

Milling

The milling process affects the nutritional value and quality of a flour. Lower heat methods result in a nutritionally superior flour. Stone-ground flour is milled by a slow process using granite stones, often powered by water which scatters the bran evenly through the flour and keeps the flour cooler than when ground with steel rollers. Although stone-ground whole wheat flour is still available, most grains today are machine milled.

Most of the whole grain flours sold in co-ops are milled by an impact or “hammer mill” that generates almost no heat so the grains do not get scorched. Our flours come from companies that are well-respected for milling high-quality products.

Refining

After milling, some flours are refined. The refining process strips away both the fiber-rich bran and the germ, which contain valuable vitamins and minerals. White flour is refined whole wheat flour, but flours labeled as wheat (rather than whole wheat) are also often refined. Some refined flours have been “enriched.” This sounds a lot better than it is. Of the 22 nutrients that are lost in the refining process, only five are added back in the enrichment process. Whole grain flours are not refined and contain all of their valuable nutrients.



Gluten sensitivity and celiac disease

All forms of wheat, barley, kamut, rye, spelt and triticale contain gluten. Although not inherently unhealthy, gluten can be problematic for those with a gluten sensitivity, and can be harmful for those diagnosed with celiac disease. Symptoms of gluten sensitivity can range from mild to severe in affected individuals; commonly reported symptoms are abdominal bloating and fatigue. Celiac disease is relatively rare and is diagnosed by a blood test; symptoms are managed by adhering to a strict gluten-free diet.

For more information on cooking without wheat, refer to our Food Allergy Solutions pamphlet.



StrongerTogether.coop is a consumer website developed by **National Co+op Grocers (NCG)** for our “virtual chain” of over 140 retail food co-ops, operating more than 190 storefronts, nationwide.

StrongerTogether.coop is a place for people to gather on their food journeys. It’s a place to find out more about what’s in your food, where it comes from, where to find great food, how to prepare it and a whole lot more.

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ALL ABOUT

Flour



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Flour

is a basic and indispensable food staple and can vary in quality and nutrition depending on the type of grain and the milling process used. Baking and cooking with a variety of whole grains adds nutrition and excitement to your meals.

Types of wheat flours

Flours made from wheat are the most common. Wheat contains the most gluten, which is a protein found in some grains that helps bread rise and keep its shape. Flours with more gluten make airier, lighter-textured breads.

All-purpose flour is a blend of refined bread flour and pastry flour. This makes it a good choice for most of your baking needs because it has a moderate gluten content of 10-12 percent.

Durum flour is ground from durum wheat, the hardest variety of wheat. Semolina, the flour commonly used to make pasta, is refined durum flour. “Refined” means that the bran and germ have been removed from the wheat berry. This gives semolina pasta its characteristic light color but decreases the grain’s nutritional value.

Gluten flour is made from hard wheat that has been treated to remove some of its starch and concentrate its protein. This highly-refined flour contains at least 70 percent pure gluten. It can be added to low-gluten flours to lighten the texture of the loaf. It is also used to make seitan, a meat substitute.

Graham flour is a type of coarse-ground whole wheat flour named after Sylvester Graham, an early American dietary reformer. Used alone, it produces a heavy, compact, dark bread. It is also used to make graham crackers, a popular snack.

Unbleached white flour is popular because of its versatility. It can be used for breads, pastries, cookies or cakes. Unbleached white flour is highly refined. Although it has not been bleached, the bran and the germ have been removed during the refining process. To enhance its nutritional content, substitute part of the white flour with whole wheat flour.

Whole wheat bread flour or “hard whole wheat flour” is ground from hard red spring or hard red winter wheat berries and is the best for making breads and rolls. Because it has the bran and germ ground into the flour, it is more nutritious than refined white flour.

Whole wheat pastry flour or “soft whole wheat flour” is milled from soft winter wheat berries, a different variety of wheat than the one used for bread baking. It has the ability to absorb more fat, making it ideal for pastry and cake making.

STORAGE TIPS

Whole grain flours contain some fats that will go rancid when exposed to light, heat and air. They should be refrigerated in an airtight container and used within three months.

Refined flours should be kept in an airtight container in a cool, dry, dark place to keep out moisture and insects. Use within six months. Flour can also be kept in the freezer in an airtight bag or container.

Other flours

Flours come from many sources including grains, legumes, starchy vegetables, nuts and coconut. Each has its own baking properties and uses.

Amaranth flour is a gluten-free flour which combines well with other flours to make smooth breads, muffins, pancakes and cookies. Amaranth is an ancient Aztec food with an impressive amount of protein, fiber and minerals.

Barley flour adds a nutty, malty flavor to breads or pancakes. Barley is usually used as a whole grain or in malting, but it is also valuable as a flour because it gives breads a cake-like texture and pleasant sweetness. It can also be used as a thickener. Contains gluten.

Brown rice flour is nuttier and richer tasting than white rice flour and also more nutritious. It is useful for making breads, cakes, muffins or noodles. Brown rice flour contains no gluten. Keep refrigerated to prevent spoilage.

Buckwheat flour has a full-bodied and earthy flavor. It is the traditional flour used in Russian blini, French Brittany crepes, Japanese soba noodles and, of course, buckwheat pancakes. Naturally gluten-free, buckwheat is not a grain but a seed from a plant in the rhubarb family.

Corn flour, more finely ground than cornmeal, is cream-colored, slightly sweet and gluten-free. It is not the same as cornstarch, which is used as a thickener.

Kamut flour is made from a highly-nutritious ancient form of wheat. Some people who are allergic to common wheat may not react to kamut because it has a lower gluten content. Use kamut flour for making breads with a slightly nutty flavor.

Millet flour, ground from whole millet, adds a nut-like, slightly sweet flavor to wheat breads. It is gluten-free and traditionally used in Indian and African cuisines.

Oat flour is made by grinding oat groats to a fine consistency. It has a subtle, sweet flavor and can replace up to 20% of flour in a recipe. If you can’t find oat flour, you can make your own by grinding rolled oats in a food processor or blender. Oats can be certified gluten-free, though due to commonly shared processing facilities, oats often acquire traces of other grains that contain gluten.

Potato flour is made from peeled and steamed potatoes that have been dried and ground. It is stark white and very fine. It can be used to thicken sauces or combined with all-purpose flour to make potato rolls and breads. Potato flour is suitable for those on a gluten-free diet.

Rye flour produces a bread loaf with a full-bodied, bitter, slightly sour flavor. It does not contain enough gluten proteins to raise loaves well by itself and the gluten it contains is delicate. Rye loaves should be kneaded gently to avoid breaking the gluten strands.

Soy flour and soya flour are richer in calcium and iron than wheat flour, high in protein, and gluten-free. Soy flour is ground from raw soybeans; soya flour from lightly toasted soybeans. Both add a slightly sweet, pleasant flavor to bread. Loaves made with soy flour brown quickly during baking.

Spelt flour is from a non-hybridized wheat with a long cultivation history. It works well as a bread flour and has an exceptional amount of protein and fiber. Spelt gluten is highly water soluble, making it is easy to digest. Spelt flour is not gluten-free but may be a good wheat substitute for some people who are allergic to wheat.