

# A Note to Teachers

This lesson is packed with information and activities related to Canada's Food Guide, whole grains and nutrition labels.

**Time:** approximately 60 minutes. There are optional extensions you can add.

As you discuss foods, be mindful that there are reasons families choose refined over whole grains, such as chronic conditions, culture, convenience, or price. Some families prefer white bread, which can be part of a healthy diet, and it's important that we avoid leading students to judge others for their lunches, etc.

## Materials:

- Nutrition labels (or chromebooks)
- [Food Label Scavenger Hunt](#)
- For more on nutrition labels and ingredients, see: [Reading Labels Means Healthy Food Choices](#)

## OPTIONAL EXTENSIONS:

- A grain planting activity has been added on slides 21 and 22. Classroom seed kits can be ordered from Grain Farmers of Ontario's Good in Every Grain program.
- A related Microbit [Coding Connections Slides](#) to monitor moisture in the grain plants can also be found at the [end of the lesson](#).
- [Career Connections Slides](#) for a [Nutrition Specialist](#) and a [Food Scientist](#) can be used at this time or later.



# A Note to Teachers

## Supplemental Resource

In the [Healthy Respectful Lunchroom](#), dietitian Gwen engages students about what's in their lunchboxes, what others bring, being open to different or unfamiliar foods and more. It includes presentations, worksheets and discussion guides.

Excerpt from  
*"Healthy Respectful Lunchroom"*

The video and discussion guide includes  
tips for teachers about:

- Talking about gluten-free or other diets
- Talking with students about eating local
- How to create safe lunchroom environments

Note: This resource can be found at [Good in Every Grain](#) and on a variety of Ontario health authority [webpages](#).



### About this Topic

"Healthy eating" and food education are included in curriculum in Ontario and across Canada, but they are rarely defined well. Many of us have been taught to think about "healthy" only as it relates to nutrients. People have questions. What is in food? Which are "good" and "bad" foods? How much should we eat? These are the topics that are typically focused on in school.

What if "healthy" meant just a little bit more? At Good in Every Grain, we believe that "healthy" means more than the nutrients in our foods. We know that healthy eating includes our relationship with food, our food skills, our connection with our families and culture, and our understanding and appreciation of where our food comes from.

We are excited to offer an education session for your classrooms that reminds us all to celebrate and respect our foods, ourselves and our classmates, and educators while eating at school.

# Expectations

## Science & Technology: Life Systems

B1.3 Explain how food literacy can support decisions

## Health

D2.1 explain how to use nutrition fact table and ingredient lists

### Transferable Skills:

- Collaboration
- Creativity

### Agriculture/Agri-Food:

- Grains are included in Canada's Food Guide as an important part of a healthy diet. In fact, they are an important staple around the world.
- Canada's Food Guide recommends that grains make up 25% of your diet
- Grains contain several essential vitamins and minerals, such as B vitamins, iron, zinc and magnesium.
- Grains also improve digestion, give your body energy, and help your brain perform at its best.





## Stage 2 Lesson 2: Canada's Food Guide and Food Labels



# Learning Goals



We are learning:

- About the difference between the nutrition facts table and the ingredients list on packaged food.
- How knowing about our food can help us make good decisions.
- About dietary fibre and how it relates to the digestive system.
- How to locate ingredients and fat content on labels and think critically about a label



# Business Connection

How will this learning help our business?

WE ARE HERE  
Lesson 2 of 3

**Stage 1**  
Starting a  
Business

**Stage 2**  
Food & Our  
Body

**Stage 3**  
Market Research  
& Business Plan

**Stage 4**  
Food Systems  
& Farming

**Stage 5**  
Create & Pitch



# Minds ON!

In your business group, read these questions and write your answer on a sticky note. Place it on the chart at the front of your classroom.

Let's see what we already know!

What is an example of a protein food?

What is an example of a whole grain food?

What type of food should we eat the most of?



# Canada's Food Guide

There are three food groups in Canada's Food Guide.

