % or more % DV of a nutrient have **a lot**.







Currently there is no % Daily Value for sugar, but it will be included when the new labelling guidelines take effect. Also see **Appendix: Ingredient Investigation Answer Key** for sample ingredient lists provided.

Nutrients you want more of are:

- Fibre
- CalciumIron

- Nutrients you want less of are:
 - Sodium
 - Sugar
 - Saturated and Trans Fat
- 6. You are trying to make the healthiest choice between granola bar A and B. Which granola bar do you choose and why?

Choose granola bar B because it has less saturated fat, sodium, and sugar.

Also, granola bar B has more fibre, protein, calcium, and iron. Whole grains is the first ingredient in granola bar B compared to the third ingredient in granola bar A. In granola bar A, there is more corn syrup by weight than whole grains, as this is the order of the ingredients in the ingredient list.

Discussion Questions and Answers

- <u>What healthier options could you eat, compared to the foods you saw at this station?</u> Students provide examples of other snack/meal options. It could be a different food or a modification such as making the food at home, choosing an alternative lower in sugar or sodium, or eating smaller portions of a less healthy food.
- 2. What are the advantages to preparing your own food?

Some advantages include:

- Freshly prepared food often tastes better
- You can choose to add more healthy ingredients like vegetables and fruit
- You can control what ingredients go into your food (ex. less salt and sugar)
- You can change the food to meet your individual likes and dislikes

Supplementary Information and Resources

Canada's Food Guide – Limit Highly Processed Foods, Using Food Labels

Healthy Eating Starts Here: Label Reading

Inspiring Healthy Eating includes healthy recipes that meet the Alberta Nutrition Guidelines





Appendix: Ingredient Investigation -

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

Sample Ingredient Lists

9 Ingredient Lists Provided:

- Buttery Microwave Popcorn
- Chicken Nuggets
- Chocolate Chip Granola Bar
- Vegetable Beef Canned Soup
- Cinnamon Bun
- Hot Hot Chicken Instant Noodle Cup
- Ready-Bake Frozen Pepperoni Pizza
- The Original Potato Chips
- Granola Bar A and B





Buttery Microwave Popcorn

Nutrition Facts Per 7.5 cups popped (50 g)						
Amount		% Dail	y Value			
Calories 270						
Fat 16 g			25 %			
Saturated 8	g		40 %			
+ Trans 0 g						
Cholesterol	Cholesterol 0 mg					
Sodium 250 mg 10 %						
Carbohydrat		9 %				
Fibre 6 g			24 %			
Sugars 0 g						
Protein 4 g						
Vitamin A	0 %	Vitamin C	0 %			
Calcium	0 %	Iron	6 %			



INGREDIENTS

100% WHOLE GRAIN POPPING CORN, PALM OIL (CONTAINS TBHQ, CITRIC ACID), SALT, POTASSIUM CHLORIDE, NATURAL AND ARTIFICIAL BUTTER FLAVOUR, BUTTER, COLOUR (ANNATTO, TURMERIC, PAPRIKA).

CONTAINS MILK.





Chicken Nuggets

Nutrition Facts Per 4 nuggets (67 g)						
Amount	% Dail	y Value				
Calories 180						
Fat 12 g			18 %			
Saturated 2 + Trans 0 g		10 %				
Cholesterol 30 mg						
Sodium 330		14 %				
Carbohydrat		4 %				
Fibre 1 g			4 %			
Sugars 0 g						
Protein 10 g						
Vitamin A	0 %	Vitamin C	0 %			
Calcium	0 %	Iron	4 %			



INGREDIENTS

CHICKEN:

BONELESS SKINLESS CHICKEN BREAST MEAT, WATER, 100% VEGETABLE OIL (CANOLA OIL, CORN OIL, SOYBEAN OIL, HYDROGENATED SOYBEAN OIL [TBHQ], CITRIC ACID, DIMETHYLPOLYSILOXANE), WHEAT FLOUR, YELLOW CORN FLOUR, MODIFIED CORN STARCH, RICE STARCH, SALT, BAKING POWDER, SEASONING (WHEAT STARCH, YEAST EXTRACT, SALT, NATURAL FLAVOUR, SAFFLOWER OIL, DEXTROSE, CITRIC ACID, ROSEMARY), SPICES, CANOLA OIL, SODIUM ALUMINUM PHOSPHATE, DEXTROSE, WHEAT STARCH, CORN STARCH.

CONTAINS WHEAT.





Chocolate Chip Granola Bar

Nutrition Facts Per 1 bar (26 g)						
Amount		% Daily Value				
Calories 110						
Fat 3 g			5 %			
Saturated 1 g)		5 %			
+ Trans 0 g						
Cholesterol 0 mg						
Sodium 60 mg		3 %				
Carbohydrate	1 9 g		6 %			
Fibre 2 g			8 %			
Sugars 5 g						
Protein 1 g						
Vitamin A	0 %	Vitamin C	0 %			
Calcium	0 %	Iron	4 %			



INGREDIENTS

GRANOLA (ROLLED OATS, ROLLED WHOLE WHEAT, BROWN SUGAR, BARLEY FLAKES, SUNFLOWER OIL, INULIN, HONEY, NATURAL FLAVOUR, MODIFIED MILK INGREDIENTS), GLUCOSE, CHOCOLATE CHIPS (SUGAR, CHOCOLATE LIQUOR, COCOA BUTTER, SOY LECITHIN, SALT, VANILLIN), WHOLE GRAIN BROWN RICE CRISPS (WHOLE GRAIN BROWN RICE FLOUR, SUGAR, BARLEY MALT, SALT, MIXED TOCOPHEROLS), GLYCERIN, SHORTENING (CANOLA OIL, MODIFIED PALM AND PALM KERNEL OILS), BROWN SUGAR, SORBITOL, INULIN, SALT, NATURAL AND ARTIFICIAL FLAVOUR, SOY LECITHIN, BHT (PRESERVATIVE).

CONTAINS OAT, WHEAT, BARLEY, MILK, AND SOY INGREDIENTS.





Vegetable Beef Canned Soup

Nutrition Per 1 cup (2			
Amount	% Da	ily Value	
Calories 11	0		
Fat 0.5 g			1 %
Saturated (+ Trans 0 g		1 %	
Cholestero	l 5 mg		
Sodium 790		33 %	
Carbohydra	ite 19 g		6 %
Fibre 2 g			8 %
Sugars 3 g Protein 7 g			
Vitamin A	10 %	Vitamin C	2 %
Calcium	2 %	Iron	4 %



INGREDIENTS

BEEF BROTH (WATER, BEEF STOCK), CARROTS, POTATOES, SEASONED BEEF, BARLEY, GREEN BEANS, FLAVOUR, CORN, PEAS, MODIFIED CORN STARCH, YEAST EXTRACT, SUGAR, SALT, MONOSODIUM GLUTAMATE, WHEAT FLOUR, ONION POWDER, HYDROLYZED PROTEIN (SOY, CORN, WHEAT), CARAMEL, PARSLEY FLAKES, DEHYDRATED GARLIC.





