

# Flour

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## Overview

Flour dates back thousands of years to the Far East, Egypt, and Rome where grain was ground with rocks. Things have improved since then and now machinery instead of rocks are used to grind grain. Flour can be milled from rye, corn, rice, barley, wheat, and many other grains. Wheat is the grain of choice for flour. Flour refers to any product created by grinding and sifting a grain; however, the word flour is often used interchangeably with wheat flour.



Wheat is different from other grains, because it has a gluten-forming protein complex. When mixed with liquid the proteins form gluten. Gluten is the substance that gives dough structure and elasticity. For yeast breads more gluten means more volume. Wheat is an excellent source of many nutrients including: carbohydrates, fiber, B-vitamins, protein, and small amounts of many minerals.

Wheat flour can be made from different types of wheat: Hard Red Winter, Hard Red Spring, Soft Red Winter, Hard White, Soft White, and Durum. The various types of wheat have differing protein and gluten contents which give the flour different characteristics. Hard wheat has a higher protein content and forms a stronger gluten structure. Hard wheat is great for making yeast breads while soft wheat is better for light fluffy cakes.

## Types of Flour

**All-Purpose**, enriched white flour made from high protein wheat. All-purpose flour is great for baking and used in many recipes.

**Self-Rising**, made by adding leavening and salt to all-purpose flour. One cup of self-rising flour has the equivalent of 1-1/2 teaspoons of baking powder and 1/2 teaspoon salt. If using self-rising flour in a recipe that calls for all-purpose flour you can usually omit the baking powder, baking soda, and salt from the recipe.

**Unbleached**, all-purpose flour with no bleaching agents used. The flour will be more yellow in color than bleached flour.

**Whole-Wheat**, ground from the entire wheat kernel including the endosperm, germ, and bran is rich in B-vitamins, fiber, and other nutrients. It has a high oil content which

makes it more perishable than white flour. Refrigerating or freezing whole-wheat flour will preserve the natural oils and prevent rancidity. Whole-wheat flour will make a heavier, denser product than white flour. You can generally substitute whole wheat for white flour, but may have better results by using half whole wheat and half white flour.

**Cake Flour**, milled from soft wheat is especially good for cakes, pastries, and tender/fine textured baked products. You can substitute cake flour for all-purpose flour by increasing the flour measurement by 2 Tablespoons per cup.

## **Flour Terms**

**Enriched.** Iron and B vitamins which are removed during processing are added back to white flour.

**Pre-sifted.** The flour is sifted many times at the mill so you do not need to sift before measuring.

**Bleached.** Freshly milled flour is yellow or creamy in color. Bleaching agents are added to whiten the flour and improve appearance of baked goods