eat well
EXPLORING CANADA'S FOOD GUIDE

Teacher Guide

With curriculum connections to Grades 4-8

Agriculture
in the Classroom
MANITOBA

TABLE OF CONTENTS

STUDENT LEARNING OBJECTIVES

- Students will read and interpret information found on Canada's new nutrition labels

- Students will sort foods according to the eat well plate in the new Canada Food Guide

- Students will compare types of nutrients found in different foods and food groups

- Students will identify how and why nutrition labels are changing between 2017 and 2022

- Students will classify beverages as seldom, sometimes or often foods based on information in the new nutrition labels

- Students will compare different types of protein food, including their nutrition and environmental impact

- Students will identify how science and technology help farmers provide healthier, safer, higher quality, more environmentally sustainable and abundant food for Canadians

- Students will identify ways to reduce consumer food waste

- Students will explain why variety is an essential part of a nutritious diet

- Students will create healthy eat well plates based on the new Canada Food Guide recommendations

MANITOBA CURRICULUM CONNECTIONS AT A GLANCE

Curriculum Outcomes Grade 4 Health		Activity						
		1	2	3	4	5	6	7
K.5.4.C.1a	Demonstrate an understanding of food groups, serving sizes, and serving numbers that support good health.		✓	✓	✓			✓
Grade 4 Math								
4.SP.2	Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions			✓				
4.PR.3	Represent and describe patterns and relationships using charts and tables to solve problems.	✓				✓		

Curriculum Outcomes Grade 5 Science		Activity						
		1	2	3	4	5	6	7
5-0-6A	Construct graphs to display data and interpret and evaluate these and other graphs. Examples: bar graphs		✓	✓		✓		
5-0-8C	Recognize that technology is a way of solving problems in response to human needs.						✓	
5-1-01	Use appropriate vocabulary related to their investigations of human health. Include: nutrients; carbohydrates; proteins; fats; vitamins; minerals; Canada's Food Guide to Healthy Eating; food group; serving size.	✓	✓	✓	✓	✓	✓	✓
5-1-02	Interpret nutritional information found on food labels. Examples: ingredient proportions, identification of potential allergens, information related to energy content and nutrients	✓		✓	✓	✓	✓	

Curriculum Outcomes Grade 5 & 6 Food Nutrition		Activity						
		1	2	3	4	5	6	7
5.1.6.8 6.1.6.8	Prepare and serve a food item(s) that reflects current nutritional guidelines and also fits into a balanced eating plan for optimal health (e.g., snacks, entrees, soups, desserts, breakfasts, etc.).							✔
5.2.1.2 6.2.1.2	Identify the six classifications of nutrients (i.e., carbohydrates, protein, fats, vitamins, minerals, water).	✔		✔	✔	✔	✔	
5.2.1.3 6.2.1.3	Identify Canada's dietary guidelines (e.g., versions of Canada's Food Guide).		✔			✔		✔
5.2.1.4 6.2.1.4	Identify the key messages and recommendations in Canada's dietary guidelines (e.g., nutrients, exercise, illustrations, foods emphasized).		✔			✔	✔	✔
5.2.1.5 6.2.1.5	Identify personal food choices (e.g. diversity within the food groups, food choices such as seldom, sometimes, and often) and recommended serving sizes.					✔		✔
5.2.2.2	Identify food labels as a source of information.	✔		✔	✔	✔		
6.2.2.2	List the food and nutrition/health information on labels (e.g. nutrition facts table, ingredient list, nutrition or health claims).	✔		✔	✔	✔		
5.3.2.3 6.3.2.3	Identify Manitoba food that is grown/harvested, reared, caught, and processed locally (e.g., fresh, frozen, seasonal, canned, and dried).				✔		✔	
5.4.1.6 6.4.1.6	Identify the foods eaten traditionally by Indigenous Peoples of Manitoba (e.g., berries, fish, moose, squash).				✔		✔	
Grade 6 Math								
6.SP.3	Graph collected data and analyze the graph to solve problems.			✔				

Curriculum Outcomes Grade 7 & 8 Food Nutrition		Activity						
		1	2	3	4	5	6	7
7.1.6.8 8.1.6.8	Prepare and serve a food item(s) that reflects current nutritional guidelines and also fits into a balanced eating plan for optimal health (e.g., snacks, entrees, soups, desserts, breakfasts, etc.).							✔
7.1.6.10 8.1.6.10	Evaluate and critique a food item(s) and/or recipe(s) according to a set criteria.					✔		
7.2.1.4	Describe the key messages and recommendations in Canada's dietary guidelines as they apply to rural, urban, and northern locations.					✔		✔
7.2.1.5 8.2.1.5	Identify diverse foods within the food groups (e.g., non-dairy sources of calcium, nutrient-dense foods), recommended serving sizes, key messages, and recommendations according to Canada's dietary guidelines.	✔	✔	✔	✔	✔	✔	✔
7.2.1.7	Identify a meal plan(s) that include(s) a variety of foods according to Canada's dietary guidelines.							✔
8.2.1.7	Develop a personal meal plan(s) that incorporates a variety of foods according to Canada's dietary guidelines (e.g. include an apple with lunch, add healthy foods into meals, such as adding a chopped apple into coleslaw).							✔
7.2.2.2	Describe how food and nutrition/health information on labels (e.g., nutrition facts table, ingredient list, nutrition claims) are used to identify specific information or to compare food products (e.g. compare products based on fat, salt, sugar, fibre content).			✔	✔	✔	✔	
7.2.2.3	Analyze food labels to select ingredients and/or food products to meet the nutritional needs of the adolescent.					✔		
8.2.2.3	Compare and contrast food labels of various products to make informed food choices to promote health and wellness.					✔	✔	
7.3.2.3 8.3.2.3	Identify food that is grown/harvested, reared, caught, and processed throughout Canada (e.g. fresh, frozen, seasonal, canned, and dried).				✔		✔	
7.3.2.4	Identify foods from around the world that are available in Manitoba (e.g. fish, tropical fruits, nuts, coffee, tea, chocolate, etc.).				✔			

MATERIALS
INCLUDED IN THIS KIT:

- **Teacher Guide**
- **Master worksheets**:
  » Activity 1- the set of 40 different **Food Nutrition Labels**
  » Activity 1- the set of 40 blank **Student Nutrition Cards**
  » Activity 3 - the student graphing worksheet, **Nutrients in Your Food**
  » Activity 3 - **Graph Paper**
  » Activity 5 - the student worksheet, **Helping Canadians Make Healthy Choices**
  » Activity 6 - Let's Look at Proteins – a series of 3 student worksheets:
    » Part 1 – **Protein Nutrition**
    » Part 2 - **What are Proteins?**
    » Part 3 – **Decreasing the Environmental Impact of Producing Protein Foods in Canada**
  » Activity 7 - the student worksheet, **Eat Well Plate Challenge**
- **Answer Key** for Activities 1 - 7
- **Display materials** including **Canada's Food Guide Eat Well Plate** and **Food Category Labels** for Activity 2
- **Eat Well Cards** - 6 decks for use with Activities 2, 4, 6 & 7

ACTIVITIES
ACTIVITY 1 – READING NUTRITION FACTS LABELS

Lesson Plan:
- Give each student 1 or more blank Student Nutrition Cards and the corresponding Food Nutrition Label(s).
- Have each student use information from the Food Nutrition Label(s) to fill in their blank Student Nutrition Card(s).
- Have each student put their name on the back of the card they completed.

> **MATERIALS NEEDED:**
> - 1 photocopied and cut out set of 40 Food Nutrition Labels
> - 1 photocopied and cut out set of the 40 blank Student Nutrition Cards
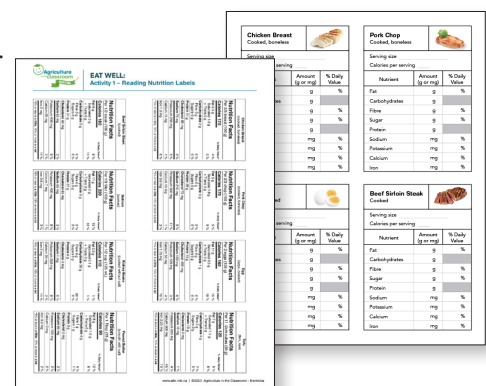
ACTIVITY 2 – EAT WELL PLATE FOOD GROUPS

LESSON PLAN:

- Create a display with the materials provided. See display suggestions below.
- Have each student place their completed Student Nutrition Card(s) from Activity 1 under the Canada Food Guide food group on the display that they believe their food belongs to.
- As a class, decide if any of the foods were put in the wrong food group and make corrections as needed.

MATERIALS NEEDED:

- Canada's Food Guide Eat Well Plate and labels for the display
- Answer Key – use the Eat Well card deck

DISPLAY OPTION 1:

DISPLAY OPTION 2:

ACTIVITY 3 – CREATING AND ANALYZING FOOD NUTRIENT GRAPHS

LESSON PLAN:

- Have each student take back their completed student nutrition card(s) from the display and, using the appropriate coloured highlighter, colour in the top left-hand corner of their card(s).
    - » Green for vegetables and fruits
    - » Orange for proteins
    - » Yellow for grain products
    - » (See the Eat Well card deck for examples)

- Hand out a graphing worksheet and graph paper to each student.
    - » Have students create bar graphs on the graph paper provided using the data on their Student Nutrition Card(s). The colour of the bars on their graph is to match the colour used for the food group their food belongs to.
    - » Have students post their completed graphs under the correct Food Group heading on the display.
    - » Have students do a gallery walk to compare the graphs and answer the questions on the graphing worksheet.

> **Materials needed:**
>
> - Orange, green, and yellow highlighters
> - Samples from the Eat Well card deck
> - Copies, 1/student, of the graphing worksheet, 'Nutrients in Your Food'
> - 40 copies of the Activity 3 Graphing Paper. Students will need 1 copy of the graph paper for each nutrition card they completed
> - Answer key

ACTIVITY 4 – NUTRIENT CHALLENGE CARD GAME

LESSON PLAN:

- Nutrition Challenge Card Game (a cross between a Top Trumps game and the card game War.)
    - » Have students play in groups of 3 or 4
    - » Give each group a deck of 40 Eat Well cards.
    - » Dealer deals out all the cards
    - » Players place their cards nutrition facts down in a pile in front of them.
    - » Player to the left of the dealer picks up the top card from their own pile, looks at the nutrition facts, says the food on their card and the nutrient they choose to challenge with (i.e. Green Beans, Fibre 10%) and lays their card nutrition facts up on the table in front of them.
    - » Each of the other players, in turn, takes the top card from their pile of cards, says the food they have and what amount of challenge nutrient they have, (i.e. Beef Sirloin Steak, Fibre 0%; or Kidney Beans, Fibre 20%) and then places it nutrition facts up on the table in front of them.
    - » The player with the highest challenge nutrient (i.e. Kidney Beans, Fibre 20% in our example) is the winner. The winner takes the cards and adds them to the bottom of their pile. Then they take the card off the top of their pile, identify the food and what nutrient they are challenging with for the next round and lay that card face up on the table in front of them.
    - » Play continues until one player has all the cards or time is up in which case the player with the most cards is the winner.

> **Materials needed:**
>
> - 6 decks of Eat Well cards

ACTIVITY 5 – CANADA FOOD GUIDE TOOLS FOR MAKING HEALTHY NUTRITION CHOICES

LESSON PLAN:
- Have students complete the 'Helping Canadians Make Healthy Choices' worksheet to discover:
  - » The recent changes to the Nutrition Facts Table and the rationale for the changes including: addition of potassium, removal of vitamins A and C, addition of %DV for sugar, and addition of %DV footnote.
  - » Students will also discover the rationale behind limiting sodium and sugary drinks.

> **Materials needed:**
> - Copies, 1/student, of 'Helping Canadians Make Healthy Choices' worksheet
> - Answer Key

ACTIVITY 6 – LET'S LOOK AT PROTEIN

LESSON PLAN:
This activity includes 3 stand-alone worksheets that will help students explore the new protein group on the new Canada Food Guide's Eat Well Plate.

- **Part 1 – Protein Nutrition.** Topics include why protein is an important nutrient, identifying protein foods and where they are grown.
  - » Give each student a copy of the worksheet 'Let's Look at Protein: Part 1 – Protein Nutrition.'
  - » Create groups of 3 – 4 students. Give each group 1 deck of 40 Eat Well cards.
  - » Have each group work through the activities and questions on the worksheet.

- **Part 2 – What are Proteins**? Topics include essential amino acids, complete, incomplete and complementary proteins, and a comparison of types of proteins in our diet.
  - » Give each student a copy of the worksheet 'Let's Look at Protein: Part 2 – What are Proteins?'.
  - » Create groups of 3 – 4 students. Give each group 1 deck of 40 Eat Well cards.
  - » Have each group work through the activities and questions on the worksheet.

- **Part 3 – Decreasing the Environmental Impact of Producing Protein Foods in Canada.** Topics include the current impact of agriculture in Canada, what farmers are doing to decrease the impact and how individual Canadians can help by reducing food waste.
  - » Give each student a copy of the worksheet 'Let's Look at Protein: Part 3 – Decreasing the Environmental Impact of producing Protein Foods in Canada'.
  - » Have each student complete the worksheet.

> **Materials needed:**
> - 6 decks of Eat Well cards
> - Let's Look at Proteins – a series of 3 worksheets:
>   - » Part 1 – Protein Nutrition
>   - » Part 2 – What are Proteins?
>   - » Part 3 – Decreasing the Environmental Impact of Producing Protein Foods in Canada
> - Computer, projector, and screen to play videos
> - Answer key
>
> **Videos for Part 3**
> - Topic: Precision Agriculture:
>   - » GPS Technology on the Farm, 1:59
> - Topic: Grassland Sustainability:
>   - » Guardians of the Grasslands, 12:44
>   - » MB Species at Risk Partnerships on Agricultural Lands, 3:45
> - Topic: Food Waste:
>   - » Life of a Strawberry, 1:53

ACTIVITY 7 – EAT WELL PLATE CHALLENGE

LESSON PLAN:

- Show the students the following Canada Food Guide Videos:
  - » Healthy snacks using Canada's food guide plate, 0:46s
  - » Healthy breakfasts using Canada's food guide plate, 0:33s
  - » Eat together using Canada's food guide plate, 0:46s
  - » Use Canada's food guide plate to make any meal, 0:40s

1. Individually or in groups, have students complete the Eat Well Plate Challenge worksheet.

   » It may be helpful to provide students with a deck of Eat Well cards.