Glazed Cinnamon Bun

Nutrition Facts Per 1 bun (105 g)	
Amount	% Daily Value
Calories 410	
Fat 22 g	34 %
Saturated 11 g	55 %
+ Trans 0 g	
Cholesterol 0 mg	
Sodium 340 mg	14 %
Carbohydrate 49 g	16 %
Fibre 2 g	8 %
Sugars 14 g	
Protein 4 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 0 %	Iron 0 %



INGREDIENTS

CINNAMON ROLL: ENRICHED WHEAT FLOUR, WATER, SHORTENING (PALM OIL, MODIFIED PALM OIL, WITH TBHQ AS PRESERVATIVE), YEAST, CORN STARCH, SUGAR, CINNAMON, WHEY POWDER (MILK), WHEAT GLUTEN, LEAVENING (SODIUM ACID PYROPHOSPHATE, SODIUM BICARBONATE), SKIM MILK POWDER, EMULSIFIERS [MONO AND DIGLYCERIDES (WITH BHT AND CITRIC ACID AS PRESERVATIVES), SODIUM STEAROYL-2-LACTYLATE, DIACETYL TARTARIC ACID ESTER OF MONO AND DIGLYCERIDES], POTATO FLOUR, SALT, CORN FLOUR, SOYBEAN FLOUR, DEXTROSE, VEGETABLE OIL (CANOLA OIL AND/OR SOYBEAN OIL, WITH TBHQ AS PRESERVATIVE), SILICON DIOXIDE (FREE FLOW AGENT), ASCORBIC ACID, ARTIFICIAL FLAVOUR, COLOUR (YELLOW #5 AND #6), L-CYSTEINE HYDROCHLORIDE, TRICALCIUM PHOSPHATE, GUAR GUM, ENZYMES (AMYLASE, XYLANASE, WHEAT FLOUR, SALT, DEXTRIN), SUNFLOWER OIL. **GLAZE:**

SUGAR, WATER, GUAR GUM, MODIFIED POTATO STARCH, POTASSIUM SORBATE (PRESERVATIVE), CITRIC ACID (PH CONTROL) AGAR, XANTHAN GUM.





Hot Hot Chicken Instant Noodle Cup

Nutrition Facts Per 1 container (64 g)					
Amount		% Dail	y Value		
Calories 280)				
Fat 10 g			15 %		
Saturated 5	g		25 %		
+ Trans 0 g					
Cholesterol	0 mg				
Sodium 740	mg		31 %		
Carbohydra	te 42	g	14 %		
Fibre 2 g			8 %		
Sugars 1 g					
Protein 7 g					
Vitamin A	2 %	Vitamin C	0 %		
Calcium	2 %	Iron	15%		



INGREDIENTS

NOODLE:

ENRICHED WHEAT FLOUR, PALM OIL, MODIFIED STARCH, SUGAR, SALT, GUAR GUM, GARLIC POWDER.

VEGETABLES:

TEXTURED SOY PROTEIN, DEHYDRATED CABBAGE, DEHYDRATED GREEN ONION, DEHYDRATED CARROTS, FREEZE DRIED CORN, FREEZE DRIED PEAS. **SOUP BASE:**

ARTIFICIAL CHICKEN FLAVOUR, SALT, MONOSODIUM GLUTAMATE, SUGAR, SOY SAUCE POWDER (SOYBEANS, SALT, WHEAT), YEAST EXTRACT POWDER (DRIED BREAD YEAST, WATER), DISODIUM INOSINATE AND DISODIUM GUANYLATE, PAPRIKA EXTRACT, WHITE PEPPER POWDER, DRIED LEEK, CARAMEL.

CONTAINS WHEAT, SOY.





Ready-Bake Frozen Pepperoni Pizza

Nutrition Per 1/6 pizz)			
Amount		% Da	% Daily Value		
Calories 22	20				
Fat 9 g			14 %		
Saturated	3.5 g		18 %		
+ Trans 0	g				
Cholesterol 20 mg					
Sodium 550 mg 23 %					
Carbohydra	ate 26 g	1	9 %		
Fibre 1 g			4 %		
Sugars 2 g	1				
Protein 9 g					
Vitamin A	2 %	Vitamin C	0 %		
Calcium	10 %	Iron	15 %		



INGREDIENTS

CRUST:

WHEAT FLOUR, WATER, EXTRA-VIRGIN OLIVE OIL, SALT, SUGAR, YEAST, MALTED BARLEY FLOUR).

TOPPING:

MOZZARELLA CHEESE (MILK, BACTERIAL CULTURES, SALT, MICROBIAL ENZYMES, CELLULOSE), SAUCE (WATER, TOMATO PASTE, BASIL, EXTRA-VIRGIN OLIVE OIL, GARLIC PURÉE, SALT, SUGAR, OREGANO, VINEGAR, THYME, SPICES, SOY OIL), PEPPERONI (PORK, SALT, SPICES, [MUSTARD], DEXTROSE, LACTIC ACID STARTER CULTURE, FLAVOURS, SODIUM ASCORBATE, GARLIC POWDER, SODIUM NITRITE, PORK STOCK, CITRIC ACID), EXTRA-VIRGIN OLIVE OIL, DEHYDRATED PARSLEY.





The Original Potato Chips

Nutrition Per 36 chips			
Amount		% Dail	y Value
Calories 28	0		
Fat 18 g			28 %
Saturated 2	2 g		10 %
+ Trans 0	g		
Cholestero	l 0 mg		
Sodium 330) mg		14 %
Carbohydra	ate 26	g	9 %
Fibre 1 g			4 %
Sugars 0 g			
Protein 3 g			
Vitamin A	0 %	Vitamin C	20 %
Calcium	0 %	Iron	4 %



INGREDIENTS

SPECIALLY SELECTED POTATOES, VEGETABLE OIL, SALT.





Which granola bar would you choose?

A

Nutrition	Facts	3	
Per 1 bar (3	35 g)		
Amount	% Dail	% Daily Value	
Calories 10	60		
Fat 7 g		10 %	
Saturated		10 %	
+ Trans 0			
Cholester	ol 0 mg		
Sodium 14		6 %	
Carbohydr	g	7 %	
Fibre 1 g			6 %
Sugars 8	g		
Protein 3 g	1		
Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	2 %

INGREDIENTS

ALMONDS, CORN SYRUP, WHOLE GRAIN OATS, SUGAR, RICE FLOUR, PALM KERNEL OIL, WHOLE GRAIN WHEAT, VEGETABLE GLYCERIN, HONEY ROASTED ALMOND BUTTER (ALMONDS, HONEY, MALTODEXTRIN, PALM OIL, MIXED TOCOPHEROLS), FRUCTOSE, CANOLA OIL, SALT, SOY LECITHIN, CORN STARCH, REDUCED MINERALS WHEY, NONFAT MILK, BARLEY MALT EXTRACT, BAKING SODA, NATURAL FLAVOUR, MIXED TOCOPHEROLS.



Β

Nutrition Per 1 bar (3		5	
Amount	% Dail	y Value	
Calories 15	50		
Fat 5 g		8 %	
Saturated + Trans 0		3 %	
Cholestero	l 0 mg		
Sodium 11		5 %	
Carbohydrate 19 g			6 %
Fibre 4 g			16 %
Sugars 5 g	1		
Protein 7 g			
Vitamin A	0 %	Vitamin C	0 %
Calcium	4 %	Iron	10 %

INGREDIENTS

ROLLED WHOLE GRAIN BLEND (HARD RED WHEAT, OATS, RYE, BARLEY, TRITICALE), ROASTED ALMONDS (ALMONDS, VEGETABLE OIL), **BROWN RICE SYRUP, SOY** FLOUR, TAPIOCA STARCH, DRIED CANE SYRUP, WHOLE FLAXSEED, ACACIA GUM, EXPELLER PRESSED CANOLA **OIL, GLYCERIN, OAT HULL** FIBRE, SOY FIBRE, SEA SALT, NATURAL FLAVOUR, CORN STARCH, MOLASSES, SOY LECITHIN, SKIM MILK POWDER, XANTHAN GUM, PEANUT FLOUR.





