



Storing Whole Grains

Enjoying whole grains is easy. Buying them is even simpler now that there's a Whole Grain Stamp as our signal. But once we get them home, what's the best and safest way to keep whole grains fresh and full of good nutrients? Storing your grains is actually a piece of cake too!

*(ummm... cake... try our recipes for **French Honey Rye Cake** and **Millet Apple Raisin Cake**!)*

Whole grains are supreme in heartiness, but because they retain their healthful oils, they are more susceptible to oxidation and need the proper living quarters. As best-selling cookbook author and WGC culinary advisor **Lorna Sass** writes, "Heat, light and air are the enemies of the oil in the germ" of whole grains. Try to buy from stores with high turnover for freshness. If you're shopping in the bulk section, don't be afraid to sniff the grains – you want to find a light sweetness or no scent at all, for if the bin smells oily or moldy, the grains may be rancid.

Once you bring your whole grain home, store it directly in the refrigerator or freezer. You can either keep it in its unopened package or transfer it into an airtight container or plastic zip-top bag.

Since different grains vary in fat content (from about 1.7% for wheat to about 6.9% for oats), the shelf life of the flours made from them varies too. In general, most whole grain flours keep well in the fridge for 2–3 months, and in the freezer for 6–8 months. We recommend keeping flour in a sealed container so it won't pick up stray odors and tastes from the fridge or freezer.

Grains, because their oil is sealed into the original grain kernel and cannot easily oxidize, can keep much longer than flour. Most will keep for several months in a room-temperature cupboard, and for a year in the freezer. General advice on grains and flour: try to buy what you'll use in 2–3 months, because even if it will keep longer, you don't want to clutter up your fridge for longer than that!

SAFE STORAGE, GRAIN BY GRAIN

Storage is quite similar across the board, but here are a few tips for specific favorites:

Whole Wheat Flour – airtight seal, freezer, 6 months

Store your whole-wheat flour in the freezer immediately upon purchase, either in its original package or in an airtight container or bag. The more finely ground the flour, the more quickly it will turn (but you can keep this from happening). When you're ready to use the flour, let it sit at room temperature for about 15 minutes before using it.

Oats – airtight seal, freezer, 3 months

Oat Flour – airtight seal, freezer, 2 months

Oats are a high-fat grain, so they have a slightly shorter storage life than others.

Cornmeal – airtight seal, freezer 4–6 months

Kernels or Popcorn – airtight seal, freezer, 1 year

Cornmeal is a bit more volatile than wheat flour, while corn kernels are more stable. Try to buy the meal from a source with high turnover. Depending on how often you open the package, cornmeal should last 4–6 months in the freezer. Kernels or popcorn, kept in airtight plastic or glass containers, should be safe in the pantry for a few months, or in the freezer for up to a year.



Rye Flour – *airtight seal, freezer, 6 months*

Rye flour can also be stored in the refrigerator for a shorter amount of time (4 months).

Spelt Flour – *airtight seal, freezer, 6 months*

Spelt berries can be stored at room temperature (in a cool, dark cabinet), but it's also preferable to keep them in the freezer if you'll be storing them for longer periods.

Buckwheat Flour – *airtight seal, freezer, 2 months*

Buckwheat's essential fatty acids are particularly volatile and can go rancid quickly once husked. It is best to use the flour within 2 months of purchase.

Barley Flour – *airtight seal, freezer, 4 months*

Barley, while packed with nutrients like selenium and manganese, is also a more volatile grain and susceptible to molds without proper storage.

Brown Rice – *airtight seal, cupboard, 5–6 months; freezer, up to a year*

Brown rice, having retained its germ, is more volatile than white rice, but it still has both a long shelf and freezer life.

Brown Rice Flour – *airtight seal, refrigerator: 4–5 months; freezer: up to a year*

Brown rice flour is surprisingly not much different than its whole grain, but you want to keep it cool.



*A big thanks to King Arthur Flour's **Whole Grain Baking** cookbook and Lorna Sass' **Whole Grains Every Day, Every Way** for much of the helpful information on this page. If you have additional questions about storing whole grains, email **Karen Mansur** at the Whole Grains Council.*