ASSESSMENT IDEAS:

2. Students/groups could present their Eat Well Plate and their plan for where, when, why, and how they will eat their meal to the class.

3. Have students/groups post their Eat Well Plates as part of a classroom display.

> **Materials Needed:**
> - 6 decks of Eat Well cards
> - Computer, projector, and screen to play the Eat Well Plate videos
> - Copies, 1/student or 1/ student group of the Eat Well Plate Challenge worksheet
> - Copies, 1/student or 1/ student group of the Blank My Eat Well Plate

EXTENSION ACTIVITY SUGGESTIONS:

1. Have students look for the new nutrition facts label on food packages in their homes and bring them in and share them.

2. Have students do a web search for the food on the card/graph they completed to find the complete list of nutrients (minerals and vitamins) in that food.

3. Have students compare nutrient facts labels for food prepared or preserved using different methods. i.e. fresh corn, frozen corn, canned corn, flaked corn (cornflakes cereal), corn meal.

4. Have students bring in the nutrition facts label for their favourite snack food and compare and/or graph the fat, sugar, and sodium content of each.

ENRICHMENT RESOURCES

- **Sodium: the basics,** Government of Canada

  https://www.canada.ca/en/health-canada/services/nutrients/sodium/sodium-basics.html

- **Sodium Detector** - Use the Sodium Interactive Tool to learn how much sodium is in the foods that you eat. Government of Canada

  https://health.canada.ca/en/health-canada/services/food-nutrition/food-guides-healthy-eating/nutrients/sodium/detector.html

- **snapAG** – Information sheets from Agriculture in the Classroom - Canada. Use the Environment and Food/ Nutrition topic filters to find relevant sheets.

  https://aitc-canada.ca/en-ca/learn-about-agriculture/category/plant-and-animal-proteins

VIDEO SUMMARY AND LINKS
ACTIVITY 6

GPS Technology on the Farm, 1:59. https://www.manitobapork.com/educational-videos

This video is brought to you by Manitoba Pork. Nutrient-rich soil grows the most nourishing food. If cropland is short of any nutrients, a valuable organic fertilizer like hog manure can be injected before the crop is planted. By using Global Positioning Systems (GPS) and doing annual soil testing, farmers make sure that every bit of hog manure is used to its best advantage while reducing their carbon footprint.

Guardians of the Grasslands, 12:44. https://guardiansofthegrasslands.ca

This short documentary is brought to you by a group of dedicated Canadian conservationists, ranchers, and filmmakers. The film explores the current state of one of the world's most endangered ecosystems, the Great Plains grasslands, and the role that cattle play in its survival here on the Canadian prairies.

MB Species at Risk Partnerships on Agricultural Lands, 3:45 https://vimeo.com/388562868

This short documentary is brought to you by Manitoba Beef Producers (MPB) and features conservationist Dr. Christian Artuso, who was the MB Program Manager for Bird Studies Canada at the time the video was made. Dr. Artuso worked with MBP's Species at Risk Partnerships on Agricultural Lands (SARPAL) Keep Grazing project for grassland threatened species. The video was shot in southwestern Manitoba at the property of MBP District 1 Director Gord Adams.

Life of a Strawberry, 1:53 min.   https://www.youtube.com/watch?v=CLFOK4U34wI

This video is a TV ad created by the Ad Council and the Natural Resources Defense Council as part of their "Save The Food," a national public service campaign to combat food waste from its largest source—consumers, who collectively waste more food than grocery stores, restaurants or farms. The initiative hopes to encourage consumers to reduce the amount of food they trash in their homes, thereby saving the water, energy and money that are lost along with it.

ACTIVITY 7

The four short Eat Well Plate videos developed by Health Canada can be viewed using the links below for the Health Canada website or YouTube.

VIDEO	HEALTH CANADA LINK	YOUTUBE LINK
Healthy snacks using Canada's food guide plate, 0:46s	https://www.canada.ca/en/health-canada/services/video/food-nutrition/eat-well-plate-healthy-snacks.html	https://www.youtube.com/watch?v=Zj1w42_WhpE
Healthy breakfasts using Canada's food guide plate, 0:33s	https://www.canada.ca/en/health-canada/services/video/food-nutrition/eat-well-plate-healthy-breakfasts.html	https://www.youtube.com/watch?v=FQ35D2OzRYM
Eat together using Canada's food guide plate, 0:46s	https://www.canada.ca/en/health-canada/services/video/food-nutrition/plate-eat-together.html	https://www.youtube.com/watch?v=9FG4d-2tECo
Use Canada's food guide plate to make any meal, 0:40s	https://www.canada.ca/en/health-canada/services/video/food-nutrition/plate-make-any-meal.html	https://www.youtube.com/watch?v=hknXiyFwUEA

SOURCES

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16. Manitoba Egg Farmers, https://www.eggs.mb.ca/about-us/social-responsibility

17. Dairy Farmers of Canada, https://dairyfarmersofcanada.ca/en/who-we-are/our-commitments/environment-our-legacy-future-generations

18. Manitoba Pork, https://www.manitobapork.com/sustainability-focus/environment

ANSWER KEY

ACTIVITY 3 – NUTRIENTS IN YOUR FOOD WORKSHEET

Part 1

PAGE 1: **BAR GRAPH 1**

1. a. Multiple Choice   **B) By 2s**

PAGE 1: **BAR GRAPH 2**

2. No. The y-axis number scale represents %DV in Graph 1 and grams in Graph 2. Since they are not the same unit (variable) the graphs cannot be compared to each other and do not have to use the same scale. (If you want to compare graph 1 for different foods, then the number scale must be the same for every graph 1 so that comparing graphs is relevant and easy. The same is true for graph 2.)

5. So anyone reading this graph will know what it is about.

Part 2

PAGE 3 & 4

1. a. Smallest amount of fat is **Vegetables and Fruit**

   b. Highest amount of carbohydrates is **Grains**

   c. Highest amount of protein is **Proteins**

2.

NUTRIENTS	TOP 3 FOODS	FOOD GROUP	YOUR PREFERENCE
Carbohydrates	SPAGHETTI 62g	GRAINS	
	BAGEL 45g	GRAINS	
	WHITE LONG GRAIN RICE 39g	GRAINS	
Protein	BEEF SIRLOIN STEAK 31g	PROTEINS	
	CHICKEN BREAST 31g	PROTEINS	
	ELK STEAK 31g	PROTEINS	

2.

NUTRIENTS	TOP 3 FOODS	FOOD GROUP	YOUR PREFERENCE
Fibre	LENTILS 8g = 29%	PROTEINS	
	KIDNEY BEANS 6g = 20%	PROTEINS	
	BREAD, WHOLE GRAIN 6g = 20%	GRAINS	
Potassium	POTATO 750mg = 16%	VEGETABLES & FRUIT	
	BANANA 500mg = 11%	VEGETABLES & FRUIT	
	PORK CHOP 500mg = 11%	PROTEINS	
Calcium	TOFU 600mg = 45%	PROTEINS	
	MILK 300mg = 23%	PROTEINS	
	YOGURT 250mg = 20%	PROTEINS	
Iron	CHEERIOS 5.5mg = 30%	GRAINS	
	ELK STEAK 4mg = 23%	PROTEINS	
	LENTILS 3.5 mg = 19%	PROTEINS	

3. Different food groups contain foods that provide different types and amounts of nutrients, so you need to eat foods from each group to ensure you get all the nutrients you need to be healthy.

ACTIVITY 5 – HELPING CANADIANS MAKE HEALTHY CHOICES WORKSHEET

PAGE 1

A) NUTRITION FACTS TABLE

1. The differences:

- **Increased the font size of serving size and calories.**
- **Added a bold line under the calories.**
- **Removed % Daily Value (%DV) for Carbohydrate.**
- **Added new % Daily Value for total sugars.**
- **Added the amounts in milligrams (mg) for potassium, calcium, and iron.**
- **Vitamin A and Vitamin C removed, and potassium added.**
- **Added a footnote "5% or less is a little, 15% or more is a lot" at the bottom of the table.**
- **Order is different: Instead of fat, cholesterol, sodium, carbohydrates, protein, it is fat, carbohydrates, protein, cholesterol, sodium.**

Here are some reasons for the changes found in the new **Nutrition Facts Table** from the Government of Canada.

The changes to the nutrition facts table include:

- making the serving size more:
  - » consistent, so that it's easier to compare similar foods
  - » realistic, so that it reflects the amount that Canadians typically eat in one sitting

- making the information on serving size and calories easier to find and read by:
  - » increasing the font size of serving size and calories
  - » adding a bold line under the calories

- revising the % daily values based on updated science

- adding a new % daily value for total sugars

- updating the list of nutrients to:
  - » add potassium because:
    - it's important for maintaining healthy blood pressure
    - most Canadians are not getting enough of this nutrient
  - » remove vitamin A and vitamin C because:
    - most Canadians get enough of these nutrients in their diets
  - » adding the amounts in milligrams (mg) for potassium, calcium, and iron

- adding a footnote at the bottom of the table about % daily value
  - » this will help consumers understand how much sugar and other nutrients (like sodium) are in their food and will explain that:
    - 5% or less is a little
    - 15% or more is a lot

PAGE 2

C) Sugar

1. 1 g of sugar = **1 %** daily value of sugar
   100 g of sugar = 100 % daily value of sugar

2. 100 grams of sugar = **25** teaspoons of sugar

PAGE 3

E) Sodium

1. Canadians need 1500 mg of sodium each day.

2. 76% of children aged 4 - 13 years eat too much sodium.

3. 1 tsp of salt contains 2325 mg of sodium.

4. The average restaurant meal item contains 1 day's worth of sodium.

PAGES 4, 5 & 6

F) Drinks

1.   A. **Often** – although it is not low in sugar or fat, it is not high in sugar or fat either. It has more than a little potassium and a lot of calcium, both nutrients that we need more of.

B. **Seldom** – it has a lot of sugar.

C. **Seldom** – it has a lot of sugar and no other nutrients.

D. **Seldom** – it has a very large amount of sugar and no other nutrients.

E. **Seldom** – it has a lot of sugar, very little potassium and more than a little salt.

F. **Seldom or Sometimes** – it has more than a little potassium, but it has a lot of sugar.
(The Heart and Stroke Foundation recommends that we eat fruit, not drink it.)

2.

Q #1 Nutrition Label	a) Beverage	b) Sugar %DV
A.	2% White Milk	12%
B.	Vitamin Water	32%
C.	Coca-Cola	39%
D.	Slurpee (Coca-Cola flavour)	78%
E.	Powerade	12%
F.	100% Orange Juice	20%

3.   a. Chocolate Milk (250 mL) =   **24%** Daily Value

b. Flavoured Latte (355 mL) =   **36%** Daily Value

c. Sweetened Iced Tea (695 mL) =   **40%** Daily Value

d. Energy Drink (710 mL) =   **84%** Daily Value

4.   Water has no sugar, something we want less of. Water makes up 55% to 75% of our body, and we lose water every time we breathe, sweat, or go to the toilet. To stay healthy, we need to drink water every day to replace what we lose.

White milk and unsweetened plant-based beverages contain less than 15% sugar and provide other important nutrients like calcium. These are nutritious choices, unlike other beverages that contain large amounts of sugar and very little if any other nutrients. Sugar is something we want to consume a little of.

ACTIVITY 6 – LET'S LOOK AT PROTEIN WORKSHEETS
PART 1: PROTEIN NUTRITION WORKSHEET

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3.

Who's growing your animal-based protein?		Grown In	
The Farmer	Food Produced	Canada	Manitoba
Beef Producers	**Beef Sirloin Steak**	x	x
Chicken Producers	**Chicken Breast**	x	x
Dairy Farmers	**White Milk, Yogurt, Cheese**	x	x
Egg Farmers	**Egg**	x	x
Elk Farmers	**Elk Steak**	x	x
Pork Producers	**Pork Chop**	x	x
Salmon Farmers	**Salmon**	x	
Turkey Producers	**Turkey Breast**	x	x

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4. Animal-based proteins contain much greater amounts of protein per serving than plant-based proteins.

5. Grain foods contain protein as well, and in similar amounts as plant-based proteins in the protein group.

6. Vegetables and fruits contain a very small amount of protein.

PART 2: WHAT ARE PROTEINS WORKSHEET

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1. Plant-based proteins contain fibre. Plant-based proteins like kidney beans and lentils contain a lot of fibre (i.e. more than 15% DV). Animal-based proteins contain no fibre.

2. a.

Animal-based Protein Food	Calories / Serving	Protein in grams
Beef Sirloin Steak	180	31
Chicken Breast	170	31
Pork Chop	170	29

Plant-based Protein Food	Calories / Serving	Protein in grams
Kidney Beans	110	8
Peanut Butter	90	3
Tofu	120	13

b. About **1** serving of beef which would contain **180** total calories.

About **1** serving of chicken which would contain **170** total calories.

About **1** serving of pork which would contain **170** total calories.

About **4** servings of kidney beans which would contain **440** total calories.

About **10** servings of peanut butter which would contain **900** total calories.

About **2** (or 2.25) servings of tofu which would contain **240** (or 270) total calories.

c. You need to eat more servings and calories of plant-based protein to get the same amount of protein you would get eating only 1 serving and fewer calories of animal-based protein.

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Test Your Understanding

1. There are 9 essential amino acids (EEAs). These 9 must come from our food so it is essential we include them in our diet.

2. a. Complete protein examples include all animal proteins, soy-based foods, and quinoa.

   b. Incomplete protein examples include plant-based proteins such as pulses, whole grain foods and nuts.