Activity Station:

Ingredient Investigation





Activity Station: Ingredient Investigation

Instructions:

Part A:

• Choose at least four food labels. Look at the ingredient lists.

Sugar and sodium can be called many different names. Can you spot them all?

- Use dry erase markers to circle the different names for sugar in blue and sodium in red.
- Use the worksheet to answer the questions.

Part B:

• Look at the labels for Granola Bar A and B. Which granola bar would you choose and why?

Hint: Look at the "*Ingredient Investigation – Fact Sheet*" and "*Label Reading the Healthy Way*" *handout.*





Ingredient Investigation – Worksheet

- 1. In what order are ingredients listed?
- 2. List all the names which mean sodium that you can find in the ingredient lists:
- 3. List all the names which mean sugar that you can find in the ingredient lists:

4. Without using the ingredient list, where else on a food package can you find nutrition information to help you make healthier choices?

5. How do you tell if there is a little or a lot of a nutrient in a food?

6. You are trying to make the healthiest choice between granola bar A and B. Which granola bar do you choose and why?





Ingredient Investigation Fact Sheet

Ingredient list

The ingredient list shows all the ingredients in a packaged food. Ingredients are listed in order of weight, beginning with the ingredient that weighs the most and ending with the ingredient that weighs the least. This means that a food contains *more* of the ingredients found at the beginning of the list, and *less* of the ingredients at the end of the list.

Ingredients with many names

Sometimes ingredients like sodium and sugar appear on ingredient lists under many different names. Here's a list of commonly used terms:

Commonly Used Terms for Sodium (Salt) and Sugar					
Nutrient	Other Names				
Sodium	 Baking powder Baking soda Brine Celery salt Disodium phosphate Garlic salt Monosodium glutamate (MSG) Onion Salt Salt Sodium alginate Sodium benzoate Sodium bicarbonate Sodium bisulfate Sodium propionate Soy sauce 				
Sugar	 Brown sugar Cane juice extract Corn syrup Demerara or Turbinado sugar Dextrose Evaporated cane juice Fructose Galactose Glucose Glucose-fructose High-fructose corn syrup Tip: Words ending in "ose" usually mean sugar. Sugars are also found naturally in foods such as fruit, fruit juices, milk a vegetables. Honey Invert sugar Lactose Invert sugar Invert sugar Invert sugar Lactose Maltose Molasses Sucrose Syrup Treacle White sugar 	nd			

Information adapted from Health Canada's <u>Ingredient list</u> and Alberta Health Services' <u>Label Reading the Healthy</u> <u>Way</u>.





Activity Station: Fat Match

Activity Description

Students will learn the types of fats found in common foods eaten and the effect they have on their body and health.

Key Messages

- Fat is an important nutrient in health. It provides energy and helps you to absorb certain vitamins.
- The different types of fats eaten have different effects on health.
- Healthy fats (unsaturated fats) can help lower your risk of disease. Eat healthy fats (unsaturated and omega-3 fats) in small amounts.
- Unhealthy fats (saturated fats) can increase your bad cholesterol, which can increase your risk of heart disease. Limit your intake of these fats.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- The Low Down on Fats Fact Sheet (print x 1)
- Printable Appendix: Fat Match Cards (print x 1). Cut each card, and laminate or glue to index cards. Display right side up.
- Answer Key (print x 1). Display upside down.

Set-Up

- Place station title, instructions, fact sheet, and worksheets at the station.
- Place answer key (face down) at the station.
- Place all *Fat Match Cards* face down at the station with the exception of the 4 cards which say the type of fat: Unsaturated Fats, Omega-3 Fats, Trans Fats, and Saturated Fats.
- Use the discussion questions for further class discussion.





Answer Key for Worksheet

Type of Fat	Definition	Food Sources
Unsaturated Fats	 are liquid at room temperature can help prevent heart disease and stroke by lowering the bad cholesterol in your blood 	Almonds, avocado, margarine, olives, seeds, vegetable oil
Omega-3 Fats	 are a type of unsaturated fat help to lower the risk of heart disease and stroke may also have other health benefits such as helping with brain development and reducing inflammation in the body 	Salmon, walnuts
Saturated Fats	 are hard at room temperature mainly come from animal sources are unhealthy fats can clog arteries, increase blood pressure and increase risk of heart attack and stroke 	Bacon, beef burger, butter, cheese, coconut oil, coffee cream, whipping cream, ice cream, salami, doughnuts

Discussion Questions and Answers

1. Which types of fats are healthy fats?

Unsaturated fats are healthy fats. They can help lower the bad cholesterol in your blood vessels if you eat these instead of foods with saturated fat in the diet.

- 2. Which foods have healthy fats?
 - Olive, canola, safflower, sunflower, peanut oils, and margarines made from these oils.
 - Avocados, olives
 - Nuts (almonds, pecans, hazelnuts, pistachios, walnuts, almonds, and pecans) and seeds (sunflower seeds and sesame seeds).

3. Which fats are unhealthy?

Saturated and trans fats are unhealthy fats. These fats can clog your blood vessels. Too much unhealthy fat increases your risk of heart disease and stroke.







Trans fats occur naturally in some animal-based foods. Trans fats are created from partially hydrogenated oils and can be present in many packaged foods such as cookies or microwave popcorn. Health Canada has now banned the use of partially hydrogenated oils (trans fats) so they will no longer be present in our food.

4. <u>What are some examples of unhealthy fats?</u>

Lard, fat in beef, lamb, pork or chicken, and higher milk fat (M.F.) milk products.

Supplementary Information and Resources

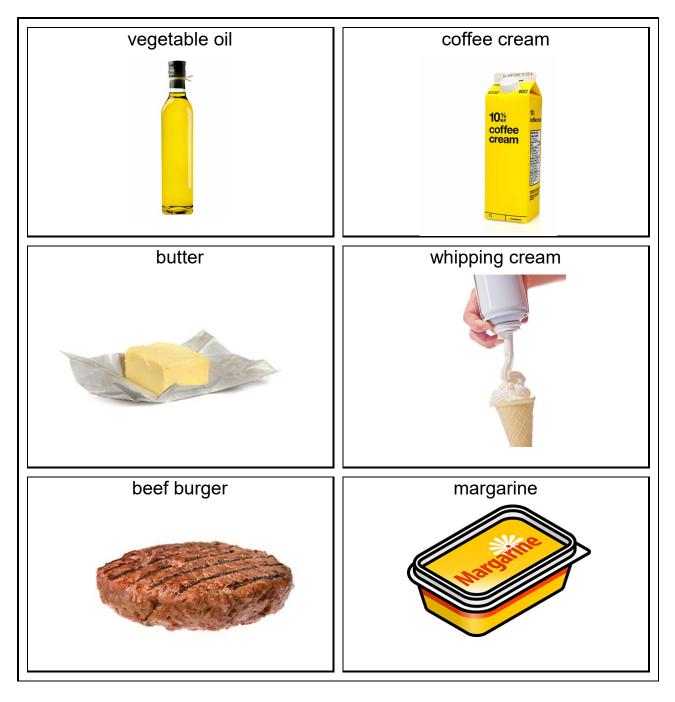
- <u>Choosing Foods with Healthy Fats</u>
- Making Foods with Less Fat and Sugar handout

Task: Choose a recipe (ex. quick bread) and experiment with using less fat or replacing unhealthy fats with healthy fats.