- What are they?
- What do you notice?
- What is on the plate?
- What is not on the plate?
- Why might the foods shown be important for our bodies?





# Canada's Food Guide

Eat a variety of healthy foods each day

Fruits and  
vegetables



Protein  
foods

Whole grain  
foods

# Canada's Food Guide

Canada's Food Guide tells us:

- To eat a variety of healthy foods each day.
- Fruits and vegetables should take up half of our plate.
- We should include a variety of proteins in our diets from animals (milk, eggs, meat) and/or plants (beans, lentils and seeds).
- Choose grain foods to make up 25% of diet. This can be things like whole grain bread, pasta, wheat berries, pearl barley or oats!
- To choose foods that have less sugar, fat and salt.

*How can we tell which foods have less sugar, fat, or salt?*

# What is a whole grain?

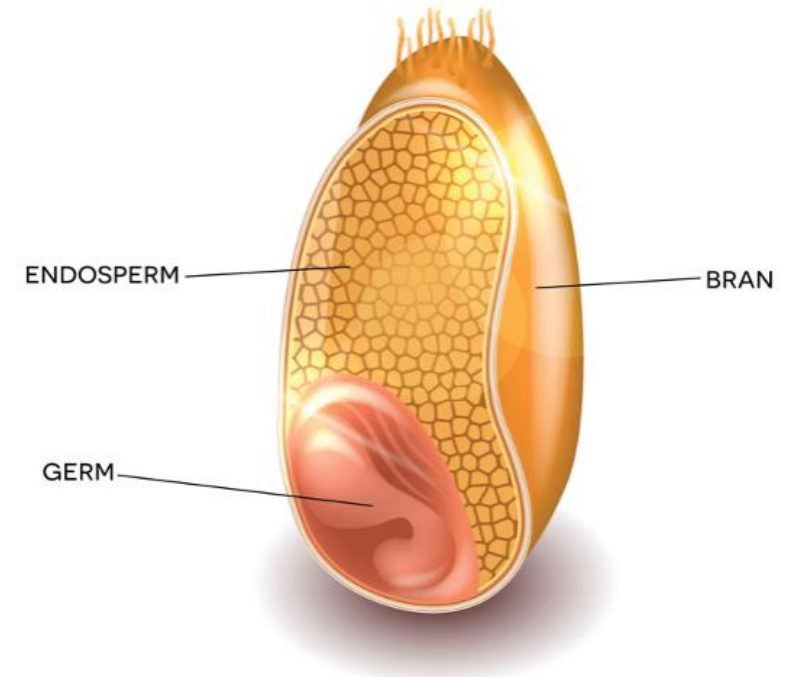


Can you define **whole grain** after watching this? Let's try!

# What is a whole grain?

- We eat refined grain and whole grain foods.
- Whole grains have all the parts of the grain seed. Refined means the germ and bran have been removed.
- Check your sticky notes. Which ones are examples of whole grains?

ANATOMY OF A GRAIN





# Examples of whole grain foods





# Dietary Fibre

**We find fibre mainly in plant foods such as fruits, vegetables, whole grains, and members of the bean family called legumes.**

## What are some fibrous foods that you've eaten this week?



# Dietary Fibre

Dietary fibre increases the weight and size of stool (yes, poop!) and softens it. That's because fibre absorbs water and adds bulk to stool. The fibre passes through the digestive system relatively unchanged.

Think about the digestive system you built.

1. What represented fibre in your “stomach?”
  2. What would have happened if you didn't have a fibrous food item?
  3. Why does the food guide recommended eating whole grain foods?
- 