3. The Three Sisters crop includes the grain maize (also known as corn) and the legume beans. Each of these foods by themselves are incomplete proteins. When eaten together, they provide all 9 EAAs.

4. a. Plant-based proteins include fibre and are low in saturated fat.

   b. Animal-based proteins include vitamins B12 and D3, DHA omega 3 fatty acids, and heme iron.

5. Answers will vary but should include foods that are animal-based or contain legumes, pulses, whole grains, or nuts.

PART 3: DECREASING THE ENVIRONMENTAL IMPACT OF PRODUCING PROTEIN FOODS IN CANADA WORKSHEET

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Test Your Understanding

1. Crop farmers are reducing the environmental impact of growing plant-based proteins by using:

   - Conservation or zero-till – not ploughing the soil so carbon remains stored in the soil and isn't released into the atmosphere.

   - Herbicide Resistant Genetically Engineered (GE) Crops – reducing the need to plough land to control weeds so less carbon is released into the air.

   - Precision Agriculture – using technology to produce the most with the least environmental footprint

   - Including legumes in the crop rotation to lower nitrogen fertilizer use and its associated greenhouse gases as well as improve the soil.

2. Legumes can take nitrogen from the air and put it into the soil where plants can use it. This means less nitrogen fertilizer is needed for legume crops. Since the production and spreading of man-made fertilizers requires the burning of fossil fuels, growing legumes reduces greenhouse gas emissions.

3. Grasslands need to be maintained because they protect habitat for wildlife, protect wetlands, reduce flooding, and store carbon to offset greenhouse gas (GHG) emissions.

4. Cattle

5. Science, technology, and innovation have:

   - Improved livestock breeding

   - Improved livestock diets

   - Improved manure management

6. One of:

   - Beef Cattle: Producing 1 kg of beef in 2011 compared to 1981 produced fewer GHGs, including 14% less CH_4, 15% less N_2O and 12% less CO2 with 29% fewer cows and 24% less land.

   - Chicken Farmers – In the past 40 years have lowered their carbon footprint by 37%, their water consumption by 45% and their non-renewable energy use by 37%.

   - Dairy Farmers – In the past 5 years have reduced their carbon footprint by 7%, water consumption by 6% and land use by 11%. It takes 65% fewer dairy cows to produce milk for all of Canada today than it did 50 years ago.

   - Egg Farmers – Between 1962 and 2012, they used 81% less land, 41% less energy and 69% less water, and produced 72% fewer greenhouse gas emissions while increasing egg production by 50%.

   - Pork Producers – For every kilogram of pork produced today, farmers use about 40% less water, 33% less feed and as much as 59% less land while emitting 35% fewer greenhouse gases than they did 50 years ago.

7. All the land, water, fossil fuels, greenhouse gas emissions and worker time and energy used to grow, process and transport that food is wasted when food is thrown away.

8. a. 47% – consumer food waste

   b. 56.6 million tonnes of greenhouse gases

9. Food in a landfill releases methane as it breaks down. Methane has 25 times the global warming potential of carbon dioxide. Composting food waste does not give off methane. It also produces compost which can be recycled as a valuable fertilizer.

10. a. Any 2 of:

    - Use leftovers, or freeze them for later use instead of throwing them away

    - Serve yourself a small amount – you can always go back for seconds if you are still hungry

    - Compost food scraps

    b. Student tips for reducing food waste will vary.

11. Livestock eat by-products from food and energy processing such as canola meal and distiller's grain as well as crops that are not high enough quality for human consumption, and turn them from waste products to high quality protein for our plates.

MASTER WORKSHEETS

The following worksheets are also available on our website, under the Teacher's tab in *Resources & Activities*. Included in the master worksheets:

- » Activity 1- the set of 40 different **Food Nutrition Labels**
- » Activity 1- the set of 40 blank **Student Nutrition Cards**
- » Activity 3 - the student graphing worksheet, **Nutrients in Your Food**
- » Activity 3 - **Graph Paper**
- » Activity 5 - the student worksheet, **Helping Canadians Make Healthy Choices**
- » Activity 6 - Let's Look at Proteins – a series of 3 student worksheets:
  - » Part 1 – **Protein Nutrition**
  - » Part 2 - **What are Proteins?**
  - » Part 3 – **Decreasing the Environmental Impact of Producing Protein Foods in Canada**
- » Activity 7 - the student worksheet, **Eat Well Plate Challenge**

Chicken Breast (cooked, boneless)

Nutrition Facts
Per 3/5 breast (100 g)

	% Daily Value*
Calories 170	
Fat 3.5 g	4 %
Saturated 1.0 g + Trans 0 g	5 %
Carbohydrate 0 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 31 g	
Cholesterol 85 mg	
Sodium 75 mg	3 %
Potassium 250 mg	5 %
Calcium 15 mg	1 %
Iron 1.0 mg	6 %

*5% or less is **a little**, 15% or more is **a lot**

Pork Chop (cooked, boneless)

Nutrition Facts
Per 2/3 chop (100 g)

	% Daily Value*
Calories 170	
Fat 5 g	5 %
Saturated 1.8 g + Trans 0 g	9 %
Carbohydrate 0 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 29 g	
Cholesterol 75 mg	
Sodium 210 mg	9 %
Potassium 500 mg	11 %
Calcium 10 mg	1 %
Iron 0.6 mg	3 %

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Egg (large, cooked)

Nutrition Facts
Per 2 eggs (105 g)

	% Daily Value*
Calories 160	
Fat 11 g	15 %
Saturated 3.5 g + Trans 0 g	18 %
Carbohydrate 1 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 13 g	
Cholesterol 400 mg	
Sodium 130 mg	6 %
Potassium 125 mg	3 %
Calcium 50 mg	4 %
Iron 1.75 mg	10 %

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Beef Sirloin Steak (cooked)

Nutrition Facts
Per 1/2 steak (100 g)

	% Daily Value*
Calories 180	
Fat 6 g	8 %
Saturated 2 g + Trans 0 g	11 %
Carbohydrate 0 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 31 g	
Cholesterol 60 mg	
Sodium 65 mg	3 %
Potassium 400 mg	9 %
Calcium 20 mg	2 %
Iron 2 mg	11 %

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Salmon (cooked)

Nutrition Facts
Per 1/3 fillet (100 g)

	% Daily Value*
Calories 220	
Fat 11 g	15 %
Saturated 2 g + Trans 0 g	10 %
Carbohydrate 0 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 27 g	
Cholesterol 85 mg	
Sodium 65 mg	3 %
Potassium 400 mg	8 %
Calcium 7 mg	1 %
Iron 0.5 mg	3 %

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Tofu (firm, raw)

Nutrition Facts
Per 11 -2cm cubes (85 g)

	% Daily Value*
Calories 120	
Fat 7 g	9 %
Saturated 1.1 g + Trans 0 g	6 %
Carbohydrate 4 g	
Fibre 2 g	7 %
Sugars 0 g	0 %
Protein 13 g	
Cholesterol 0 mg	
Sodium 10 mg	1 %
Potassium 200 mg	4 %
Calcium 600 mg	45 %
Iron 2.25 mg	13 %

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Kidney Beans (cooked without salt)

Nutrition Facts
Per 1/2 cup (125 mL)

	% Daily Value*
Calories 110	
Fat 0.5 g	1 %
Saturated 0.1 g + Trans 0 g	1 %
Carbohydrate 20 g	
Fibre 6 g	20 %
Sugars 0 g	0 %
Protein 8 g	
Cholesterol 0 mg	
Sodium 1 mg	0 %
Potassium 350 mg	8 %
Calcium 30 mg	2 %
Iron 2 mg	11 %

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Peanut Butter (smooth with salt)

Nutrition Facts
Per 1 Tbsp (15 g)

	% Daily Value*
Calories 90	
Fat 8 g	12 %
Saturated 1.5 g + Trans 0 g	8 %
Carbohydrate 4 g	
Fibre 1 g	4 %
Sugars 1 g	1 %
Protein 3 g	
Cholesterol 0 mg	
Sodium 60 mg	3 %
Potassium 100 mg	2 %
Calcium 0 mg	0 %
Iron 0.3 mg	2 %

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Green Beans (cooked without salt)

Nutrition Facts
Per 2/3 cup (85 g)
Calories 30

	Amount	% Daily Value*
Fat	0 g	0 %
Saturated	0 g	0 %
+ Trans	0 g	
Carbohydrate	7 g	
Fibre	3 g	10 %
Sugars	1 g	1 %
Protein	2 g	
Cholesterol	0 mg	0 %
Sodium	1 mg	0 %
Potassium	125 mg	3 %
Calcium	40 mg	3 %
Iron	0.5 mg	3 %

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Cheese (Cheddar, 31%, milk fat)

Nutrition Facts
Per 3 cm cube (30 g)
Calories 120

	Amount	% Daily Value*
Fat	9 g	12 %
Saturated	6 g	30 %
+ Trans	0.3 g	
Carbohydrate	1 g	
Fibre	0 g	0 %
Sugars	0 g	0 %
Protein	7 g	
Cholesterol	30 mg	
Sodium	190 mg	8 %
Potassium	20 mg	1 %
Calcium	175 mg	13 %
Iron	0.1 mg	1 %

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Banana (raw)

Nutrition Facts
Per 1 large (140 g)
Calories 120

	Amount	% Daily Value*
Fat	0.4 g	1 %
Saturated	0.1 g	1 %
+ Trans	0 g	
Carbohydrate	32 g	
Fibre	4 g	13 %
Sugars	17 g	17 %
Protein	2 g	
Cholesterol	0 mg	
Sodium	1 mg	0 %
Potassium	500 mg	11 %
Calcium	10 mg	1 %
Iron	0.4 mg	2 %

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Yogurt (Fruit, 2.9%, milk fat)

Nutrition Facts
Per 3/4 cup (175 g)
Calories 160

	Amount	% Daily Value*
Fat	5 g	7 %
Saturated	2.5 g	14 %
+ Trans	0.2 g	
Carbohydrate	22 g	
Fibre	0 g	0 %
Sugars	18 g	18 %
Protein	7 g	
Cholesterol	15 mg	
Sodium	75 mg	3 %
Potassium	350 mg	7 %
Calcium	250 mg	20 %
Iron	0.2 mg	1 %

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Soymilk (unfortified)

Nutrition Facts
Per 1 cup (250 mL)
Calories 140

	Amount	% Daily Value*
Fat	4.5 g	6 %
Saturated	0.5 g	3 %
+ Trans	0 g	
Carbohydrate	16 g	
Fibre	2 g	6 %
Sugars	10 g	10 %
Protein	8 g	
Cholesterol	0 mg	0 %
Sodium	130 mg	6 %
Potassium	300 mg	6 %
Calcium	75 mg	5 %
Iron	1.75 mg	9 %

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Bagel (plain)

Nutrition Facts
Per 1 medium bagel (85 g)
Calories 230

	Amount	% Daily Value*
Fat	1.5 g	2 %
Saturated	0.2 g	1 %
+ Trans	0 g	
Carbohydrate	45 g	
Fibre	2 g	8 %
Sugars	0 g	0 %
Protein	9 g	
Cholesterol	0 mg	0 %
Sodium	450 mg	20 %
Potassium	75 mg	2 %
Calcium	20 mg	1 %
Iron	1.2 mg	7 %

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Oatmeal Porridge (cooked without salt)

Nutrition Facts
Per 1 cup (250 mL)
Calories 170

	Amount	% Daily Value*
Fat	3.5 g	5 %
Saturated	0.5 g	3 %
+ Trans	0 g	
Carbohydrate	32 g	
Fibre	4 g	14 %
Sugars	1 g	1 %
Protein	6 g	
Cholesterol	0 mg	0 %
Sodium	10 mg	0 %
Potassium	175 mg	3 %
Calcium	25 mg	2 %
Iron	2.1 mg	12 %

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Bread (Whole Grain)

Nutrition Facts
Per 2 slices (75 g)
Calories 200

	Amount	% Daily Value*
Fat	3 g	4 %
Saturated	0.5 g	3 %
+ Trans	0 g	
Carbohydrate	32 g	
Fibre	6 g	20 %
Sugars	5 g	5 %
Protein	10 g	
Cholesterol	0 mg	0 %
Sodium	320 mg	14 %
Potassium	175 mg	4 %
Calcium	75 mg	6 %
Iron	2 mg	10 %

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Cheerios (regular, whole oat)

Nutrition Facts
Per 1 cup (27 g)

	% Daily Value*
Calories 100	
Fat 2 g	3 %
Saturated 0.4 g	2 %
+ Trans 0 g	
Carbohydrate 20 g	
Fibre 3 g	12 %
Sugars 1 g	1 %
Protein 4 g	
Cholesterol 0 mg	
Sodium 170 mg	7 %
Potassium 175 mg	4 %
Calcium 50 mg	4 %
Iron 5.5 mg	30 %

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Quinoa (cooked)

Nutrition Facts
Per 3/4 cup (140 g)

	% Daily Value*
Calories 170	
Fat 2.5 g	4 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 30 g	
Fibre 4 g	14 %
Sugars 0 g	0 %
Protein 6 g	
Cholesterol 0 mg	
Sodium 10 mg	0 %
Potassium 250 mg	5 %
Calcium 20 mg	2 %
Iron 2 mg	12 %

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Spaghetti (cooked without salt)

Nutrition Facts
Per 1 cup (215 g)

	% Daily Value*
Calories 320	
Fat 2 g	2 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 62 g	
Fibre 4 g	13 %
Sugars 1 g	1 %
Protein 12 g	
Cholesterol 0 mg	
Sodium 2 mg	0 %
Potassium 100 mg	2 %
Calcium 10 mg	1 %
Iron 2.5 mg	14 %

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White Long Grain Rice (cooked without salt)

Nutrition Facts
Per 1 cup (140 g)

	% Daily Value*
Calories 180	
Fat 0.4 g	0 %
Saturated 0.1 g	1 %
+ Trans 0 g	
Carbohydrate 39 g	
Fibre 0.6 g	2 %
Sugars 0 g	0 %
Protein 4 g	
Cholesterol 0 mg	
Sodium 1 mg	0 %
Potassium 50 mg	1 %
Calcium 14 mg	1 %
Iron 0.3 mg	2 %