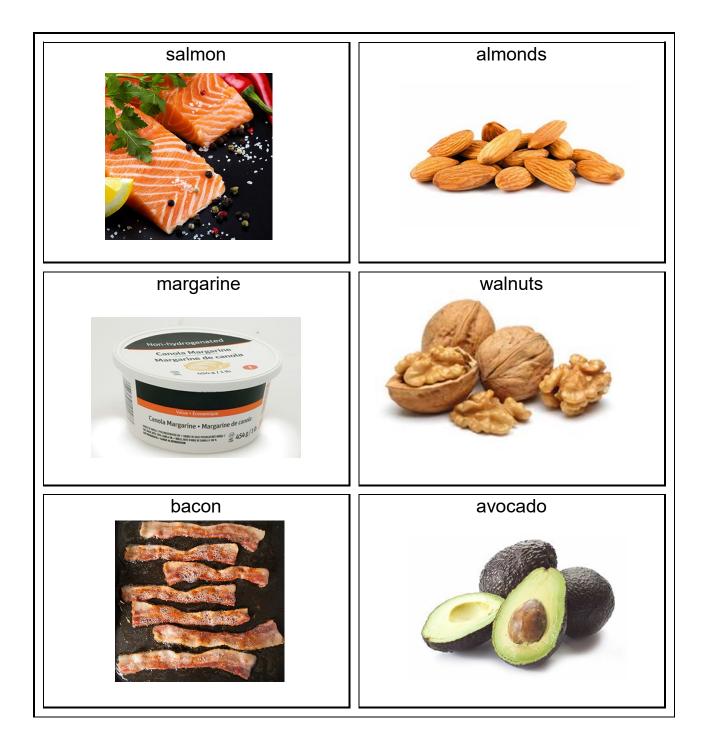


Appendix: Fat Match Cards Note for facilitator/teacher: Please cut all cards out individually.



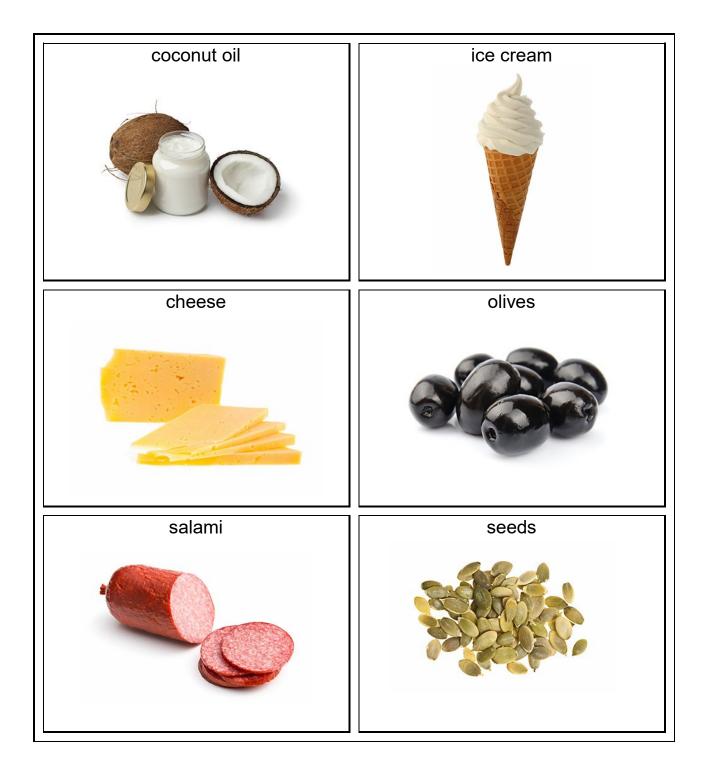
















muffin	doughnuts
Unsaturated Fats	 are liquid at room temperature can help prevent heart disease and stroke by lowering the bad fats in your blood vessels
Omega-3 Fats	 are a type of unsaturated fat can help to lower the risk of heart disease and stroke may have other health benefits such as helping with brain development and reducing inflammation in the body
Saturated Fats	 are hard at room temperature mainly come from animal sources are unhealthy fats can clog blood vessels, increase blood pressure, and increase risk of heart disease and stroke





Activity Station:

Fat Match





Activity Station: Fat Match

Instructions:

- In this activity you are looking for foods that are sources of these types of fats: Unsaturated Fats, Omega-3 Fats, and Saturated Fats.
- The face down cards include definitions of the types of fats and several food examples for each type of fat.
- One by one flip over the cards and match the definition or example with the correct type of fat to find the 'matches.'

Hint: Look at "The Low Down on Fats Fact Sheet"





The Low Down on Fats Fact Sheet

There are different types of fats that have different effects on health. Eating healthy fats can help lower your risk of disease. Healthy fats are called unsaturated fats. They can lower your bad cholesterol in your blood when they replace saturated fat. Foods with these fats:

- Olive, canola, safflower, sunflower, peanut oils, and margarines made from these oils
- Avocados, olives
- Nuts (almonds, pecan, hazelnuts, pistachios, walnuts, almonds and pecans) and seeds (sunflower seeds and sesame seeds)

Omega-3 fats are a type of unsaturated fat. Eating Omega-3 fats can help lower the risk for heart disease and and stroke.

The best sources of omega-3 fats are fatty fish such as: salmon, trout, herring, sardines and whitefish. Other sources of omega-3 fats include: ground flaxseed, walnuts,oils/non-hydrogenated margarines made from canola, linseed and soybeans.

Unhealthy fats are saturated and trans fats. These fats can increase the bad cholesterol which can clog blood vessels. Too much bad cholesterol in your blood vessels increases your risk of heart disease and stroke.

Foods with saturated fats include lard, fat in beef, lamb, pork, or chicken and high fat milk products. Limit saturated fats by:

- choosing lean meats with no visible fat
- eating less processed meats like side bacon and salami
- eating less butter and lard
- choosing lower fat cheese (less than 20% Milk Fat) and lower fat milk (skim, 1% or 2%)

Trans fat can occur naturally in some animal based foods. Trans fats are also created from partially hydrogenated oils and can be present in many packaged foods such as cookies and microwave popcorn. Health Canada has now banned the use of partially hydrogenated oils so they will no longer be added to our food.





Activity Station: Sodium Analyzer

Activity Description

Students will be able to determine the amount of sodium (salt) in processed foods compared to the recommended daily intake.

