

Whole Grains

What is a whole grain?

Whole grains are the seeds of cereal grasses. Examples include wheat, barley, oats, brown and wild rice, buckwheat, quinoa, rye, bulgur and corn. These seeds can be used in their whole form, cracked, or ground into a flour that contains the entire grain or kernel. Whole grains include all three parts of the kernel (or seed) of the grain – the bran, germ, and endosperm.

Bran – is the outer layer of the grain. It provides the most fibre of the three parts and contains B vitamins, minerals and a small amount of protein.

Endosperm – is the largest part of the whole grain and contains the starchy carbohydrate middle layer, small amounts of protein, fibre, and vitamins.

Germ – is the smallest part of the kernel. It provides healthy fats, protein, B vitamins, vitamin E and minerals.

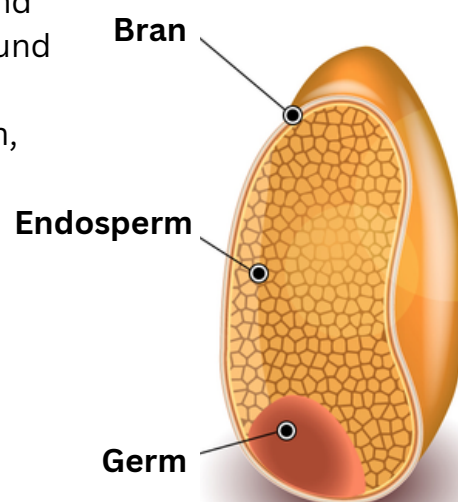


Image from www.whataboutwheat.ca

Why are whole grains so important?

Whole grains are higher in fibre, vitamins and minerals when compared to refined grains and enriched grains, which don't contain the germ and bran. Fibre is like the broom of our digestive system. It keeps it swept out and clean. Fibre is also the food for the good bacteria in our digestive system.



Did you know?

- Flours made from other grains, like rice, oat or corn flour are not required by law to be enriched or fortified. Check the label to be sure.
- A product labelled 'multigrain' simply means a flour that contains many different grains. Multigrain does not mean whole grain. Take a look at the ingredient list and look for the word "whole" before the type of grain.

Wheat Flour Matching

Match the Wheat Flour to its definition!

1. This flour contains the bran, germ and endosperm.
2. This flour is missing 5% of the grain kernel, including most of the germ and some of the bran. This helps reduce rancidity while prolonging the shelf life and flavour .
3. This flour contains the endosperm with much of the bran and germ removed. This process removes most of the fibre, some of the protein and many of the vitamins and minerals of wheat.
4. This flour is fortified with higher amounts of nutrients shown to provide specific health benefits. In Canada, this flour is fortified with: thiamine (vitamin B1), riboflavin (vitamin B2), niacin (vitamin B3), folic acid and iron. However, this flour is still missing many of the other nutrients and fibre that is found in whole grains.

Enriched Wheat Flour

Whole Wheat Flour

Refined Wheat Flour

100% Whole Grain Flour/
100% Whole Wheat Flour

Answers: Enriched wheat flour = 4, Whole Wheat Flour = 2, Refined Wheat Flour = 3, 100% Whole Grain Flour/100% Whole Wheat Flour = 1

Activity - Reading Food Labels

Learning how to read a food label is part of food literacy.

Knowing how to find reliable nutrition information and how to make sense of it improves one's self-efficacy and confidence with food. This is also part of the Grade 5 Healthy Eating curriculum. Check out these links on how to read food labels.

Health Canada

<https://www.canada.ca/en/health-canada/services/video/food-nutrition/start-with-serving-size.html>

<https://www.canada.ca/en/health-canada/services/understanding-food-labels/ingredient-list.html>

Dietitians of Canada

<https://www.unlockfood.ca/en/Articles/Nutrition-Labeling/Understanding-Food-Labels-in-Canada.aspx>

Interactive Food Label

https://inspection.canada.ca/active/video/label5_eng.html

| 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 | 0 % |
| + Trans / trans 0 g | |
| 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 | |