Choosing and Using a Grain Mill for Better Homestead Baking

Does the idea of grinding your own wheat fill you with fascination? Are you seeking ways to feast on artisan flatbread made from the freshest flour possible? If so, a grain mill is one of the best self-sufficiency tools to add to your kitchen.

In mere minutes a day, you'll manage to fill your home with the heady scent of freshly cracked grain, creating memories for you and your family that will last a lifetime.

Oh, and did we mention that fresh-ground flour is far healthier than anything you'll find at the store? You have nothing to lose and everything to gain from tossing those bags of bleached flour in the trash and grinding your own grain instead.

Why Use a Grain Mill?

Elegant in their simplicity yet surprisingly versatile, grain mills can enhance the taste, texture, and nutritional content of your homemade bread in a way that nothing else can replicate. Just as grinding your morning coffee beans brings on a sensory experience that packaged grounds can never match, baking with home-ground flour will make your dinner menu mouthwatering in all the right ways. But don't limit your experiments just to flour; grain mills are ideal for making homemade nut butter, powdering spices like cinnamon, and yes, grinding coffee beans.

Modern grain mills are versatile, easy to use, and allow you to save money by buying your grains in bulk. Best of all, grinding your own grain lets you control exactly what goes into each recipe, meaning that you can keep the preservatives, bleaches and other artificial ingredients in conventional flour far from your family.

Health Benefits of Home-Ground Flour

Every kernel of wheat, rye, and other grains contains all the energy that a seed needs to sprout, making them some of the most concentrated forms of nutrition on the planet. Grinding these kernels transforms them into a powder that your body can better process, but conventional milling takes out the most nutritious part- the wheat germ. The oils in this germ will turn freshly ground flour rancid after a few weeks, which leads manufacturers to remove it. However, this extended shelf life comes at a <u>major cost</u> to the vitamins, minerals, and antioxidants in the flour, leaving you with a product that is nutritionally deficient compared to the natural grain.

In contrast, milling your own flour lets you leave the grain's nutrition intact, and because you can grind exactly what you need for every recipe, there's no risk of it turning rancid before you use it. It's also possible to keep unground grains fresh for far longer than store-ground flour, letting you save money by buying in bulk while still enjoying a fresher, healthier final product.

How Do Grain Mills Work?

Though different models may vary significantly, all grain mills have internal mechanisms that grind, crush, or beat hard, wet, or oily grains and nuts into a delicate powder. The final texture depends on the type of mill you use, and it can range from coarse to extremely fine.

Today, two forms of grain mills are most popular: burr and impact mills.

Burr Mills

As the most common kitchen mill, burr mills are usually hand cranked and consist of two grinding plates, one that's stationary and one that rotates. When grain goes into the gaps between the burrs, it becomes sheared or crushed into a powder.

These burrs are either made from stone or metal cutting blades, and the two types create different final textures for the flour. While stone burrs work to crush grain, metal tends to break and shear it instead. Many burr mills, like the Wondermill deluxe Jr, come with both burr types so that you can adjust the milling process for the kind of grain you're grinding.

Impact Mills

As an electric-only grain mill option, impact mills are made from two flat stainless steel heads with teeth that fit together when running at high speeds. The grain caught between these teeth are quickly hammered into a fine powder. Ideal for all non-oily grains, impact mills are the most hands-off way to grind flour at home.

High-quality impact mills like the Royal Lee Household Grain Mill come with numerous accessories that let you optimize the texture of your final flour to best fit your recipe requirements. These kinds of mills are usually more expensive than burr mills, but they are faster and more efficient for grinding large amounts of grain.

Will Using a Grain Mill Save You Money?

Though buying a grain mill might seem like a big expense, this tool will save you tremendous amounts of money over its long lifespan. Think about it: how much money do you spend on premade bread every year? Even worse, how much money gets wasted when you're forced to toss away spoiled flour?

By buying your grains whole and in bulk, you will dramatically reduce the risk of dealing with damaged food while enhancing the nutritional value every loaf in the process. Home-ground flour will last for up to two weeks (and even longer in the freezer) ensuring that grinding your own grain is an easy, efficient process for gaining more control over the food you feed your family.

Is Heat Buildup a Concern?

Recently, the heat that wheat and other grains are exposed to has become a concern for many bread lovers.

It takes tremendous power to crush hard kernels in a grain mill, meaning that mills tend to get hot as they operate. Sometimes this can compromise the nutritional quality of your grains.

<u>Research has shown</u> that sustained temperatures between 120- 140 degrees can deactivate enzymes, destroy vitamins and cause damage to other components in each kernel.

However, your home-milled flour is LESS at risk of this damage than store bought. This is because you have complete control of the milling process, and most home mills won't exceed 130 degrees. If things start to feel too hot, you can simply turn off your mill and stir the flour in the bowl to help any excess heat dissipate before it becomes an issue.

Manual or Electric: Questions to Ask Before Buying a Grain Mill

Today, most grain mills are either electric or manual. For those with plenty of energy and a keen passion for preserving the nutritional content of their grains, manual mills like the Wondermill Deluxe Jr are a great way to cultivate a 'hands on' connection to your food. However, these mills are a significant amount of work, so it's important to factor in your overall enthusiasm for manual grinding before making a purchase.

In contrast, an electric mill like the Royal Lee is the premier choice if your objective is to get fresh bread on the table as quickly as possible. These mills are incredibly powerful and can create almost any texture of flour with only minimal effort from you, and they tend to be easy to clean as well.

Stuck between manual and electric mill options? Ask yourself these key questions to narrow down what most matters to you in a mill to make the best decision for your situation.

What Will I Most Use My Mill For?

Though the idea of milling your grain by hand may sound romantic, it requires plenty of work, and the overall texture of your grain will be coarser than what electric mills make. For this reason, manual grinders are ideal for hearty multigrain loaves but are less suitable for milling the superfine flour used for pastries. Likewise, if you plan on baking daily, manually grinding your flour may get tiresome.

Can I Live with Loud Noise?

The biggest, most powerful grain mills are also the noisiest- especially electric impact-chamber models. If a powerful motor will disrupt your family life, buying a model that operates at a lower decibel level might be the better choice.

Will Flour Dust Be an Issue?

Allergy sufferers and those with asthma can find breathing in fine flour particles to be a misery, making some electric models a pain to live with. If you prefer to make less dust, hand crank models might be better.

What Flour Temperature Can I Live With?

The faster and more efficient your grain mill, the hotter your flour is likely to get, and the greater the nutritional loss is liable to be. If you can't live with the idea losing some vitamins and minerals to the milling process, a low heat manual grain mill is the better choice.

Still Can't Choose? Consider a Convertible Mill Instead!

If deciding between grain mills is giving you stress, the answer might be a convertible mill instead. These mills are specially designed to work with or without electricity, making them an optimal option if you live off grid or experience regular power outages. The manual grain mill deluxe comes with a hand crank, and it's also designed to accommodate an external motor when desired.

Make Your Baking Great with a Grain Mill

No matter whether you're a professional baker or merely want to feed your family better bread, switching from processed flour to freshly ground is an ideal way to become more connected with the food that feeds you.

Grain mills are efficient, easy to use, and well worth their cost after mere months of making homemade bread. So long as you carefully consider your options and choose the grain mill that's best for your needs, this kitchen tool will be a staple in your homestead kitchen for years to come.