Key Messages

- Salt contains sodium. We need sodium for our bodies to work properly, but most Canadians eat too much salt. Eating too much sodium or salt can increase risk for health problems such as high blood pressure.
- There is sodium in many foods. Some sodium is found naturally in foods but most of the sodium in foods is added during processing. The amount added to foods at home represents less than 20% of the sodium Canadians consume.
- The tolerable upper limit for sodium intake is 2300 mg sodium per day. This is the amount of sodium in 1 teaspoon (5 mL) of salt.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Sodium Analyzer (print x 1 per student)
- Display items: 1 box of salt, and food packages
- Printable Appendix: Sample Food Labels, print and laminate
- Measuring spoons, clear plastic cups or re-sealable plastic bag to hold salt (1 per nutrition label)
- Calculator (optional)

Set-Up

- Place station title, instructions, worksheets, handouts, display items and printed food labels at the station.
- Place measuring spoons, clear plastic cups or re-sealable plastic bag to hold salt (1 per nutrition label).
- Students should develop a good understanding of the difference between reference serving size on a label and the actual amount of food eaten before completing this activity.
 - Encourage students to review background information on the <u>Using Food</u> <u>Labels</u> webpage and watch a short video online here: www.youtube.com/watch?v=vKYdgETc_PI







Answer Key for Worksheet

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

Food	Amount of Food Eaten	Amount of Sodium Eaten (mg)	% Daily Value	ls it a Little (< 5 %) Yes/No
Breakfast	1			
Glazed Cinnamon Bun	1 bun (105 g)	340	14%	No
Snack				
The Original Potato Chips	Whole bag (250 g)	1650	70%	No
Lunch	1			
Chili Fire Hot Sauce	2 teaspoon (10 mL)	280	12%	No
Hot Hot Chicken Instant Noodle Cup	1 noodle cup (64 g)	740	31%	No
Snack				-
Chicken Nuggets	4 nuggets (67 g)	330	14%	No
Dinner				
Ready-Bake Frozen Pepperoni Pizza	2 slices (1/3 of pizza or 176 g)	1100	46%	No
Tota	I for the day	4393 mg	186%	No

2300 mg of sodium = 1 tsp of salt

4393 mg of sodium = approximately 2 tsp of salt







Discussion Questions and Answers

Students can reflect on their answers and discuss as a class.

1. What do these high sodium foods have in common?

All of the food examples are highly processed convenience-type foods. Processing a food may involve adding ingredients that contain sodium for flavour, texture, or shelf life.

2. <u>Think about the sources of processed food in your diet. Do you think you are eating more</u> <u>or less sodium than the tolerable upper limit?</u>

Individuals over the age of 14 should consume less than 2300 mg of sodium per day for good health. Children aged 9-13 should consume less than 2200 mg per day. This is called the tolerable upper limit. The Canadian Community Health survey in 2004 showed that 85% of men and 60-80% of women ate more than the tolerable upper limit of sodium.

Some common examples of processed foods include:

- Canned and dried soup
- French fries
- Canned vegetables and tomato sauces
- Canned pasta products
- Processed cheese slices and cheese spreads
- Condiments such as ketchup, mustard, and soy sauce
- Fast food, pizza
- Processed meats
- Snack foods such as salted chips, nachos, pretzels, popcorn and crackers
- Seasoning mixes with added salt

3. <u>How does the % Daily Value (%DV) on the Nutrition Facts table help us make lower</u> sodium choices?

The % Daily Value (DV) on the Nutrition Facts label can help you decide if there is a little or a lot of a nutrient in a food.

- Foods with 5 % or less % DV of a nutrient have a little.
- Foods with 15 % or more % DV of a nutrient have a lot.

Nutrients you want more of are:

- Fibre
- Calcium
- Iron

Nutrients you want less of are:

- Sodium
- Sugar
- Saturated and Trans Fat

For example, if a serving of food provides 3% DV of sodium, it is providing only 'a little' sodium. This makes it a lower sodium choice. We want to choose more foods that provide 'a little' of sodium (<5% DV).





- 4. How can you decrease the amount of sodium you eat?
 - Eat less processed snack foods. Choose more fresh fruits and vegetables as snacks instead.
 - Cook more foods at home so that you can limit the amount of salt and condiments added during food preparation.
 - Use herbs, spices, lemon or lime juice, hot peppers or garlic to flavour foods instead of salt or seasoning salts.
 - Choose packaged foods that are lower in sodium. Look for nutrient claims such as "free of," "low," "reduced," "lower," or "no added" sodium or salt.
 - You can compare the milligrams of sodium on Nutrient Facts tables or the % Daily Value of sodium of different products and choose the product with lower milligrams of sodium or lower % DV.
 - Use small portions of condiments.

Supplementary Information and Resources

- Handout: <u>Cooking Without Salt</u>
- Handout: <u>Hold the Salt</u>
- Webpage: <u>Sodium Detector</u>





Activity Station: Sodium Analyzer

Activity Description

Students will be able to determine the amount of sodium (salt) in processed foods compared to the recommended daily intake.

Key Messages

- Salt contains sodium. We need sodium for our bodies to work properly, but most Canadians eat too much salt. Eating too much sodium or salt can increase risk for health problems such as high blood pressure.
- There is sodium in many foods. Some sodium is found naturally in foods but most of the sodium in foods is added during processing. The amount added to foods at home represents less than 20% of the sodium Canadians consume.
- The tolerable upper limit for sodium intake is 2300 mg sodium per day. This is the amount of sodium in 1 teaspoon (5 mL) of salt.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Sodium Analyzer (print x 1 per student)
- Display items: 1 box of salt, and food packages
- Printable Appendix: Sample Food Labels, print and laminate
- Measuring spoons, clear plastic cups or re-sealable plastic bag to hold salt (1 per nutrition label)
- Calculator (optional)

Set-Up

- Place station title, instructions, worksheets, handouts, display items and printed food labels at the station.
- Place measuring spoons, clear plastic cups or re-sealable plastic bag to hold salt (1 per nutrition label).
- Students should develop a good understanding of the difference between reference serving size on a label and the actual amount of food eaten before completing this activity.
 - Encourage students to review background information on the <u>Using Food</u> <u>Labels</u> webpage and watch a short video online here: www.youtube.com/watch?v=vKYdgETc_PI







Answer Key for Worksheet

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

Food	Amount of Food Eaten	Amount of Sodium Eaten (mg)	% Daily Value	ls it a Little (< 5 %) Yes/No
Breakfast	1			
Glazed Cinnamon Bun	1 bun (105 g)	340	14%	No
Snack				
The Original Potato Chips	Whole bag (250 g)	1650	70%	No
Lunch	1			
Chili Fire Hot Sauce	2 teaspoon (10 mL)	280	12%	No
Hot Hot Chicken Instant Noodle Cup	1 noodle cup (64 g)	740	31%	No
Snack				-
Chicken Nuggets	4 nuggets (67 g)	330	14%	No
Dinner				
Ready-Bake Frozen Pepperoni Pizza	2 slices (1/3 of pizza or 176 g)	1100	46%	No
Tota	I for the day	4393 mg	186%	No

2300 mg of sodium = 1 tsp of salt

4393 mg of sodium = approximately 2 tsp of salt







Discussion Questions and Answers

Students can reflect on their answers and discuss as a class.

1. What do these high sodium foods have in common?

All of the food examples are highly processed convenience-type foods. Processing a food may involve adding ingredients that contain sodium for flavour, texture, or shelf life.

2. <u>Think about the sources of processed food in your diet. Do you think you are eating more</u> <u>or less sodium than the tolerable upper limit?</u>

Individuals over the age of 14 should consume less than 2300 mg of sodium per day for good health. Children aged 9-13 should consume less than 2200 mg per day. This is called the tolerable upper limit. The Canadian Community Health survey in 2004 showed that 85% of men and 60-80% of women ate more than the tolerable upper limit of sodium.

