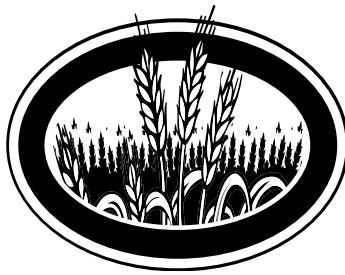


# Grains

they're essential!



# Les produits céréaliers,

essentiels pour la santé !

## Separating the wheat from the chaff

### Defining the many wheat words found in today's marketplace

Many terms are used when referring to grain and bakery products. Each has its own unique meaning and role in the wheat industry and understanding the differences can help you select which product best suits your needs. Some of the following definitions are rooted in regulations, others in science, and others still, are related to product development.



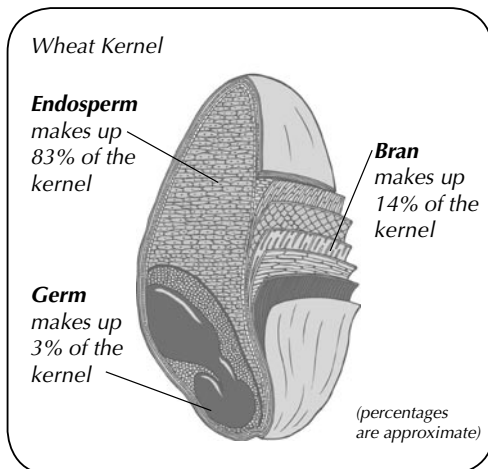
### Wheat basics

These are broad wheat categories based on government regulations and/or production practices.

#### Grain

Grain is the umbrella term that refers to the dried seed of the cereal species.

Examples of grains are wheat (including spelt and kamut), barley, oats, rye, corn, rice, wild rice, millet, sorghum, teff and triticale. Seeds of certain plants—buckwheat, amaranth and quinoa—that are not technically in the cereal species, are used in grain products and are milled similarly. As a result, they are grouped with grain.



#### Whole grain

When you see the words, “**whole grain**”, it means that all three parts of the grain kernel, or grain seed, are used in the food product in the proportion found in the original kernel.

- The **endosperm** contains mostly carbohydrate, a source of energy.
- The **bran** contains fibre, vitamins (B-vitamins), minerals (e.g., iron, magnesium) and phytochemicals.
- The **germ** contains additional vitamins (e.g., vitamin E), minerals, polyunsaturated fats, and phytochemicals.

#### Enriched

Enrichment is the practice of adding back only those micronutrients that are lost during milling. In Canada, all white wheat flour is enriched with B-vitamins and iron to match the levels found in whole wheat flour.

#### Fortified

Fortification is the addition of nutrients whether or not they are present in the food or the addition of levels of nutrients that are much higher than found naturally. In Canada it is mandatory to add folic acid to white wheat flour and enriched pasta. Bread, breakfast cereals and other wheat products have nutrients added on a voluntary basis (e.g., calcium in bread, vitamins in breakfast cereals). Decisions about voluntary nutrient additions are made by the manufacturer. All added nutrients are listed on the label.

#### Refined

Refined often describes a grain that has been processed or milled to create a white flour product. All purpose flour is a mixture of hard wheat (used in bread making) and soft wheat (used in cake and pastry flour). In Canada, most whole wheat or whole grain flours undergo the same milling process as white flour. The difference is that the bran is added back to create whole wheat flour and the bran and germ are added back to make whole grain flour.



#### Did you know

That since the fortification of white flour with folic acid began, there has been a 50% reduction in neural tube defects in infants.



## Wheat staples

The following are examples of wheat products for use in cooking, baking and meal preparation.

Product	Description	Uses
<b>wheat berries</b> Also known as... wheat kernels	Wheat berries are another name for wheat seeds or kernels. They are available as hard wheat or soft wheat berries.	<ul style="list-style-type: none"> <li>• To add a crunch to dishes such as salads.</li> <li>• As a rice substitute or an ingredient in chili or stew.</li> </ul>
<b>white flour</b> Also known as... flour, enriched flour or enriched white flour	The wheat kernel is milled to separate out the endosperm. It must be free of the bran and the germ.	<ul style="list-style-type: none"> <li>• As an ingredient in breads, pasta, crackers, breakfast cereals, all types of baked goods.</li> <li>• In coating mixes and as a thickening agent.</li> </ul>
<b>whole grain flour</b> Also known as... the whole grain wheat flour; whole wheat with germ added	Contains all three parts of the wheat kernel in the same proportion as the intact kernel.	<ul style="list-style-type: none"> <li>• As an ingredient in breads, breakfast cereals, crackers, many baked products.</li> </ul>
<b>whole wheat flour</b> Also known as... entire wheat flour	Contains at least 95% of the wheat kernel—mostly the endosperm, the bran and up to half of the germ.	<ul style="list-style-type: none"> <li>• As an ingredient in breads, pasta, crackers, many baked goods.</li> </ul>
<b>graham flour</b>	Is a wheat flour, similar to whole wheat but is not required to include 95% of the wheat kernel.	<ul style="list-style-type: none"> <li>• Used in a similar way to whole wheat in breads and baked goods.</li> </ul>
<b>cracked wheat</b> Also known as... crushed wheat or coarse ground wheat	Wheat kernels are crushed or cracked into smaller pieces; the size determines which name is used.	<ul style="list-style-type: none"> <li>• As an ingredient in multi-grain breads, pilaf, stuffing and breakfast cereals.</li> </ul>
<b>bulgur</b>	Bulgur is made from wheat kernels that are cooked, dried and cracked. Usually it has some of the bran removed.	<ul style="list-style-type: none"> <li>• In tabouli (tabbouleh), pilaf.</li> <li>• In Mediterranean dishes.</li> </ul>
<b>wheat flakes</b>	Wheat kernels that have been steamed, rolled and flaked.	<ul style="list-style-type: none"> <li>• In cooked breakfast cereals (similar to rolled oats or oat flakes) or in granola.</li> </ul>
<b>semolina</b>	Semolina is the product from the milling of a specific type of wheat called durum wheat.	<ul style="list-style-type: none"> <li>• In long pasta such as spaghetti.</li> <li>• Combined with all purpose flour to make short pasta.</li> <li>• Steamed to make couscous.</li> </ul>

## Prepared wheat products

Breads, crackers, pasta and breakfast cereals are made from a variety of grains. Just about everywhere you shop for food or buy food to eat you will encounter the versatility and infinite variety of grain products. Many products combine different grains—some are refined, some are fortified, some are whole grains.

What do the names on packages really mean?

**Multigrain** - used to describe a product that contains more than one type of grain. The final product can vary greatly. If the product only includes refined grains and has no whole grains, there would be little to no fibre. If whole grains are included, whole grain would be on the label and the amount of fibre would be noted.

**7 grain or 12 grain** - these products contain the number of grains and/or seeds identified in the name (either 7 or 12 different types). Similar to multigrain, these products may or may not include whole grains. Check the label.

**Whole grain** - when “whole grain” is included in the name or in the ingredient list, the grain is whole. This means that the endosperm, bran and germ are included in the same proportions as the original kernel. The grain most often used is wheat.

### **Whole wheat bread, pasta or crackers**

- these products are made with whole wheat flour containing at least 95% of the wheat kernel.

Some products declare “100%” or “60%” in front of the product name. This indicates how much whole wheat flour is used.

**Enriched pasta and enriched white bread** - both are made from white wheat flour that has the B-vitamins and iron added back to levels that match whole wheat. In addition, all enriched pasta and white bread in Canada is fortified with folic acid.



**For more information contact: Baking Association of Canada**

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