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Turkey Breast (cooked, boneless)

Nutrition Facts
Per 1/6 breast (100 g)

	% Daily Value*
Calories 140	
Fat 0.5 g	1 %
Saturated 0.2 g	1 %
+ Trans 0 g	
Carbohydrate 0 g	
Fibre 0 g	0 %
Sugars 0 g	0 %
Protein 30 g	
Cholesterol 85 mg	
Sodium 50 mg	2 %
Potassium 300 mg	6 %
Calcium 10 mg	1 %
Iron 1.5 mg	8 %

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Broccoli (cooked without salt)

Nutrition Facts
Per 1/2 cup (85 g)

	% Daily Value*
Calories 30	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 6 g	
Fibre 3 g	10 %
Sugars 1 g	1 %
Protein 2 g	
Cholesterol 0 mg	
Sodium 35 mg	2 %
Potassium 250 mg	5 %
Calcium 30 mg	3 %
Iron 0.5 mg	3 %

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Carrot (raw)

Nutrition Facts
Per 2/3 cup (85 g)

	% Daily Value*
Calories 35	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 8 g	
Fibre 3 g	11 %
Sugars 4 g	4 %
Protein 1 g	
Cholesterol 0 mg	
Sodium 60 mg	3 %
Potassium 250 mg	6 %
Calcium 30 mg	2 %
Iron 0.3 mg	2 %

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Corn (cooked without salt)

Nutrition Facts
Per 2/3 cup (85 g)

	% Daily Value*
Calories 90	
Fat 1 g	1 %
Saturated 0.2 g	1 %
+ Trans 0 g	
Carbohydrate 21 g	
Fibre 2 g	8 %
Sugars 3 g	3 %
Protein 3 g	
Cholesterol 0 mg	
Sodium 0 mg	0 %
Potassium 175 mg	4 %
Calcium 0 mg	0 %
Iron 0.4 mg	2 %

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Fiddleheads (cooked)

Nutrition Facts
Per 1/3 cup (85 g)

	% Daily Value*
Calories 30	
Fat 0 g	0 %
Saturated 0 g + Trans 0 g	0 %
Carbohydrate 5 g	0 %
Fibre 0 g	0 %
Sugars 0 g	
Protein 4 g	
Cholesterol 0 mg	
Sodium 0 mg	0 %
Potassium 100 mg	2 %
Calcium 20 mg	2 %
Iron 0.5 mg	3 %

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Green Pepper (raw)

Nutrition Facts
Per 1/2 cup (85 g)

	% Daily Value*
Calories 15	
Fat 0.2 g	0 %
Saturated 0.1 g + Trans 0 g	0 %
Carbohydrate 4 g	5 %
Fibre 1 g	2 %
Sugars 2 g	
Protein 1 g	
Cholesterol 0 mg	
Sodium 3 mg	0 %
Potassium 150 mg	3 %
Calcium 10 mg	1 %
Iron 0.3 mg	1 %

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Tomato (raw)

Nutrition Facts
Per 2/5 cup (85 g)

	% Daily Value*
Calories 15	
Fat 0.2 g	0 %
Saturated 0 g + Trans 0 g	0 %
Carbohydrate 3 g	4 %
Fibre 1 g	2 %
Sugars 2 g	
Protein 1 g	
Cholesterol 0 mg	
Sodium 4 mg	0 %
Potassium 200 mg	4 %
Calcium 10 mg	1 %
Iron 0.3 mg	1 %

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Strawberries (raw)

Nutrition Facts
Per 12 medium (140 g)

	% Daily Value*
Calories 45	
Fat 0.4 g	1 %
Saturated 0 g + Trans 0 g	0 %
Carbohydrate 11 g	10 %
Fibre 3 g	7 %
Sugars 7 g	
Protein 1 g	
Cholesterol 0 mg	
Sodium 1 mg	0 %
Potassium 225 mg	5 %
Calcium 20 mg	2 %
Iron 0.5 mg	3 %

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Potato (baked)

Nutrition Facts
Per 1 small (140 g)

	% Daily Value*
Calories 130	
Fat 0 g	0 %
Saturated 0 g + Trans 0 g	0 %
Carbohydrate 30 g	11 %
Fibre 3 g	2 %
Sugars 2 g	
Protein 4 g	
Cholesterol 0 mg	
Sodium 15 mg	1 %
Potassium 750 mg	16 %
Calcium 20 mg	2 %
Iron 1.5 mg	9 %

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Cantaloupe (raw)

Nutrition Facts
Per 7/8 cup (150 g)

	% Daily Value*
Calories 50	
Fat 0.3 g	0 %
Saturated 0.2 g + Trans 0 g	1 %
Carbohydrate 13 g	5 %
Fibre 1 g	5 %
Sugars 12 g	
Protein 1 g	
Cholesterol 0 mg	
Sodium 25 mg	1 %
Potassium 400 mg	9 %
Calcium 10 mg	1 %
Iron 0.3 mg	2 %

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Bannock (whole wheat, baked)

Nutrition Facts
Per 1 small (55 g)

	% Daily Value*
Calories 130	
Fat 4.5 g	6 %
Saturated 1 g + Trans 0 g	5 %
Carbohydrate 20 g	11 %
Fibre 3 g	1 %
Sugars 1 g	
Protein 4 g	
Cholesterol 0 mg	
Sodium 200 mg	9 %
Potassium 125 mg	2 %
Calcium 40 mg	3 %
Iron 1.25 mg	8 %

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Elk Steak (cooked)

Nutrition Facts
Per 1/2 steak (100 g)

	% Daily Value*
Calories 160	
Fat 3.5 g	5 %
Saturated 1.5 g + Trans 0 g	7 %
Carbohydrate 0 g	0 %
Fibre 0 g	0 %
Sugars 0 g	
Protein 31 g	
Cholesterol 56 mg	
Sodium 50 mg	2 %
Potassium 400 mg	8 %
Calcium 5 mg	0 %
Iron 4 mg	23 %

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Orange (navel, raw)

Nutrition Facts
Per 1 small fruit (140 g)

	% Daily Value*
Calories 70	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 18 g	
Fibre 3 g	11 %
Sugars 12 g	12 %
Protein 1 g	
Cholesterol 0 mg	
Sodium 1 mg	0 %
Potassium 225 mg	5 %
Calcium 50 mg	4 %
Iron 0.2 mg	1 %

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Lentils (cooked without salt)

Nutrition Facts
Per 1/2 cup (125 mL)

	% Daily Value*
Calories 120	
Fat 0.4 g	1 %
Saturated 0.1 g	1 %
+ Trans 0 g	
Carbohydrate 21 g	
Fibre 8 g	29 %
Sugars 2 g	2 %
Protein 9 g	
Cholesterol 0 mg	
Sodium 2 mg	0 %
Potassium 400 mg	8 %
Calcium 20 mg	2 %
Iron 3.5 mg	19 %

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White Milk (2%)

Nutrition Facts
Per 1 cup (250 mL)

	% Daily Value*
Calories 130	
Fat 5 g	8 %
Saturated 3 g	16 %
+ Trans 0.1 g	
Carbohydrate 12 g	
Fibre 0 g	0 %
Sugars 12 g	12 %
Protein 9 g	
Cholesterol 20 mg	
Sodium 120 mg	5 %
Potassium 400 mg	8 %
Calcium 300 mg	23 %
Iron 0 mg	0 %

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Apple (raw with skin)

Nutrition Facts
Per 1 small (140 g)

	% Daily Value*
Calories 70	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 19 g	
Fibre 3 g	12 %
Sugars 15 g	15 %
Protein 1 g	
Cholesterol 0 mg	
Sodium 1 mg	0 %
Potassium 150 mg	3 %
Calcium 10 mg	1 %
Iron 0.1 mg	1 %

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Cucumber (with peel, raw)

Nutrition Facts
Per 4/5 cup (85 g)

	% Daily Value*
Calories 15	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 3 g	
Fibre 0 g	0 %
Sugars 1 g	1 %
Protein 1 g	
Cholesterol 0 mg	
Sodium 2 mg	0 %
Potassium 100 mg	2 %
Calcium 10 mg	1 %
Iron 0.3 mg	1 %

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Lettuce (green leaf, raw)

Nutrition Facts
Per 5-6 leaves (85 g)

	% Daily Value*
Calories 15	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 2 g	
Fibre 1 g	4 %
Sugars 1 g	1 %
Protein 1 g	
Cholesterol 0 mg	
Sodium 40 mg	2 %
Potassium 175 mg	4 %
Calcium 30 mg	2 %
Iron 0.75 mg	4 %

*5% or less is **a little**, 15% or more is **a lot**

Kale (raw)

Nutrition Facts
Per 1 1/5 cups (85 g)

	% Daily Value*
Calories 40	
Fat 0.5 g	1 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 8 g	
Fibre 2 g	6 %
Sugars 0 g	0 %
Protein 3 g	
Cholesterol 0 mg	
Sodium 35 mg	2 %
Potassium 350 mg	8 %
Calcium 125 mg	9 %
Iron 1.5 mg	8 %

*5% or less is **a little**, 15% or more is **a lot**

Sugar Snap Peas (raw with pods)

Nutrition Facts
Per 1 1/2 cup (85 g)

	% Daily Value*
Calories 35	
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 6 g	
Fibre 2 g	8 %
Sugars 3 g	3 %
Protein 2 g	
Cholesterol 0 mg	
Sodium 3 mg	0 %
Potassium 175 mg	4 %
Calcium 40 mg	3 %
Iron 1.75 mg	10 %

*5% or less is **a little**, 15% or more is **a lot**

Chicken Breast
Cooked, boneless

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Pork Chop
Cooked, boneless

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Egg
Large, cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Beef Sirloin Steak
Cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Salmon
Cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Kidney Beans
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Tofu
Firm, raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Peanut Butter
Smooth with salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Cheese, cheddar
31% milk fat

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Yogurt
Fruit, 2.9% milk fat

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Soymilk
Unfortified

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

White Milk
2%

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Elk Steak
Cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Lentils
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Sugar Snap Peas
Raw with pods

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Banana
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Turkey Breast
Cooked, boneless

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Carrot
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Broccoli
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Corn
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Fiddleheads
Cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Tomato
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Potato
Baked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Green Pepper
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Strawberries
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Cantaloupe
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Orange
Navel, raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Green Beans
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Apple
Raw with skin

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Cucumber
With peel, raw

Serving size _____

Calories per serving _____

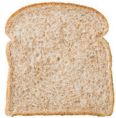| Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Kale
Raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Lettuce
Green leaf, raw

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Bread
Whole grain

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Cheerios
Regular, whole oat

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Bagel
Plain

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Oatmeal Porridge
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Quinoa
Cooked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Spaghetti
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

White Long Grain Rice
Cooked without salt

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

Bannock
Whole wheat, baked

Serving size _____

Calories per serving _____

Nutrient	Amount (g or mg)	% Daily Value
Fat	g	%
Carbohydrates	g	
Fibre	g	%
Sugar	g	%
Protein	g	
Sodium	mg	%
Potassium	mg	%
Calcium	mg	%
Iron	mg	%

PART 1

Using the graph paper provided, create 2 bar graphs showing the nutrient content of your food by following these steps:

BAR GRAPH 1

On Bar Graph 1, you will show the % Daily Value of each of 7 nutrients in your food. Please note that carbohydrates and protein are not included on Graph 1 because they do not have a % Daily Value.

1. **Look at the number scale** on the vertical (up and down) y-axis on Graph 1. **The first four lines have been numbered for you.**

    a. On graph 1, how is the number scale going up

    A) By 1s

    B) By 2s

    C) By 5s

    D) By 10s

    b. Using the same number scale, number the rest of the lines.

2. **Along the y-axis, which is the vertical, up and down axis, put this label:**

    % Daily Value

    Now everyone will know what the numbers are measuring!
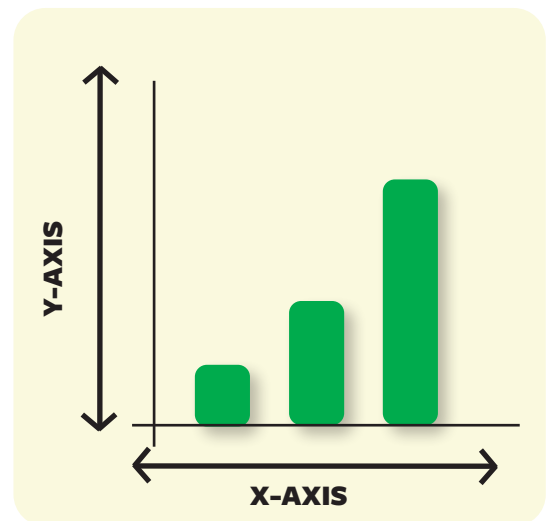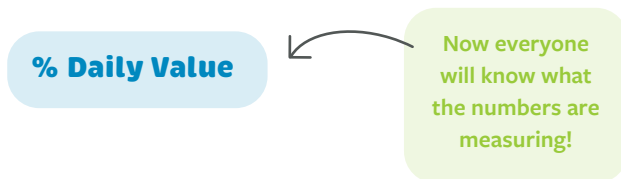
3. **The horizontal x-axis on Graph 1 has already been labeled with 7 nutrients.**

    a. Look on the Nutrition Card you completed for your food to find its % Daily Value for Fat

    b. Use that number to mark on the graph how tall the bar should be for Fat.

    c. Repeat for each of the other 6 nutrients shown on the x-axis

4. **Colour in the bars**, to the height you marked for each nutrient, **with the colour of the food group that your food belongs to.**

    a. Vegetables and Fruit – **green**

    b. Proteins – **orange**

    c. Grains – **yellow**

    This will make it easy to compare everyone's graphs!

BAR GRAPH 2

On Bar Graph 2, you will show the grams of carbohydrates and protein in your food.