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- Saturated and Trans Fat

For example, if a serving of food provides 3% DV of sodium, it is providing only 'a little' sodium. This makes it a lower sodium choice. We want to choose more foods that provide 'a little' of sodium (<5% DV).





- 4. How can you decrease the amount of sodium you eat?
 - Eat less processed snack foods. Choose more fresh fruits and vegetables as snacks instead.
 - Cook more foods at home so that you can limit the amount of salt and condiments added during food preparation.
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 - Choose packaged foods that are lower in sodium. Look for nutrient claims such as "free of," "low," "reduced," "lower," or "no added" sodium or salt.
 - You can compare the milligrams of sodium on Nutrient Facts tables or the % Daily Value of sodium of different products and choose the product with lower milligrams of sodium or lower % DV.
 - Use small portions of condiments.

Supplementary Information and Resources

- Handout: <u>Cooking Without Salt</u>
- Handout: <u>Hold the Salt</u>
- Webpage: <u>Sodium Detector</u>





Appendix: Sodium Analyzer Sample Food Labels

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

6 Food Labels Provided:

- Chicken Nuggets
- Chili Fire Hot Sauce
- Glazed Cinnamon Bun
- Hot Hot Chicken Instant Noodle Cup
- Ready-Bake Frozen Pepperoni Pizza
- The Original Potato Chips





Chicken Nuggets

Nutrition Per 4 nugge			
Amount	`		y Value
Calories 18	30		
Fat 12 g			18 %
Saturated	2 g		10 %
+ Trans 0	g		
Cholestero	l 30 m	g	
Sodium 33	0 mg		14 %
Carbohydra	ate 11	g	4 %
Fibre 1 g			4 %
Sugars 0 g	3		
Protein 10	g		
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	4 %



INGREDIENTS

CHICKEN: BONELESS SKINLESS CHICKEN BREAST MEAT, WATER, 100% VEGETABLE OIL (CANOLA OIL, CORN OIL, SOYBEAN OIL, HYDROGENATED SOYBEAN OIL [TBHQ], CITRIC ACID, DIMETHYLPOLYSILOXANE), WHEAT FLOUR, YELLOW CORN FLOUR, MODIFIED CORN STARCH, RICE STARCH, SALT, BAKING POWDER, SEASONING (WHEAT STARCH, YEAST EXTRACT, SALT, NATURAL FLAVOUR, SAFFLOWER OIL, DEXTROSE, CITRIC ACID, ROSEMARY), SPICES, CANOLA OIL, SODIUM ALUMINUM PHOSPHATE, DEXTROSE, WHEAT STARCH, CORN STARCH.

CONTAINS WHEAT.





Chili Fire Hot Sauce

Nutrition Per 1 tsp (5		S	
Amount		% Dai	ly Value
Calories 5			
Fat 0 g			0 %
Saturated	0 g		
+ Trans 0	g		
Cholester	ol 0 mg	9	
Sodium 14	l0 mg		6 %
Carbohydı	rate 1	g	0 %
Fibre 0 g			4 %
Sugars 1	g		
Protein 0 g]		
Vitamin A	2 %	Vitamin C	10 %
Calcium	0 %	Iron	0 %



INGREDIENTS

CHILI, SUGAR, SALT, GARLIC, FISH EXTRACTIVES (ANCHOVY, SALT) ACETIC ACID, ASCORBIC ACID.

CONTAINS: FISH EXTRACTIVES (ANCHOVY).





Glazed Cinnamon Bun

Nutrition Per 1 bun (-	
Amount		% Da i	ily Value
Calories 4	10		
Fat 22 g			34 %
Saturated	11 g		55 %
+ Trans 0	g		
Cholester	ol 0 mg	9	
Sodium 34	0 mg		14 %
Carbohydı	ate 49) g	16 %
Fibre 2 g			8 %
Sugars 14	l g		
Protein 4 g	3		
Vitamin A	0 %	Vitamin C	0 %
Calcium	0 %	Iron	0 %



INGREDIENTS

CINNAMON ROLL:

ENRICHED WHEAT FLOUR, WATER, SHORTENING (PALM OIL, MODIFIED PALM OIL, WITH TBHQ AS PRESERVATIVE), YEAST, CORN STARCH, SUGAR, CINNAMON, WHEY POWDER (MILK), WHEAT GLUTEN, LEAVENING (SODIUM ACID PYROPHOSPHATE, SODIUM BICARBONATE), SKIM MILK POWDER, EMULSIFIERS [MONO AND DIGLYCERIDES (WITH BHT AND CITRIC ACID AS PRESERVATIVES), SODIUM STEAROYL-2-LACTYLATE, DIACETYL TARTARIC ACID ESTER OF MONO AND DIGLYCERIDES], POTATO FLOUR, SALT, CORN FLOUR, SOYBEAN FLOUR, DEXTROSE, VEGETABLE OIL (CANOLA OIL AND/OR SOYBEAN OIL, WITH TBHQ AS PRESERVATIVE), SILICON DIOXIDE (FREE FLOW AGENT), ASCORBIC ACID, ARTIFICIAL FLAVOUR, COLOUR (YELLOW #5 AND #6), L-CYSTEINE HYDROCHLORIDE, TRICALCIUM PHOSPHATE, GUAR GUM, ENZYMES (AMYLASE, XYLANASE, WHEAT FLOUR, SALT, DEXTRIN), SUNFLOWER OIL.

GLAZE:

SUGAR, WATER, GUAR GUM, MODIFIED POTATO STARCH, POTASSIUM SORBATE (PRESERVATIVE), CITRIC ACID (PH CONTROL) AGAR, XANTHAN GUM.





Hot Hot Chicken Instant Noodle Cup

Nutrition Fact Per 1 container (6	-	
Amount	9	6 Daily Value
Calories 280		
Fat 10 g		15 %
Saturated 5 g		25 %
+ Trans 0 g		
Cholesterol 0 mg	g	
Sodium 740 mg		31 %
Carbohydrate 42	2 g	14 %
Fibre 2 g		8 %
Sugars 1 g		
Protein 7 g		
Vitamin A 2 %	Vitamin	C 0 %
Calcium 2 %	Iron	15 %



INGREDIENTS

NOODLE: ENRICHED WHEAT FLOUR, PALM OIL, MODIFIED STARCH, SUGAR, SALT, GUAR GUM, GARLIC POWDER.

VEGETABLES:

TEXTURED SOY PROTEIN, DEHYDRATED CABBAGE, DEHYDRATED GREEN ONION, DEHYDRATED CARROTS, FREEZE DRIED CORN, FREEZE DRIED PEAS.

SOUP BASE:

ARTIFICIAL CHICKEN FLAVOUR, SALT, MONOSODIUM GLUTAMATE, SUGAR, SOY SAUCE POWDER (SOYBEANS, SALT, WHEAT), YEAST EXTRACT POWDER (DRIED BREAD YEAST, WATER), DISODIUM INOSINATE AND DISODIUM GUANYLATE, PAPRIKA EXTRACT, WHITE PEPPER POWDER, DRIED LEEK, CARAMEL.

CONTAINS WHEAT, SOY.