# Nutrition Label

| <b>Nutrition Facts</b>                                               |                              |
|----------------------------------------------------------------------|------------------------------|
| <b>Valeur nutritive</b>                                              |                              |
| Per 1 cup (250 mL)<br>pour 1 tasse (250 mL)                          |                              |
| <b>Calories 110</b>                                                  | <b>% Daily Value*</b>        |
|                                                                      | <b>% valeur quotidienne*</b> |
| <b>Fat / Lipides</b> 0 g                                             | 0 %                          |
| Saturated / saturés 0 g                                              | 0 %                          |
| + Trans / trans 0 g                                                  |                              |
| <b>Carbohydrate / Glucides</b> 26 g                                  |                              |
| Fibre / Fibres 0 g                                                   | 0 %                          |
| Sugars / Sucres 22 g                                                 | 22 %                         |
| <b>Protein / Protéines</b> 2 g                                       |                              |
| <b>Cholesterol / Cholestérol</b> 0 mg                                |                              |
| <b>Sodium</b> 0 mg                                                   | 0 %                          |
| Potassium 450 mg                                                     | 13 %                         |
| Calcium 30 mg                                                        | 2 %                          |
| Iron / Fer 0 mg                                                      | 0 %                          |
| * 5% or less is a <b>little</b> , 15% or more is a <b>lot</b>        |                              |
| * 5 % ou moins c'est <b>peu</b> , 15 % ou plus c'est <b>beaucoup</b> |                              |

**Serving Size:** The label gives nutrition information for this amount of the food.

**% Daily Value:** This shows how much of your recommended daily amount this serving will help you meet.

**Calories:** The number of calories per serving. A calorie is a unit of energy.

**Sodium:** The measurement of how much salt (electrolytes) is in a serving of the food. Our bodies require electrolytes and we must have some but not too much.

**Carbohydrates:** The amount of sugars and fibre in the serving size.



# Read a nutrition facts table

What does one serving of this pizza provide?



| Nutrition Facts                                                     |                       |
|---------------------------------------------------------------------|-----------------------|
| Valeur nutritive                                                    |                       |
| Per 1/4 pizza (180 g)<br>par 1/4 pizza (180g)                       |                       |
| <b>Calories 440</b>                                                 | % Daily Value*        |
|                                                                     | % valeur quotidienne* |
| <b>Fat / Lipides 15 g</b>                                           | 20 %                  |
| Saturated / saturés 8 g                                             | 42 %                  |
| + Trans / trans 0.3 g                                               |                       |
| <b>Carbohydrate / Glucides 56 g</b>                                 |                       |
| Fibre / Fibres 3 g                                                  | 11 %                  |
| Sugars / Sucres 5 g                                                 | 5 %                   |
| <b>Protein / Protéines 18 g</b>                                     |                       |
| <b>Cholesterol / Cholestérol 30 mg</b>                              |                       |
| <b>Sodium 810 mg</b>                                                | 35 %                  |
| Potassium 300 mg                                                    | 6 %                   |
| Calcium 400 mg                                                      | 31 %                  |
| Iron / Fer 3.5 mg                                                   | 19 %                  |
| *5% or less is <b>a little</b> , 15% or more is <b>a lot</b>        |                       |
| *5 % ou moins c'est <b>peu</b> , 15 % ou plus c'est <b>beaucoup</b> |                       |



# Read Ingredients

How many food groups are on this ingredient label?  
What ingredients might be a concern for people with food restrictions?



## Ingredients

Enriched Wheat Flour, Water, Mozzarella Cheese (milk And/or Ultrafiltered Milk, Salt, Bacterial Culture, Calcium Chloride, Microbial Enzyme), Tomato Puree (tomatoes, May Contain Citric Acid), Pepperoni, Yeast, Modified Palm Oil, Sugars (sugar, Barley Malt Extract), Salt, Soya Oil, Corn Starch, Monocalcium Phosphate, Baking Soda, Datem, Dicalcium Phosphate, Guar Gum, Spices, Garlic Powder, Palm Oil, Onion Powder, Calcium Carbonate, Herbs, Calcium Citrate, Ascorbic Acid, Amylase, Amyloglucosidase, Hemicellulase, Lipase, Xylanase. Contains: Wheat, Barley, Milk.

# Nutrition Label Hunt

## It's a race!

Work in your group to complete the scavenger hunt. You have 5 minutes to see how many you can find!