1. **The number scale on the vertical (up and down) y-axis on Graph 2 is also going by 2s. The first four lines have been numbered for you.**

    a. Number the rest of the lines along the y-axis

2. **Along the y-axis, which is the vertical, up and down axis, put this label:**

Grams

Now everyone will know what the numbers are measuring!
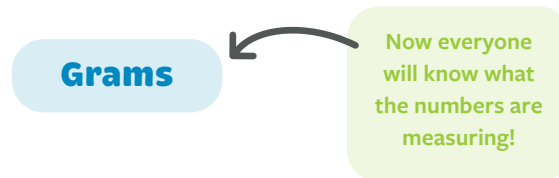
Was it required that the number scale be the same as Graph 1? Explain.

_____

_____

_____

3. **The horizontal x-axis on Graph 2 has already been labeled with carbohydrates and protein.**

    a. Look on the Nutrition Card you completed for your food to find the grams of carbohydrate

    b. Use that number to mark on the graph how tall the bar should be for carbohydrate

    c. Repeat for protein

4. **Use the same colour as you did for Graph 1 to colour in the bars on Graph 2.**

5. **Last, complete the title on your graph by filling in the blank with the name of your food.**

Why is it important to have a title on your graph?

_____

_____

_____

PART 2

Add your graph to the class display under the food group that it belongs to.

After everyone has put up their graph, use the graphs to answer the following questions:

1. **The 3 macro-nutrients, or main nutrients, required by humans are fat, carbohydrates and proteins. Which food group has the most foods with the:**

   a. Smallest amount of fat: _____

   b. Highest amount of carbohydrates:_____

   c. Highest amount of protein:_____

2. **As the graphs show, different foods provide different nutrients and different amounts of nutrients.**

   a. Use the graphs to fill in the chart on the next page with the top three foods for each nutrient.

   b. Identify the food group each food belongs to.

   c. Then, identify which of the top 3 choices is the food you would most like to include in your diet and be prepared to share your reasons.

3. **Study the graphs in each food group and then give a reason why you think Canada's Food Guide recommends that you include foods from every food group at each meal?**

   _____

   _____

   _____

   _____

   _____

NUTRIENTS	TOP 3 FOODS	FOOD GROUP	YOUR PREFERENCE
Carbohydrates			
Protein			
Fibre			
Potassium			
Calcium			
Iron			

Nutrients in 1 serving of _____

Graph 2

Carbohydrate · Protein

6 · 4 · 2 · 0

Graph 1

Fat · Fibre · Sugar · Sodium · Potassium · Calcium · Iron

6 · 4 · 2 · 0
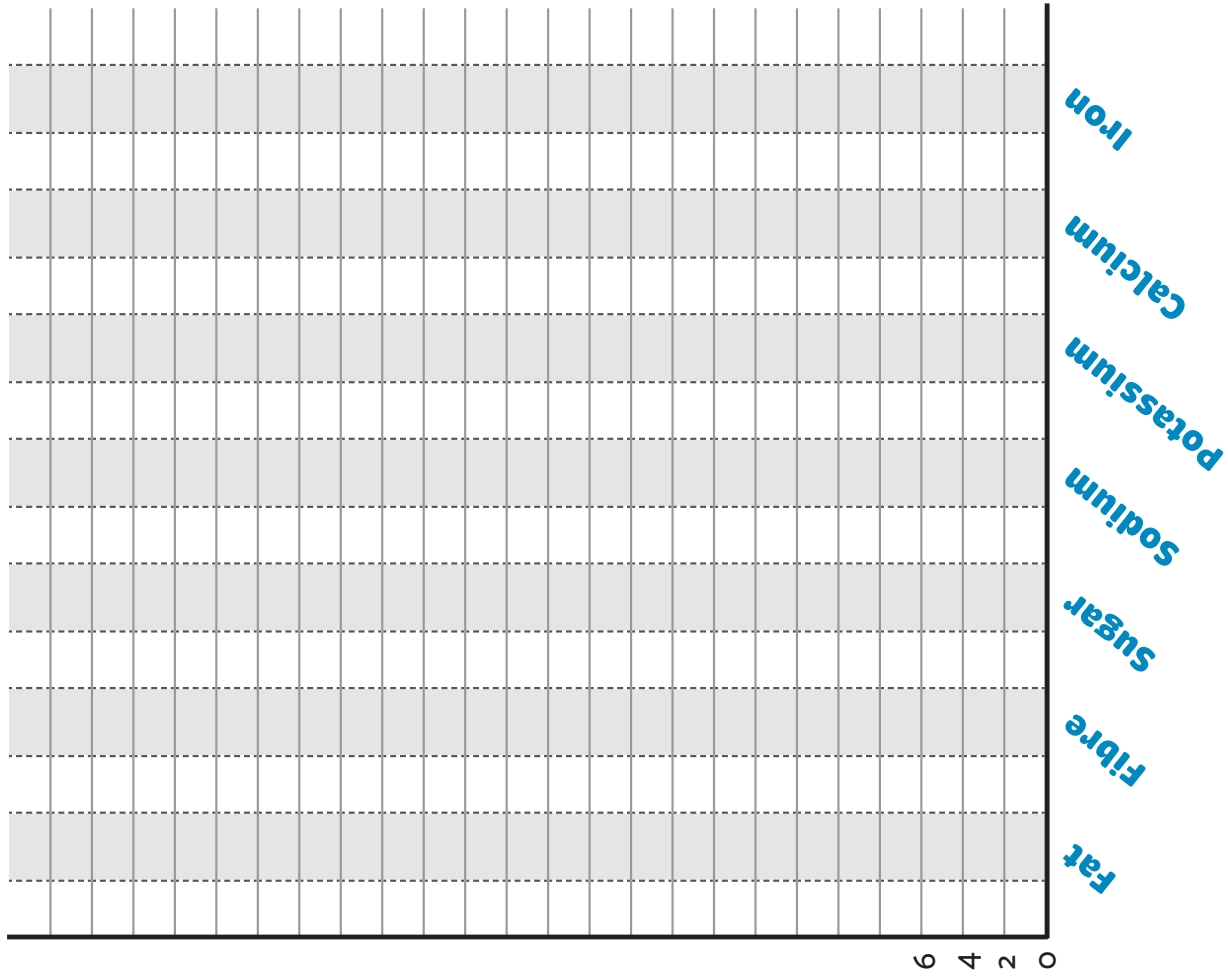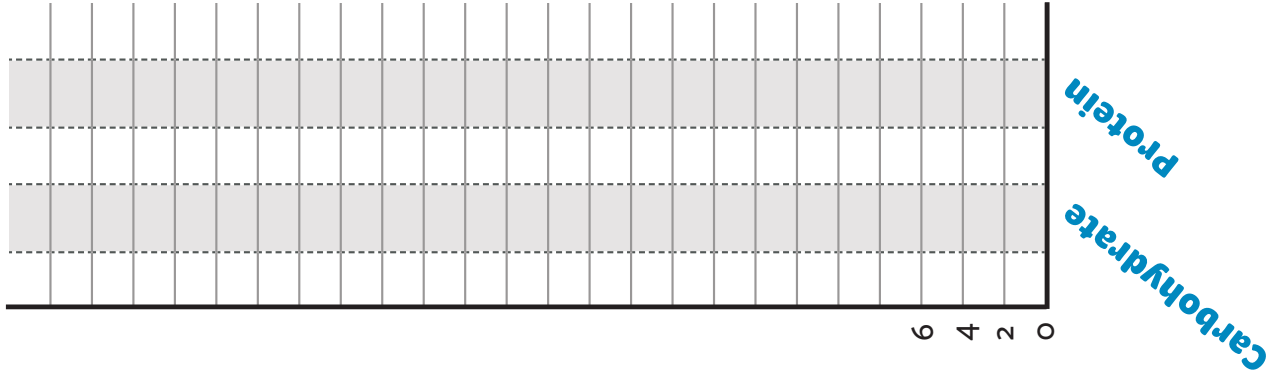
Canadians are very fortunate to live in a country with a very good agriculture and food system. In Canada, close to 300,000 farmers and over 2 million people work every day in the agriculture and food industry to provide us with safe, quality and abundant food choices.

Having so many food choices and such abundance is a very good thing, but it can also make it hard to make healthy food choices.

The Canadian government has updated its healthy eating guide to make it easier for you and other Canadians to make healthy food choices.

As part of this update, the government released a new nutrition facts table in December 2016. Food businesses must start phasing out the old table and replacing it with the new table between 2017 and 2022. Next time you buy food check to see if it has the new nutrition facts table.

A) NUTRITION FACTS TABLE[1]

ORIGINAL

Nutrition Facts
Valeur nutritive
Per 250 mL / par 250 mL

Amount Teneur	% Daily Value % valeur quotidienne
Calories / Calories 110	
Fat / Lipides 0 g	0 %
Saturated / saturés 0 g + Trans / trans 0 g	0 %
Cholesterol / Cholestérol 0 mg	
Sodium / Sodium 0 mg	0 %
Carbohydrate / Glucides 26 g	9 %
Fibre / Fibres 0 g	0 %
Sugars / Sucres 22 g	
Protein / Protéines 2 g	
Vitamin A / Vitamine A	0 %
Vitamin C / Vitamine C	120 %
Calcium / Calcium	2 %
Iron / Fer	0 %

NEW

Nutrition Facts
Valeur nutritive
Per 1 cup (250 mL)
pour 1 tasse (250 mL)

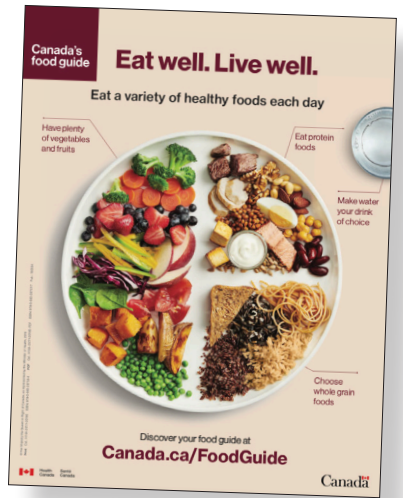| Calories 110	% Daily Value* % valeur quotidienne*
Fat / Lipides 0 g	0 %
Saturated / saturés 0 g + Trans / trans 0 g	0 %
Carbohydrate / Glucides 26 g	
Fibre / Fibres 0 g	0 %
Sugars / Sucres 22 g	22 %
Protein / Protéines 2 g	
Cholesterol / Cholestérol 0 mg	
Sodium 0 mg	0 %
Potassium 450 mg	10 %
Calcium 30 mg	2 %
Iron / Fer 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**
*5% ou moins c'est **peu**, 15% ou plus c'est **beaucoup**

1. How many differences can you find? List them below.

_____

_____

_____

_____

_____

B) VITAMINS AND MINERALS

Did you notice the change in the minerals and vitamins that are included in the new nutrition facts table?

Potassium was added because most Canadians are not getting enough potassium and it's important for maintaining healthy blood pressure. The new nutrition facts table will make it easy for you to choose foods that will help you get enough potassium.

Vitamin A and Vitamin C were removed because, even though they are important nutrients, most Canadians get enough Vitamin A and Vitamin C in their diets. That is not surprising when you look at the food examples in the chart to the right.

One (1) serving of	% Daily Value	
	Vitamin A	Vitamin C
Broccoli (85 g)	44%	61%
Carrots (85 g)	472%	6%
Cantaloupe (150 g)	171%	61%
Eggs (105 g)	21%	0%
Fiddleheads (85 g)	95%	16%
Green Leaf Lettuce (85 g)	207%	17%
Green Pepper (85 g)	11%	75%
Kale (85 g)	435%	112%
Orange (140 g)	12%	92%
Potato (140 g)	0%	15%
Strawberries (140 g)	7%	91%
Sugar Snap Peas (85 g)	30%	56%
Tomato (85 g)	24%	12%

Vitamin A is needed for:

- Eyesight
- Healthy skin
- Bone and tooth growth
- Immune system health

Vitamin C is needed for:

- Digesting protein
- Immune system health
- Iron absorbtion

C) SUGAR

A % daily value has been added for sugar.

1. See if you can fill in the blanks below:

22 g of sugar = 22 % daily value of sugar

1 g of sugar = _____% daily value of sugar

_____ g of sugar = 100 % daily value of sugar

2. If 1 teaspoon of sugar = 4 grams, then how many teaspoons of sugar are in 100 grams? _____ teaspoons

D) % DAILY VALUE – A LITTLE OR A LOT

Did you see the new information at the bottom of the new nutrition facts table above? This information can help you make healthy food choices.

5% Daily Value or less is **a little**

15% Daily Value is **a lot**

This applies to all nutrients with a % Daily Value

When making an informed food choice here are some nutrients you may want...

A LITTLE OF:

- Saturated and trans fats
- Sodium
- Sugar

A LOT OF:

- Fibre
- Potassium
- Calcium
- Iron

E) SODIUM

The Canada Food Guide recommends you choose foods with a little sodium (less than 5%) often. Here's why.[2]

A **salty** Situation

2760 mg

1500 mg

How much sodium Canadians NEED/day

How much sodium Canadians EAT/day

VS.

That's almost **2x** the **sodium we need**.[1]

3 OUT OF **5** CANADIANS EAT **TOO MUCH SODIUM**[1]

Too much sodium can cause **high blood pressure** and lead to **HEART DISEASE** and **STROKE**.[2]

Percentage (%) of Canadian population eating **too much sodium**:[1]

49% | 1–3 yrs | CHILDREN | 4–13 yrs | 72%

MALES | FEMALES
92% | 14–18 | 14–18 | 50%
96% | 19–30 | 19–30 | 45%
75% | 31–50 | 31–50 | 45%
67% | >50 | >50 | 29%

TOP 6 sources of **SODIUM** in our diet:[1]

1. Bakery Products
2. Appetizers/Entrées
3. Processed Meat
4. Cheese
5. Soups
6. Sauces/Condiments

The average **restaurant** meal item contains **1 DAY'S WORTH** of the recommended intake of sodium.[3]

[1] Sodium Intake of Canadians in 2017 (July 2018). www.canada.ca/en/health-canada/services/publications/food-nutrition/sodium-intake-canadians-2017.html
[2] Sodium Reduction Strategy for Canada (July 2010). www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/sodium/related-information/reduction-strategy/recommendations-sodium-working-group.html
[3] Scourboutakos, M.J., L'Abbé, MR. (2013). Sodium Levels in Canadian fast-food and sit-down restaurants. Can J Public Health. 104(1):e2-e8.