Ready-Bake Frozen Pepperoni Pizza

Nutrition I Per 1/6 pizza			
Amount		%	Daily Value
Calories 22	0		
Fat 9 g			14 %
Saturated 3	8.5 g		18 %
+ Trans 0 g	ļ		
Cholesterol	20 m	9	
Sodium 550	mg		23 %
Carbohydra	te 26	g	9 %
Fibre 1 g			4 %
Sugars 2 g			
Protein 9 g			
Vitamin A	2 %	Vitamin	C 0 %
Calcium	10 %	Iron	15 %



INGREDIENTS

CRUST:

WHEAT FLOUR, WATER, EXTRA-VIRGIN OLIVE OIL, SALT, SUGAR, YEAST, MALTED BARLEY FLOUR).

TOPPING:

MOZZARELLA CHEESE (MILK, BACTERIAL CULTURES, SALT, MICROBIAL ENZYMES, CELLULOSE), SAUCE (WATER, TOMATO PASTE, BASIL, EXTRA-VIRGIN OLIVE OIL, GARLIC PURÉE, SALT, SUGAR, OREGANO, VINEGAR, THYME, SPICES, SOY OIL), PEPPERONI (PORK, SALT, SPICES, [MUSTARD]), DEXTROSE, LACTIC ACID STARTER CULTURE, FLAVOURS, SODIUM ASCORBATE, GARLIC POWDER, SODIUM NITRITE, PORK STOCK, CITRIC ACID), EXTRA-VIRGIN OLIVE OIL, DEHYDRATED PARSLEY.





The Original Potato Chips

Nutrition Per 36 chips			
Amount		% D:	aily Value
Calories 28	0		
Fat 18 g			28 %
Saturated 2 + Trans 0 g	0		10 %
Cholestero	l 0 mg		
Sodium 330) mg		14 %
Carbohydra	te 26	g	9 %
Fibre 1 g			4 %
Sugars 0 g			
Protein 3 g			
Vitamin A	0 %	Vitamin C	20 %
Calcium	0 %	Iron	4 %



INGREDIENTS

SPECIALLY SELECTED POTATOES, VEGETABLE OIL, SALT.





Activity Station:

Sodium Analyzer





Activity Station: Sodium Analyzer

Instructions:

- Using the example food labels, fill in the worksheet starting with the *Amount of Sodium Eaten* for each food.
- Next record the % *Daily Value (DV)* based on the amount of food eaten. You may need a calculator for both of these steps. The amount of food eaten may be different than the serving size on the Nutrition Facts table.

< 5% DV is a little of a nutrient. > 15% DV is a lot of a nutrient.

- Add up the total mg of sodium for everything eaten that day.
- Convert the mg into teaspoons (tsp).
 2300 mg of sodium = 1 tsp of salt.
- Compare this amount to the tolerable upper limit of 2300 mg of sodium daily.
- Using the tsp measure, estimate how many tsp. of salt are consumed when eating all of these foods in one day. How does this compare to the tolerable upper limit of 2300 mg of sodium daily?





Station 8: Sodium Analyzer – Worksheet

Food	Amount of Food Eaten	Amount of Sodium Eaten (mg)	% Daily Value	ls it a Little (< 5 %) Yes/No	
Breakfast					
Glazed Cinnamon Bun	1 bun (105 g)				
Snack	/ 		1		
The Original Potato Chips	Whole bag (250 g)				
Lunch	1		1		
Chili Fire Hot Sauce	2 teaspoon (10 ml)				
Hot Hot Chicken Instant Noodle Cup	1 noodle cup (64 g)				
Snack					
Chicken Nuggets	4 nuggets (67 g)				
Dinner	Dinner				
Ready-Bake Frozen Pepperoni Pizza	2 slices ($\frac{1}{3}$ of pizza or 176 g)				
Total for the day					





Activity Station: Time Crunch! What do I Eat?

Activity Description

Students will be creative and use planning skills while making a weekly snack plan.

Key Messages

- Planning meals and snacks ahead can help you make healthier food choices every day. It can also save you time and might save you money.
- To plan a healthy meal, include foods from Canada's Food Guide.
- The size of your snack may depend on your age, activity level, and how long it is until your next meal. A small snack can be something as simple as vegetables and dip or a piece of fruit. A larger snack may include 2 or more sections of the <u>Eat Well Plate</u> from Canada's Food Guide such as whole grain foods, vegetables and fruits, and protein foods.
- Use the Weekly Menu Planner to help plan meals and snacks.
- Canada's Food guide recommends 1/2 of your plate be vegetables and fruits. Planning to eat vegetables and fruits at all meals and snacks is one strategy to eat the recommended amount.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Weekly Snack Planner and List of Foods (print x 1 per student)
- Handout: <u>Healthy Snacking</u> (print x 5)

Set-Up

- Place station title, instructions, worksheets, and handouts at station.
- Students may want to refer to the <u>Canada Food Guide</u> website.

Answer Key for the Activity

There is no answer key for this question, "*Plan a different after school snack for each day of the week using the list of foods.*" Students are encouraged to be creative, use a variety of ingredient options, and balance their snacks by choosing foods from at least 2 sections from Canada's Food Guide's Eat Well Plate.





Discussion Questions and Answers

1. What are the benefits of planning meals and snacks?

Taking time to plan your meals and snacks can save time and help you make nutritious choices when you are busy. When you plan your meals ahead of time, it may be easier to think about including variety and balance. Planning may also help to avoid skipping meals or becoming overly hungry, which can impact performance in school, sports, and other activities. You may also save money because you avoid last minute convenience food purchases or buying prepared food away from home. These usually cost more than preparing a meal or snack yourself.

- 2. <u>What makes meal planning ahead difficult?</u> Students may be able to identify many barriers on their own.
- 3. What are some healthy food choices to choose when eating away from home?
 - Buy a ready-made sandwich or salad at a supermarket deli.
 - Choose fast food restaurants that have sandwich options that allow you to choose leaner meats, fish or egg as the protein food choice.
 - Choose a salad with dressing on the side instead of deep fried foods.
 - If a convenience store is your only option, choose milk, nuts, trail mix, or whole grain crackers as a snack or mini-meal.
 - Pack snacks, such as vegetables and fruits, to combine with other foods you will purchase away from home.

Supplementary Information and Resources

- Handout: <u>Quick and Easy Meals</u>
- <u>Sport Nutrition for Youth: A Handbook for Coaches</u> Tournament Menu Plan Activity, pg 100
- Junior Chef Snack Competition





Activity Station:

Time Crunch! What Do I Eat?





Activity Station: Time Crunch! What Do I Eat?

Instructions:

- You have a really busy week.
 After school, you only have 10 minutes to eat a snack because you have activities.
- Plan a different after school snack for each day of the week using the list of foods.
- Record your snacks on the sheet.

Hint: Try to include 2 sections from Canada's Food Guide Eat Well Plate





Monday	List of Foods
-	Almonds
	Apples
	Avocado
Tuesday	Bananas
	Blueberries
	Broccoli
Wednesday	Canned black beans
	Canned tuna
	Carrots
	Cheddar cheese
Thursday Friday	Cucumber
	Dried apricots
	Frozen corn
	Granola
	Hummus
	Oat ring cereal
	Peanut butter
Saturday	Peppers
	• Pita
	Milk
	Slices of roasted chicken
Sunday	Yogurt
	Whole grain crackers
	Whole grain bread
<u></u>	Whole grain tortillas
Other creative ideas:	

Weekly Snack Planner and List of Foods Worksheet

Some condiments that you can use include:

- Mayonnaise, mustard, margarine
- Olive oil
- Vinaigrette style dressing





Activity Station: Crunchy, Juicy, or Sweet? You decide!