### Stage 2 Lesson 2 Food Label Scavenger Hunt



Name: \_\_\_\_\_

Business Group Name: \_\_\_\_\_

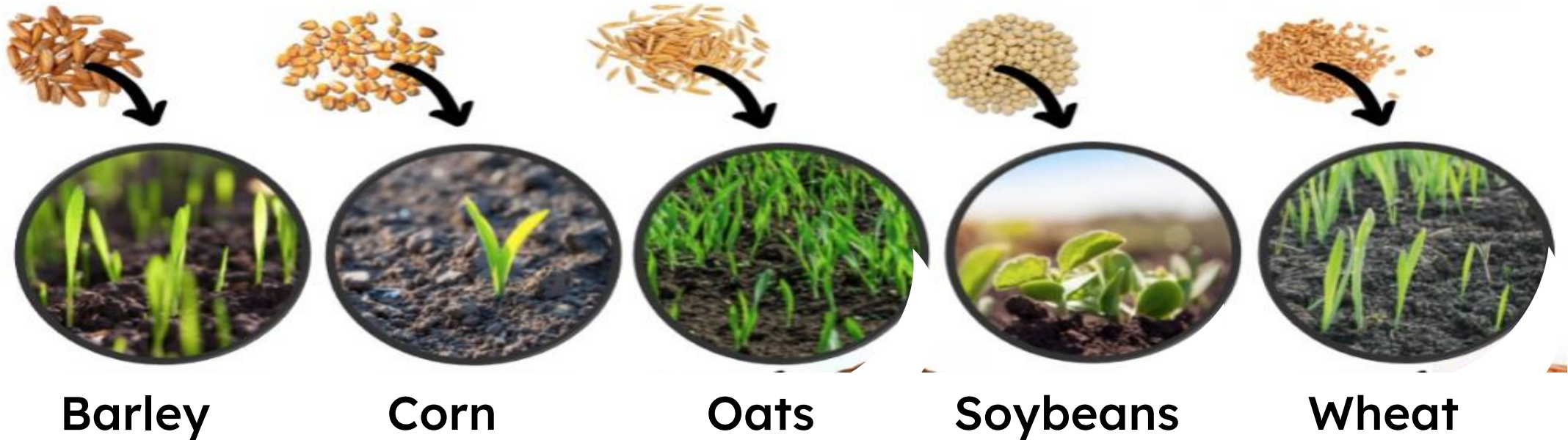
Work as a team to find foods with these characteristics.  
Write the name of the product below the clue.

|                                                                                                               |                                                                             |                                            |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------|
| Find a bakery product that is low in saturated fat.                                                           | Find a can of food                                                          | Find a product that contains whole grains. |
| Find a food high in dietary fibre.                                                                            | Find a food that you've never eaten before.                                 | Find a food that was made in Canada!       |
| Find a food that has one or more of the following vitamins or minerals: B vitamins, iron, zinc and magnesium. | Find a cereal that is high in fibre and contains whole grain ingredient(s). | Find a food that has a potential allergen. |

# Extension: Growing Our Ingredients

These are the grains Ontario farmers grow.

They are part of a healthy diet and can be part of pizza!



**In what ways can these grains be part of a pizza?**



# Extension: Plant a Seed

1. Pour about an inch of warm water in the cup.
2. Unwrap the soil puck. Put it in the cup.
3. Let the puck expand (5-15 min). Dump out the remaining water.
4. Put seed in center of soil about 1cm deep. Pinch the hole closed.
5. Place the cup in a warm place, like a sunny window.





# Wrap Up

1. Why is it important to follow Canada's Food Guide?
2. In relation to Canada's Food Guide, what do we need to think about for our pizza business?



# Check In – What's Next?





# Career Connections



# Nutrition Specialist



What do astronauts and the Canadian Space Agency have to do with tasty food?

Check out Samatha McCaig's career!

BONUS: Food in space with Commander Chris Hadfield on the International Space Station





# Food Scientist

Do you like experiments and food?

Being a food scientist might be a career for you!

[Check out the skills needed.](#)





# Coding Connections



# Soil Moisture