Learn how **HEALTH CANADA** is committed to reducing **sodium** in processed foods
www.canada.ca/healthy-eating-strategy

Health Canada   Santé Canada

Canada

Your body needs a small amount of sodium each day because sodium:

- Helps maintain the right balance of fluids in your body
- Helps transmit nerve impulses
- Helps with the contraction and relaxation of muscles[15]

ONE TEASPOON

of salt contains 2325 mg of sodium[15]

1. How much sodium do Canadians need every day? _____

2. What percentage of Canadian middle school children eat too much sodium? _____

3. How much sodium is in one teaspoon of salt? _____

4. How much sodium is in the average restaurant meal item? _____

F) DRINKS

Thirsty? Make a healthy choice often. Even though water contains no nutrients and no calories, water is a very healthy beverage choice! On average, 55% to 75% of our body is made of water. But water is lost every time we breathe out, sweat, or go to the toilet.

To replace the water lost from your body you should drink water every day, especially when it is hot, or when you are very active. Since food, especially vegetables and fruits, also contains water, eating provides your body with water too.

If you are going to drink a beverage other than water, then choose to drink a healthy beverage often. Remember sugar is a nutrient that we only want a little of!

5%
DAILY VALUE
OR LESS IS
A LITTLE

Complete the following questions.

1. Below are six nutrition labels from six different beverages. Study the nutrition facts for each beverage A – F. Decide if each beverage is one that you should consume:

often   sometimes   seldom

Circle your choice above each nutrition label. (Be prepared to give reasons for your choices.)

A. often sometimes seldom

Nutrition Facts
Per 1 carton (250mL)

Calories 130	**% Daily Value***
Fat 5 g	8 %
Saturated 3 g	16%
+ Trans 0.1 g	
Carbohydrate 12 g	
Fibre 0 g	0 %
Sugars 12 g	12 %
Protein 9 g	
Cholesterol 20 mg	
Sodium 120 mg	5 %
Potassium 400 mg	8 %
Calcium 300 mg	23 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

B. often sometimes seldom

Nutrition Facts
Per 1 bottle (591mL)

Calories 120	**% Daily Value***
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 32 g	
Fibre 0 g	0 %
Sugars 32 g	32 %
Protein 0 g	
Cholesterol 0 mg	
Sodium 0 mg	0 %
Potassium 0 mg	0 %
Calcium 0 mg	0 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

C. often sometimes seldom

Nutrition Facts
Per 1 can (355mL)

Calories 140	**% Daily Value***
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 39 g	
Fibre 0 g	0 %
Sugars 39 g	39 %
Protein 0 g	
Cholesterol 0 mg	
Sodium 25 mg	1 %
Potassium 0 mg	0 %
Calcium 0 mg	0 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

D. often sometimes seldom

Nutrition Facts
Per 1 medium cup (651mL)

Calories 290	**% Daily Value***
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 75 g	
Fibre 0 g	0 %
Sugars 78 g	78 %
Protein 0 g	
Cholesterol 0 mg	
Sodium 65 mg	3 %
Potassium 0 mg	0 %
Calcium 0 mg	0 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

E. often sometimes seldom

Nutrition Facts
Per 1 bottle (710mL)

Calories 150	**% Daily Value***
Fat - g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 40 g	
Fibre 0 g	0 %
Sugars 40 g	40 %
Protein 0 g	
Cholesterol 0 mg	
Sodium 290 mg	12 %
Potassium 70 mg	2 %
Calcium 0 mg	0 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

F. often sometimes seldom

Nutrition Facts
Per 1 box (200mL)

Calories 100	**% Daily Value***
Fat 0 g	0 %
Saturated 0 g	0 %
+ Trans 0 g	
Carbohydrate 23 g	
Fibre 0 g	0 %
Sugars 20 g	20 %
Protein 0 g	
Cholesterol 0 mg	
Sodium 15 mg	1 %
Potassium 370 mg	11 %
Calcium 0 mg	0 %
Iron 0 mg	0 %

*5% or less is **a little**, 15% or more is **a lot**

2. To complete the chart:

a. Match the beverages in the box below to their nutrition label above
in question 1.

b. Fill in the %DV for sugar for each beverage

15%

DAILY VALUE
OR MORE IS
A LOT

100% Orange Juice   **Coca-Cola**   **2% White Milk**

Slurpee (Coca-Cola flavour)   **Powerade**   **Vitamin Water**

| Q #1 Nutrition Label	a) Beverage	b) Sugar %DV
A		
B		
C		
D		
E		
F		

TO SLURP OR NOT TO SLURP?

Since Slurpees provide no other nutrients except sugar, consider it to be a seldom drink. If you
do buy a slurpee, you can reduce your sugar intake by getting the smallest size.

3. Check out the infographic 'Count Your Cubes!' below. Then use the information to calculate the %DV for the beverages below.

a. Chocolate Milk (250 mL)   -   _____ %Daily Value

b. Flavoured Latte (355 mL)   -   _____ %Daily Value

c. Sweetened Iced Tea (695 mL)   -   _____ %Daily Value

d. Energy Drink (710 mL)   -   _____ %Daily Value

SWEET HINT

1 cube = 1 teaspoon of sugar = 4 grams of sugar

1 gram of sugar = 1% daily value of sugar
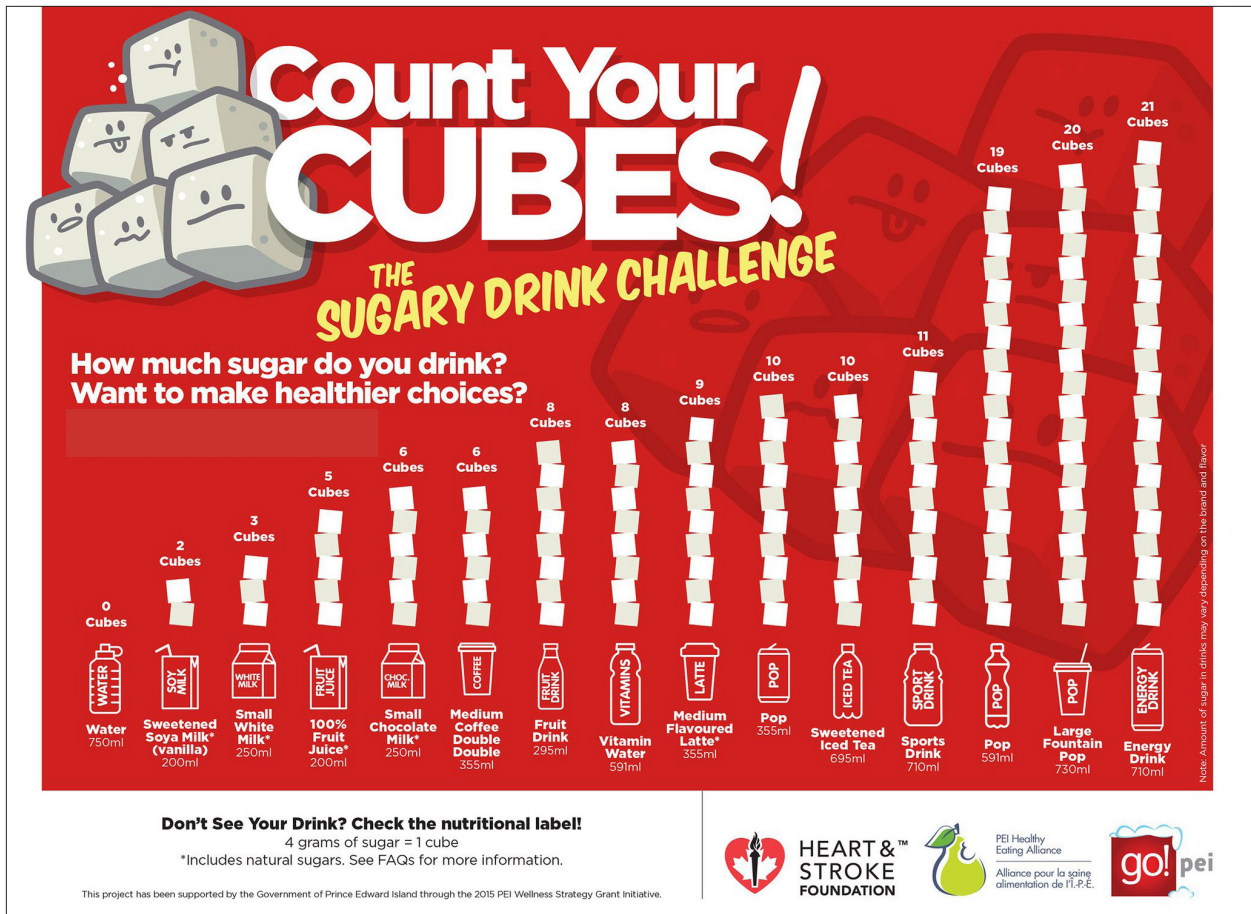
The Canada Food Guide says:

- Make water your drink of choice
- Replace sugary drinks with water

Healthy drink options other than water include:

- white milk (unsweetened lower fat milk)
- unsweetened fortified plant-based drinks like:
  - » soy beverage
  - » almond beverage

4. Give reasons why you think the Canada Food Guide recommends you choose these beverages and not others.

_____

_____

_____

_____

PART 1 - PROTEIN NUTRITION

Canada's Food Guide recommends that ¼ of your plate is protein foods.[3]

Protein is a nutrient which is essential for good health. It provides energy for the body.

PROTEIN IS:

- Part of all skin, hair, nails, muscle, bone, internal organs and body fluids
- Important for building and repairing body tissue
- Vital for body processes, such as blood clotting, immune response, vision and production of hormones and enzymes
- Important for growth in children

DID YOU KNOW?

The **legume family** of plants provide plant-based proteins for our diet. Canadian farmers have become leaders in soybean, pea, bean, chickpea, and lentil production. Even though we have a short growing season, we have developed legume crops that mature earlier.

Canada exports **billions of dollars** worth of legumes to countries all over the world.[4]

Protein is found in many animal and plant foods.
Using a deck of nutrition cards, complete the following:

1. Select all the protein foods (orange cards) from the deck of cards.

2. Sort the protein food cards into animal-based proteins and plant-based proteins.

3. Canadian farmers grow the protein foods we eat. Crop farmers grow cereal crops, including wheat and oats, and legume crops, including soybean, peas, beans, and lentils. Many different farmers grow animal-based protein. In the chart below:

    a. Match the animal-based protein food cards to the livestock farmer that produces that food.

    b. Check off all products that are grown in:

        a. Canada

        b. Manitoba

Who's growing your animal-based protein?		Grown in:	
The Farmer	**Food(s) Produced**	**Canada**	**Manitoba**
Beef Producers			
Chicken Producers			
Dairy Farmers			
Egg Farmers			
Elk Growers			
Pork Producers			
Salmon Producers			
Turkey Producers			

4. Arrange the **protein** cards (orange cards) from the food with the largest amount of **protein** to the smallest amount.

    What do you observe?

    _____

    _____

    _____

5. Select all the **grain** cards (yellow cards). Look at the number of grams of **protein** for each food. Compare these grain foods to the protein foods (orange cards).

    What do you observe?

    _____

    _____

    _____

6. Select all the **vegetables** and fruit cards (green cards). Look at the number of grams of **protein** for each food.

    What do you observe?

    _____

    _____

    _____

PART 2 - WHAT ARE PROTEINS?

Proteins are large, complex molecules made up of chains of amino acids. There are 20 different amino acids that combine to make up every type of protein in our bodies. Our body can make 11 of the amino acids but the other 9 must come from food. These 9 are called essential amino acids (EAAs).[5]

Foods are categorized by whether they have all 9 EAAs.

Foods that have 9 EAAs are called complete proteins, or high-quality proteins.

Foods that have only some of the EAAs are called incomplete proteins.

Eating complementary proteins in the same meal or during the same day can help you meet your protein needs.

COMPLETE PROTEINS

- Animal foods such as:
  » Meats
  » Poultry
  » Eggs
  » Dairy Products
  » Seafood
- Soy
- Quinoa

INCOMPLETE PROTEINS

- Pulses such as:
  » Beans
  » Lentils
  » Chickpeas
- Whole grain foods
- Nuts

Complementary proteins are any two or more incomplete protein foods that when eaten together provide all 9 EAAs.

For example, grains are low in the EAA lysine, while legumes, such as beans and peanuts, are low in EAA methionine. Legumes and grain combinations, like beans and rice or peanut butter on whole wheat bread, are complementary proteins because when eaten together they will provide you with all 9 EAAs.[6]

Essential Amino Acids (EAAs) include:

- Histidine
- Isoleucine
- Leucine
- Lysine
- Methionine
- Phenylalanine
- Threonine
- Tryptophan
- Valine
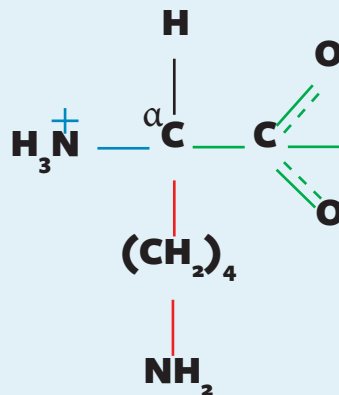
LYSINE AMINO ACID

The traditional Indigenous crops of maize (corn), beans and squash, known as the Three Sisters, are also complementary proteins because when eaten together, they will provide you with all 9 EAAs. [7]

https://www.slideshare.net/SamanthaBray2/three-sisters-garden

IS ONE PROTEIN SOURCE BETTER THAN THE OTHER?

Both plant-based and animal-based protein foods contain nutrients critical to good health.

1. Select all the **protein** foods (orange cards) from the deck of nutrition cards. Then arrange all the **protein** foods (orange cards) from the food with the largest amount of **fibre** to the smallest amount.