Activity Description

Students will understand the importance of eating a variety of vegetables and fruits, and find creative ways to use them in meals and snacks.

Key Messages

- Canada's Food Guide recommends eating a variety of healthy foods with plenty of vegetables and fruits.
- Eating a variety of vegetables and fruit may lower your risk of chronic disease. Try to fill half your plate with vegetables and fruits at every meal. Enjoy vegetables and fruits as snacks.

Materials

- Station Title (print x 1)
- Station Instructions (print x 1)
- Worksheet: Blank sheets of paper (1 for each student) and coloured markers or pencil crayons
- Worksheet: Blank Meal Plate (print x 1 per student)
- Handout: Eat More Vegetables and Fruits (print x 5)
- Optional: Canada's Food Guide Canada's Food Guide Snapshot (order here)
- Printable Appendix: Printed photos of a variety of vegetables and fruit. Allow for 1–2 pictures per students. You may need to use duplicates.
- **Optional Activity:** Vegetable taste testing: Provide a variety of vegetables (6–8), washed, and chopped in bite-size pieces for students to sample. Suggestions could include: spinach, beets, zucchini, sweet potatoes, jicama, cassava, parsnips and turnip.
 - Hand wipes or hand sanitizer
 - Spoons, forks, or toothpicks for tasting

Set-Up

- Place station title, instructions, worksheets, markers or pencils crayons and handouts at station.
- Cut food photos into individual cards and display them on a table.

Optional: taste testing:

• Wash and cut up samples of food and place on plates or in bowls. Provide hand wipes or hand sanitizer, and spoons, forks or toothpicks for tasting.





Answer Key for the Activity

Meals should have the following proportions:

- 1/2 plate fruits and/or vegetables
- ¹/₄ plate whole grain foods
- 1/4 plate protein foods

Discussion:

Ask students to describe what meals they created for breakfast, lunch, and dinner.

Other activity options can include:

- Search for recipes that include your selected vegetables and fruits.
- Plan, budget and prepare a series of healthy plate meals. Take photos of the meals and create a class cookbook.

For more information or to order more copies of Canada's Food Guide Snapshot, please refer to the following website: <u>https://food-guide.canada.ca/en/</u>





Discussion Questions and Answers

1. Why is it important to eat a variety of vegetables and fruits?

Vegetables and fruits can add colour, variety and texture to your meals and snacks and make them more appealing. Vegetables and fruits have fibre and potassium which help reduce your risk for heart disease and stroke. Eating the recommended amount of vegetables and fruits may help lower your risk of some types of cancer.

2. Encourage students to reflect on their own meal choices to determine which meals they could include more vegetables and fruits. <u>What are some ways that they can include more vegetables and fruits?</u>

Refer to: Eat Vegetables and Fruits webpage

Eat More Vegetables and Fruits handout for ideas

Supplemental Information and Resources

Eat Well Plate

Inspiring Healthy Eating

Eating out the Healthy Way



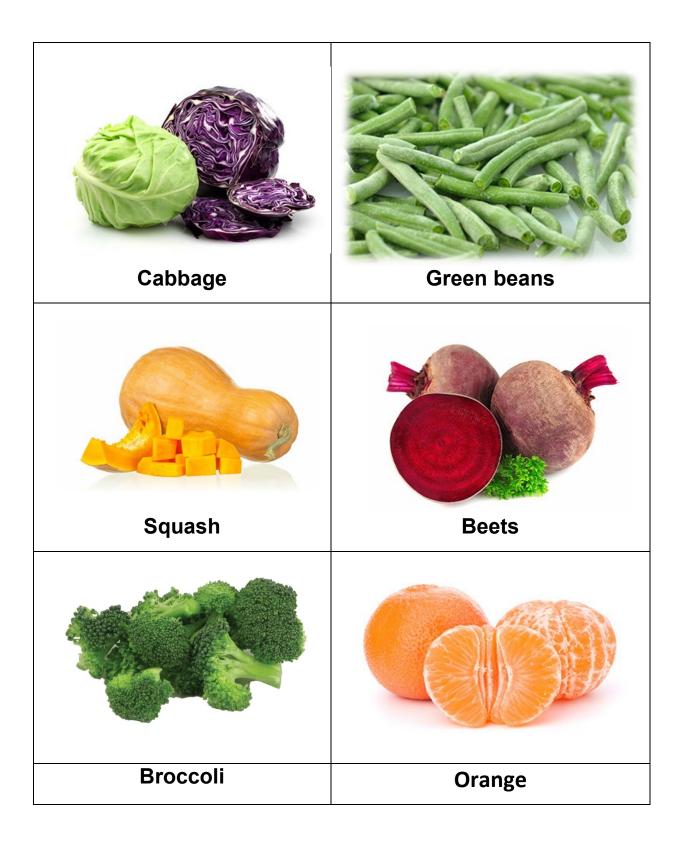


Appendix: Vegetable and Fruit Photos



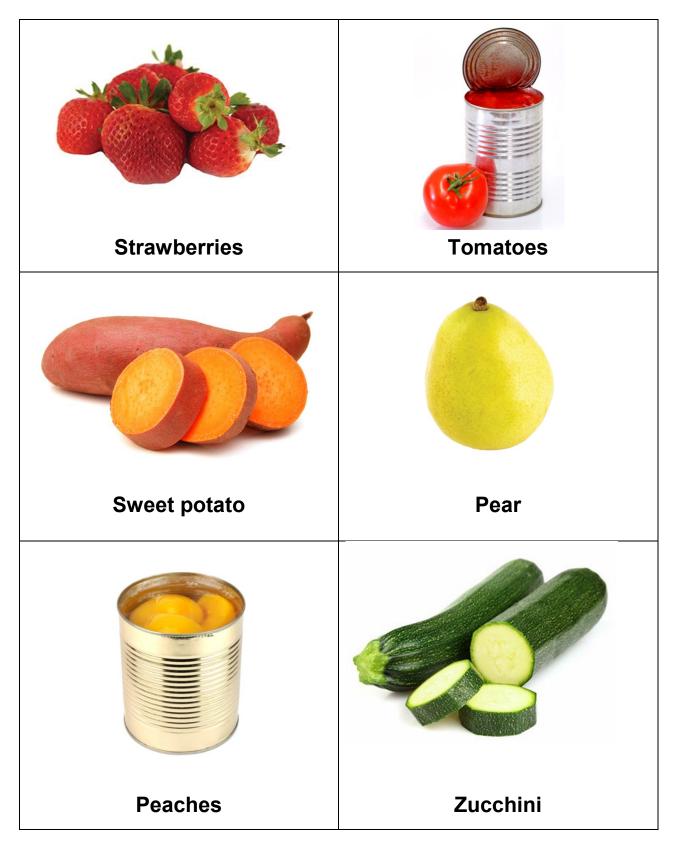
















Activity Station:

Crunchy, Juicy, or Sweet? You decide!





Activity Station: Crunchy, Juicy, or Sweet? You decide!

Instructions:

- Select 2 or more of the vegetable or fruit pictures provided to inspire you to create your own healthy plate. Use the blank plate provided to create a drawing of a tasty meal or snack, which includes your chosen foods.
- Be creative! You can use the divided Healthy Plate or the blank plate to create a mixed dish such as a soup, wrap, rice or noodle bowl. Just make sure the proportion of vegetables and fruits fill half your plate.





Blank Healthy Plate