    What do you observe? _____

    Besides being a good source of fibre, most plant-based protein foods are low in saturated fat. Canada's Food Guide suggests that saturated fat is a nutrient we may want less of.

    Animal-based protein foods are superior sources of vitamin B_{12}, vitamin D_3, DHA omega-3 fatty acids and heme iron, the type of iron most readily absorbed by your body. Consuming meat with other foods will enhance the absorption of iron and zinc in those other foods.[8] Canada's Food Guide suggests that iron is a nutrient we may want more of.

> **Animal-based proteins provide the ONLY natural source of B_{12} in our diet.**

Animal-based protein food is more protein-dense because it has more protein per serving than plant-based protein.

2. a. Using the information from the orange cards, complete the chart below:

Animal-based Protein Food	Calories/ Serving	Protein in Grams
Beef Sirloin Steak		
Chicken Breast		
Pork Chop		

Plant-based Protein Food	Calories/ Serving	Protein in Grams
Kidney Beans		
Peanut Butter		
Tofu		

b. Use the information from the charts to complete the following sentences:

To include about 30 grams of protein in your meal, you would need to eat one of the following:

- About _____ serving(s) of beef which would contain _____ total calories.
- About _____ serving(s) of chicken which would contain _____ total calories.
- About _____ serving(s) of pork which would contain _____ total calories.
- About _____ serving(s) of kidney beans which would contain _____ total calories.
- About _____ serving(s) of peanut butter which would contain _____ total calories.
- About _____ serving(s) of tofu which would contain _____ total calories.

c. What do you observe? _____

> In a study that compared land use for plant and animal-based proteins, producing the same nutritional amount of protein from plant and animal sources requires approximately the same land use.[9]

YOUR FOOD CHOICES

There are a great variety of animal-based proteins and plant-based proteins to choose from. Since each provide you with different kinds and amounts of nutrients you need, it is easy to see why eating a variety of protein foods is important. In Canada, we are fortunate to have many 'grown in Canada', healthy animal and plant-based protein foods for you to choose from to fill ¼ of your plate.

CANADA'S
Food Guide says:

'Make it a habit to eat a variety of healthy foods EVERY DAY!'

TEST YOUR UNDERSTANDING

1. Of the 20 amino acids that are used by our body to make protein, how many are considered essential amino acids (EAAs) and why?

_____

_____

2. Give 3 examples of foods that are:

    a. Complete proteins _____

    _____

    b. Incomplete proteins _____

    _____

3. Canada's Indigenous people traditionally grew the 'three sisters' crop. Explain how this provided them with a complete source of protein?

_____

_____

4. Identify other nutrients, besides protein, that each of the following provide:

    a. Plant-based proteins _____

    _____

    b. Animal-based proteins _____

    _____

5. List 10 examples of protein foods that you enjoy eating.

_____

_____

_____

_____

PART 3 - DECREASING THE ENVIRONMENTAL IMPACT OF PRODUCING PROTEIN FOODS IN CANADA

We all need food. To eat is to impact the environment because producing food requires the use of environmental resources such as air, water, sunlight, and soil nutrients. Canadian farmers are focused on using these environmental resources sustainably to produce safe, nutritious food at an affordable price. Farmers, using the latest in science and technology, are finding improved ways to increase food production, while decreasing its environmental impact.

Here are a few examples:

PLANT-BASED PROTEIN

- **Conservation or zero-till**. Not ploughing or turning the soil over can reduce soil erosion by 95% or more compared to ploughing the soil and can make the soil more resistant to erosion over time. Soil under no-till agriculture can store on average 29% more carbon than soil that is ploughed.

- **Genetically Engineered (GE) Crops.** Genetically engineered crops that are resistant to herbicides reduce the need to plough land to control weeds. Less ploughing means less soil carbon is released into the atmosphere.

- **Precision Agriculture.** Technology such as GPS guidance, drones, sensors, soil sampling and precision machinery, is used by farmers to make more informed decisions about their crops. This helps farmers do the right thing, in the right place, at the right time and grow the best crop possible with the lowest environmental footprint.

- **Including Legumes, like soybeans, peas, beans, lentils, in the Crop Rotation**. Crop rotation is the practice of growing a different crop in a field each year over a period of 3 – 4 years. Unlike other plants, legumes can take nitrogen from the air and put it into the soil where plants can use it. Nitrogen is one of the main nutrients required by plants. Growing legumes reduces greenhouse gas emissions (GHGs) because less man-made nitrogen fertilizer needs to be produced and spread on legume crops. Both the production and spreading of man-made fertilizers requires the burning of fossil fuels. Growing legumes also improves the soil for next year's crop.

A common crop rotation used by Manitoba farmers is:

Year 1 – oilseed (canola, soybean, sunflower, flax)

Year 2 – cereal (wheat, barley, oats or corn)

Year 3 – pulse (field peas, lentils, beans, chickpeas)

Year 4 – cereal (oats, barley, corn or wheat)

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
Canola	Wheat	Oats	Canola	Field Peas	Oats	Wheat	Field Peas
Oats	Field Peas	Field Peas	Wheat	Wheat	Canola	Canola	Oats
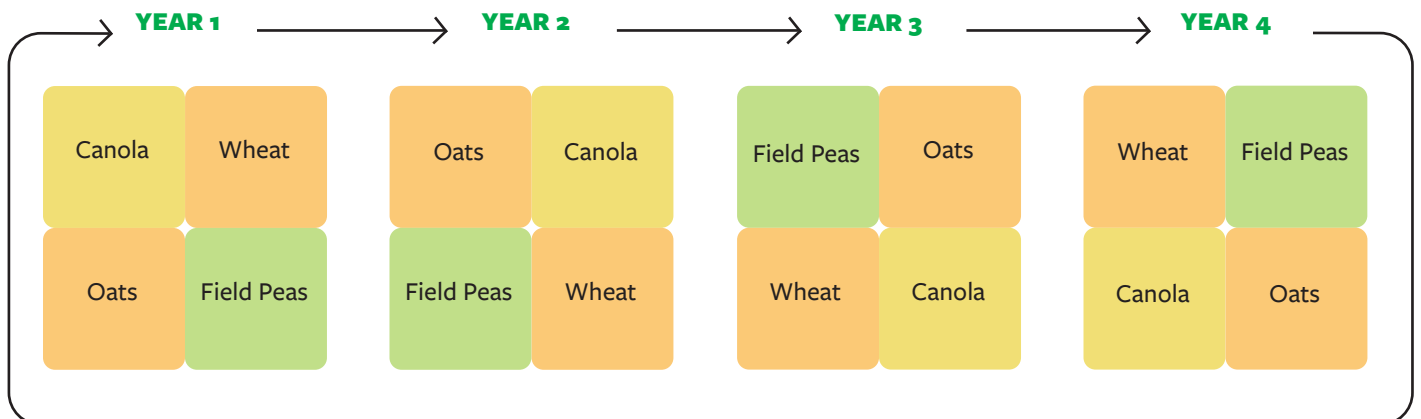
ANIMAL-BASED PROTEIN

Canada is one of the lowest GHG emitters for animal protein in the world. In Canada, it accounts for about 4% of our country's total GHG emissions.[10]

Producing 1kg of beef in Latin America, India or China generates twice the methane as in North America, Europe or Australia.[11]

The Grazers – such as cattle and sheep.

Nearly ¼ of Canada's total agricultural land is grasslands.[12]
This land is not suited for crops, but it can grow grass. Grasslands must be grazed to keep them healthy. Historically, our native grasslands were grazed by bison. Grazing allows the sun to reach the soil giving many different plant species the opportunity to compete and grow. Grass that is not grazed, grows tall, dies in the autumn, and forms a thick mat on top of the soil, making it difficult for the sun to penetrate and preventing the growth of many plant species.

Over time, a grassland that is not grazed loses its biodiversity because only a few vigorous, dominant grass species survive and grassland animal populations, many currently threatened, decline with the loss of habitat. Today, grazing cattle maintain the health of our grasslands and at the same time convert what for us is inedible grass into protein we can eat!

Baird's Sparrow

Burrowing Owl

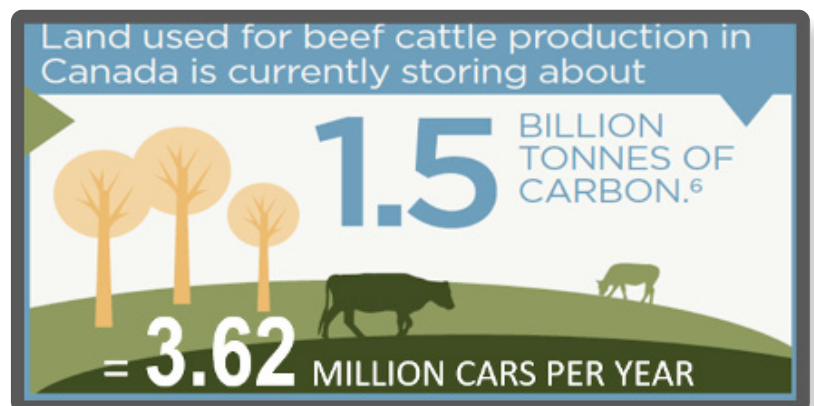**Just two examples of threatened grassland species**

Proportionally, more of the Great Plains grasslands have been converted to cropland than the Brazilian Amazon rainforest has been lost to deforestation. [14]

The Great Plains of the Canadian prairies is 1 of 4 remaining endangered temperate grasslands ecosystems in the world. It is important that these delicate grassland ecosystems are not converted to crop production or developed for residential use but are maintained to protect habitat for wildlife, protect wetlands, reduce flooding and store carbon to offset greenhouse gas (GHG) emissions. [13]

Livestock's Environmental Footprint

All of Canada's livestock industries are continually working to decrease their impact on the environment while still producing nutritious, safe animal-based protein. Science, technology and innovation have given farmers the tools to reduce their farms' environmental footprint. Innovations like:

- Improved breeding. Animals grow more quickly and bigger, so we need less feed, water, land and fewer animals.
- Improved diets. Better nutrition means animals grow more quickly, stay healthy and cattle burp fewer greenhouse gases.
- Improved manure (livestock poop) management. New ways of handling manure, which is used as a natural fertilizer for plants, has decreased pollution and greenhouse gas emissions.
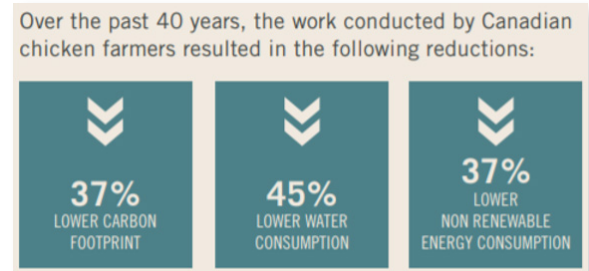

Land used for beef cattle production in Canada is currently storing about

1.5 BILLION TONNES OF CARBON.[6]

= **3.62** MILLION CARS PER YEAR

Here is a quick snapshot of what livestock farmers have accomplished so far:

- **Beef Producers:**

A SHRINKING *environmental* HOOFPRINT

IN CANADA, PRODUCING A KG OF BEEF ON-FARM IN 2011 RESULTED IN:

14% less CH_4 15% less N_2O 12% less CO_2

AND REQUIRED

29% *fewer* cattle   24% *less* land

THAN IT DID IN 1981[12]

Due to improved production and feed efficiencies, crop yields and management practices

Alberta Beef Producers: https://irp-cdn.multiscreensite.com/f1ef9cf3/files/uploaded/609.pdf

- **Chicken Farmers**: Canadian chicken production has the world's lowest carbon footprint of any chicken producing region. Chicken Farmers of Canada, 1976-2016:
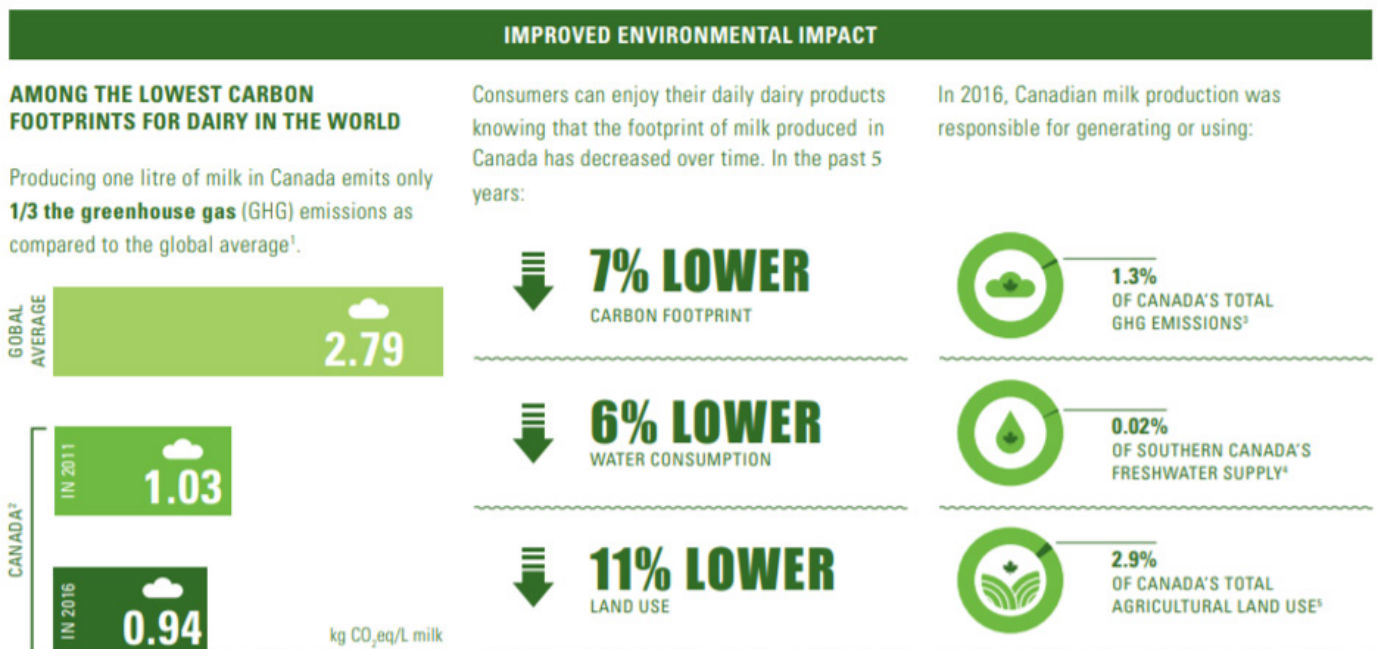

Over the past 40 years, the work conducted by Canadian chicken farmers resulted in the following reductions:

37% LOWER CARBON FOOTPRINT   45% LOWER WATER CONSUMPTION   37% LOWER NON RENEWABLE ENERGY CONSUMPTION

https://www.chickenfarmers.ca/wp-content/uploads/2018/08/CFC_ENG_F_Simple.pdf

- **Egg Farmers**: The environmental footprint of Canada's egg production supply chain declined by almost 50% between 1962 and 2012, while egg production increased by 50%. In that time frame, the Canadian egg industry used 81% less land, 41% less energy and 69% less water. The industry produced 61% fewer emissions that contribute to acid rain, 68% fewer emissions of nitrogen and phosphorus and 72% fewer greenhouse gas emissions.[16]

- **Pork Producers:** About 35% less GHGs are emitted from hog farms now than 50 years ago. It is estimated that in the last 50 years, the total of all-natural resources used by pigs has decreased by about 50% per kilogram of pork. For every kilogram of pork produced today, farmers use about 40% less water, 33% less feed and as much as 59% less land.[18]

- **Dairy Farmers:** Improvements to cow comfort and feed efficiency have helped make Canadian dairy more sustainable. Did you know it takes 65% fewer dairy cows to produce milk for all of Canada today than it did 50 years ago? [17]

https://dairyfarmersofcanada.ca/sites/default/files/2019-01/PLC-Info-ANG-F-17-12-2018_0.pdf

IMPROVED ENVIRONMENTAL IMPACT

AMONG THE LOWEST CARBON FOOTPRINTS FOR DAIRY IN THE WORLD

Producing one litre of milk in Canada emits only **1/3 the greenhouse gas** (GHG) emissions as compared to the global average[1].

GLOBAL AVERAGE: 2.79
CANADA[2] IN 2011: 1.03
IN 2016: 0.94   kg CO_2eq/L milk

Consumers can enjoy their daily dairy products knowing that the footprint of milk produced in Canada has decreased over time. In the past 5 years:

7% LOWER CARBON FOOTPRINT

6% LOWER WATER CONSUMPTION

11% LOWER LAND USE

In 2016, Canadian milk production was responsible for generating or using:

1.3% OF CANADA'S TOTAL GHG EMISSIONS[3]

0.02% OF SOUTHERN CANADA'S FRESHWATER SUPPLY[4]

2.9% OF CANADA'S TOTAL AGRICULTURAL LAND USE[5]

Canadian farmers are very proud of the work they have done to decrease their environmental footprint while still providing Canadians with abundant, nutritious, safe food. Canadian farmers are committed to supporting and adopting scientific research into methods for growing their crops and livestock that will further decrease the environmental footprint of food production.

How can you help decrease food's environmental footprint?

You can help decrease the environmental impact of food by decreasing the amount of food you throw away. Canadian farmers and the agriculture industry have become so successful at providing Canadians with abundant, safe, nutritious, inexpensive food that Canadians tend to take food for granted. Every time you throw food away you are not only wasting that food and the dollars spent to buy it, but also all the land, water, fossil fuels, greenhouse gas emissions and worker's time and energy used to grow, process and transport that food. It is estimated that consumers like you and me are responsible for 47% of the food wasted in Canada. That food waste creates about 56.6 million tonnes of greenhouse gas emissions.

Food Waste
Where it occurs through Canada's food value chain (% distribution)

- 10% On farm
- Consumers 47%
- Processing 20%
- Restaurants & hotels 4%
- 10% Retail
- 9%
- Transport & Distribution

Food waste thrown in the landfill gets buried under other garbage where, due to a lack of oxygen, it undergoes **anaerobic** decomposition which releases methane, a greenhouse gas. Methane has 25 times the global warming potential of carbon dioxide. It is better to compost food waste. Composted food waste is broken down by **aerobic** decomposition, a process which uses oxygen from the air and produces compost which is used as a fertilizer for growing plants.

AEROBIC: with oxygen

ANAEROBIC: without oxygen

YOUR ACTIONS CAN HELP SOLVE CANADA'S FOOD WASTE PROBLEM. YOU CAN TAKE ACTION BY:

- Make a shopping list and stick to it so you don't overbuy.
- Use leftovers, or freeze them for later use, instead of throwing them away.
- Serve yourself small amounts– you can always go back for seconds if you're still hungry.
- Compost food scraps.

DID YOU KNOW?

40% of Winnipeg's residential waste is made up of compostable materials.

Livestock also help reduce food waste. By-products from food and energy processing, such as the canola meal left after the canola oil has been removed or distillers' grain that is left over after ethanol production, are fed to livestock instead of being throw away. Livestock also eat grains and legumes that, because of pest or weather damage, are not high quality enough for humans to eat. Livestock turn what would otherwise be food waste into high quality protein for our plates.

FOOD WASTE IN CANADA

THE FACTS

58% of food produced in Canada is lost or wasted each year.

Food waste costs Canada's economy more than **$49 BILLION** each year.

Each year, food waste in Canada creates about **56.6 MILLION TONNES** of carbon dioxide-equivalent emissions.

Organics wasted in a landfill produce methane gas which is **25 TIMES** more damaging to the environment than carbon dioxide.

The average Canadian household spends **$1,766** on food that is wasted every year.

35.5 MILLION TONNES of food produced in Canada is lost or wasted each year.

32% of this, amounting to

11.2 MILLION TONNES could be **rescued** to support communities across Canada.

This is equivalent to the weight of almost

95 CN TOWERS

Source:
The Avoidable Crisis of Food Waste (2019): Roadmap: Second Harvest and Value Chain Management International

WRWCanada.com

WASTE REDUCTION WEEK IN CANADA

#WasteReductionWeek

Test Your Understanding

1. Describe one example of how crop farmers are reducing the environmental impact of growing plant-based protein.

_____

_____

_____

2. Explain how growing legumes such as peas or beans helps to reduce greenhouse gas emissions.

_____

_____

_____

3. Why is it important that our delicate prairie grassland ecosystems not be converted to crop production or developed for residential use?

_____

_____

_____

4. Historically, bison were the grazing animals that kept the Canadian grasslands healthy. What grazing animal is maintaining the health of our endangered grasslands today?

_____

5. Identify 3 ways that science, technology and innovation have been used to reduce the environmental footprint of livestock farming.

_____

_____

_____

_____

6. Pick one of the farm animals raised in Canada. For that animal, identify 3 facts about its environmental footprint today compared to the past.

_____

_____

_____

_____

7. When food is thrown in the garbage, describe what is being wasted besides the food and your money?

_____

_____

_____

8. a. What percentage of food waste in Canada are consumers, like you and me, responsible for?

_____

    b. How many tonnes of greenhouse gas emissions are produced by that food waste?

_____

9. Some food waste, such as eggshells and banana peels, is unavoidable. Explain why it is better to compost food waste rather than throw it in the landfill.

_____

_____

_____

_____

10. a. List 2 ways you can help reduce food waste.

_____

_____

_____

b. Your ideas. Describe your tip for reducing food waste that is not already on the list above.

_____

_____

_____

11. Explain how livestock help decrease food waste.

_____

_____

_____

_____

YOUR CHALLENGE

Plan a healthy meal that you would enjoy eating with others using a selection of food from the nutrition cards.

1. Choose the type of meal you want to make.

   a. Snack

   b. Breakfast

   c. Family Meal

   d. Mixed Dish

2. On the blank Eat Well Plate sheet provided on page 3:

   1. Use words or pictures to illustrate the healthy meal you have created.

   2. Complete the title with the type of meal you created.

YOUR GUIDE TO MAKING A HEALTHY MEAL

Use the proportions of foods on the Eat Well Plate as a guide to help you make healthy meals or snacks.

Step 1: Make half your plate vegetables and fruits. Vegetables and fruits should always make up the largest proportion of the foods you eat.

Step 2: Choose whole grain foods.

Step 3: Include protein foods.

Canada's food guide

Healthy eating recommendations
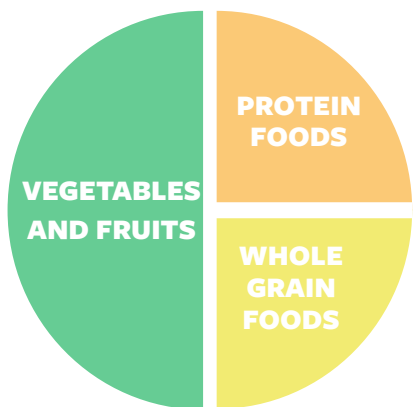
Healthy eating is more than the foods you eat. It is also about where, when, why and how you eat.

Be mindful of your eating habits
- Take time to eat
- Notice when you are hungry and when you are full

Cook more often
- Plan what you eat
- Involve others in planning and preparing meals

Enjoy your food
- Culture and food traditions can be a part of healthy eating

Eat meals with others

Government of Canada https://food-guide.canada.ca/en/healthy-eating-habits/

VEGETABLES AND FRUITS

PROTEIN FOODS

WHOLE GRAIN FOODS

THERE'S MORE TO HEALTHY EATING THAN FOOD

Healthy eating is about more than the foods you eat. So, let's plan where, when, why, and how you will eat your meal.

1. Be mindful of your eating habits.

    a. At what time of day will you eat your meal/snack?

    _____

    b. How much time will you set aside to sit and enjoy your meal/snack?

    _____

2. Cook more often.

    a. Will you prepare or cook this meal/snack yourself?

    _____

    b. Who would you ask to help you make this meal/snack?

    _____

3. Enjoy your food.

    a. What do you like most about the foods you included in your meal/snack?

    _____

    b. Identify any foods in your meal/snack that are traditional foods from your culture.
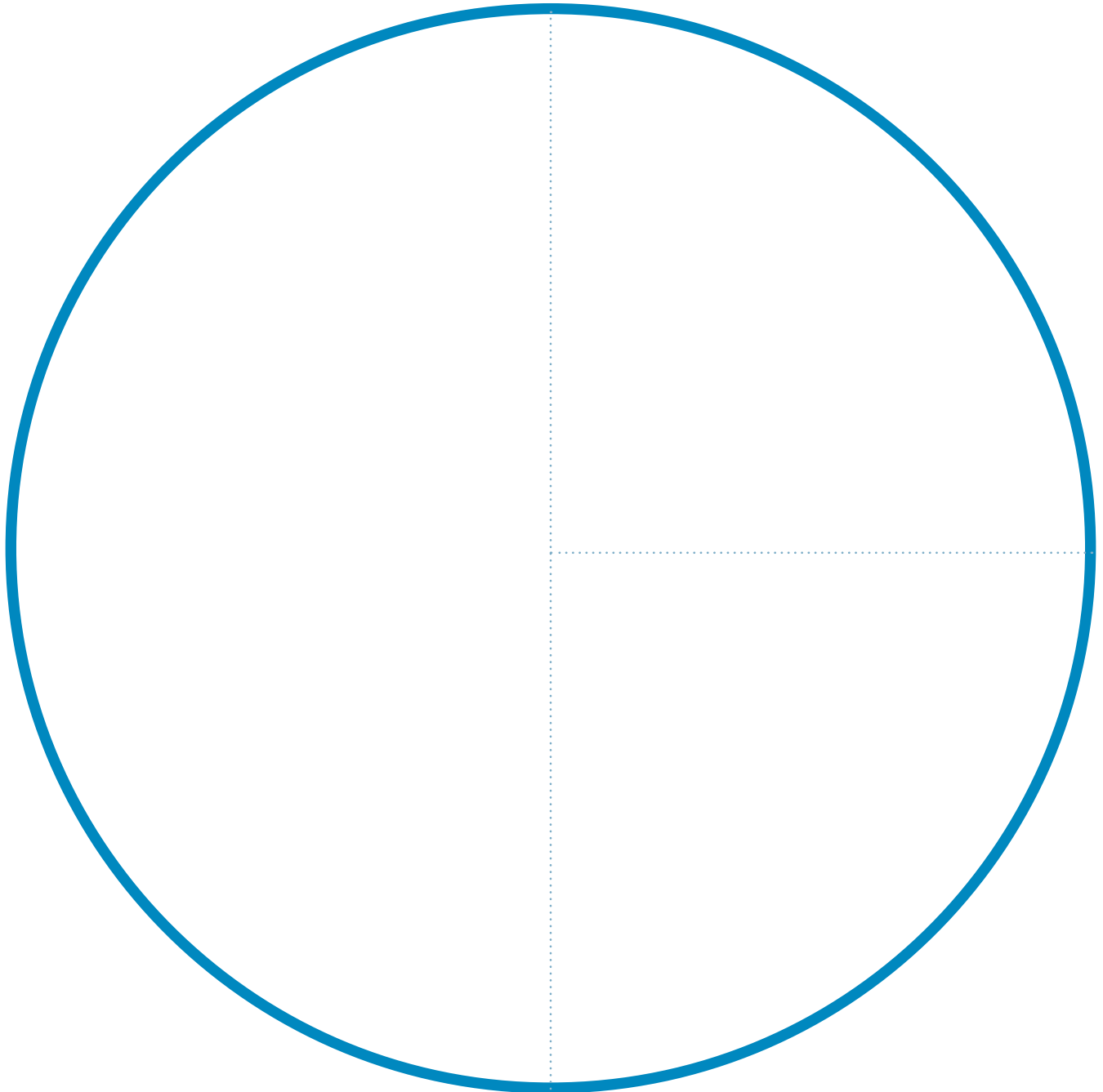
    _____

4. Eat meals with others.

    a. Who would you like to sit down and share this meal/snack with?

    _____

MY HEALTHY _____

Agriculture in the Classroom

MANITOBA

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