

Why Bake For Yourself? Why use Sourdough Starter? Why Mill Your Flour? Why Mill by Hand?
(There are plenty of good reasons.)

And finally, and A Word on Burrs

==> Why make your own bread, pasta, pastries, and so forth?

* For health reasons:

If you read labels, you'll see there are often a lot of things in commercial baked goods that you shouldn't be eating. Many of them have names you can't pronounce. Have the satisfaction of taking control of this small part of your life by making your own, and you'll know exactly what you are eating. You can use organic flours that are more likely to contain no harmful chemical residues.

* For enjoyment:

- Learn new things.
- Have something to talk about with your family and friends.
- Share what you learn.

* For other reasons:

Get some independence, beat the system, save money by doing it yourself. You say you don't have time? Baking yourself is more fun and better for you mentally and physically than watching TV. Make the choice; use your time more wisely. It doesn't take long: fresh homemade pasta is 15 minutes away. Making bread takes less than an hour of your time.

==> Why Use Sourdough Starter?

* For health reasons:

- We humans are somewhat allergic to the phytic acid in wheat bran. Sourdough culture denatures the phytic acid in wheat bran, so it becomes better for us.
- Yeast alone does not have this effect.
- Most, if not all yeast, is now genetically engineered.

* For reasons of independence:

Yeast can be difficult to find. For example in France and other European countries, bakers bake, people buy baked goods. Why would non-bakers need yeast? With your own sourdough starter, you become more independent. Use it for breads, pancakes, muffins.

My advice: get a sourdough starter and throw out that (probably genetically modified) yeast. By the way, here's a good place to get a free sourdough starter: <http://carlsfriends.net/>

==> Why mill your own flour?

Yes, you can buy commercial flour, but think about these reasons for taking the next step to the independence of milling your own:

* For reasons of health:

- Is your commercial flour certified organic, or is it full of herbicides and pesticides? This is an especially important question for "whole grain" flours that have the bran mixed in. That bran is exposed to those chemical treatments, if any.
- Commercial bread flours have a LOT of added gluten. It is up to the commercial mill how much they put in. Commercial bakers have forgotten how to make bread with flours that have not been supercharged with added gluten. I fear that eating all this added gluten over decades is what is leading people to have gluten intolerance, also known as celiac disease.
- You can take back control over part of what you eat by making your own baked goods with flour you mill from good quality organic grains.
- Additionally, many "bread" and all-purpose flours have added malted barley that serves as a yeast food. Do you want that in your flour?

* For reasons of safety:

- Healthy flour that still contains wheat germ oil does not keep long before the oil goes rancid.
- Rancid oils are poisonous to us.
- Because of that, I suspect even "whole wheat" flour has the oil removed to extend the shelf life. They don't tell you this, but my research leads me to believe the oils are chemically extracted, using chemicals whose names we can hardly pronounce, and I wonder why there wouldn't be a residue of those chemicals still in the commercial flour.

* For practical reasons:

- Different types of baked goods need different types of flour. Bread needs a certain amount of "hard" flour with a high-gluten content to rise. These would be flours made of hard wheat, durum semolina, Kamut, or other hard wheat. Pastry is much better when made from soft flours, with low gluten content. These would be flours ground from soft wheat, spelt, rye, barley, oats, rice, legumes, or even chestnuts.
- Wheat and other grains have a very long shelf life, while flour does not, unless it has been stripped of the most important nutrients.
- Keep several varieties of grains on hand, mixing them optimally for each application (gluten content, as mentioned above) then mill them yourself. You get a high quality flour of precisely the type you need and in just the quantity you need. Know there has been no chemical extraction used. Use the flour you mill before the oils go rancid, that is, immediately. So mill just enough, not too much.

* For other reasons:

Be less dependent on others that you don't have any reason to trust to provide your flour. It doesn't take long to do it yourself: grind enough flour for pasta for two persons in 2 minutes. Enough flour for a loaf of bread takes about 10 minutes.

==> Why mill your flour by hand using a hand-turned mill?

* For health reasons:

- Motor driven mills can easily overheat the flour, breaking down the natural oils.
- Hand turned mills can be turned slowly enough to avoid heating the flour. Was that done with the commercial flour, even assuming the oils are still in there (see above)?
- It's a meditative experience. Focus on one tiny act: free your mind.

* For practical reasons:

- Get your exercise doing something useful, rather than going to a health club or lifting weights that

serve no purpose.

- Hand-turned mills won't wear down the burrs as quickly.

- * For reasons of relative quiet:

It is quieter for you and your co-habitants and neighbors to mill by hand rather than using a motorized mill. The better mills can be motorized later if you decide you like the other aspects of home milled flour but no longer have fun turning the mill with muscle power.

- * For political / environmental reasons:

Mill your grains and other materials without using nuclear- or coal-generated power. You need not rely on a complicated system of power generation and distribution to perform a simple act that can be done with a simple hand-cranked machine perfectly adapted to human strength and capabilities.

==> To sift or not to sift?

It is your choice. With medium fine and extra fine sieves, you can have nearly pure white flour (passing the flour through the extra fine sieve), flour with wheat germ but minimal bran (passing the flour through the medium fine sieve) or true whole wheat flour with everything in it (by not sieving at all).

- * Choose based on culinary reasons:

Make the choice depending on what you want to use the flour for. Those who prefer a smoother dough for pasta or pastries would sift out the bran and/or germ for these applications.

- * Choose based on health reasons:

- Some say wheat bran is not so good for us. Even though the fiber is good, the phytic acid is not good.
- Sourdough culture changes the phytic acid into a form that is good for us.
- So: maybe better sift out the bran except when using sourdough, like sourdough bread.

==> A word about burrs (a mill's grinding plates): Why size matters. Why metal is better

- * Bigger burrs are better than smaller ones:

- They have more mass, so they keep the flour from heating up (again, saving the oils)
- They have a larger grinding surface and thus work faster. 5" burrs present nearly 60% more grinding surface than 3" burrs, meaning 60% greater throughput.

- * Metal burrs are better than stone or even ceramic.

There was a time that mankind didn't have the tools and materials to make burrs out of other materials besides stone. Now we do, so there is no reason to use stone burrs. Ceramic burrs suffer the same problems as stone burrs. So use metal burrs:

- For practical reasons:

Metal burrs can handle anything, from dry grains to oily nuts to spices. Stone and ceramic burrs don't handle oily materials well. Oils can enter into the porous burrs. Those burrs are also more difficult to clean.

Some manufacturers guarantee their metal burrs for life. I suspect these burrs are made from very high quality metal, or they could not be backed up with such a warranty. Either that or the

manufacturers are able to inexpensively recut worn out metal burrs, saving you and them from the expense of replacement burrs (\$100-\$150). This would be true with machined burrs, though probably not possible with cast burrs.

- For health reasons:

When stone burrs get dull, it is because little bits of the stone burrs get chipped off. Those stone particles, fine as they are, fall into your flour, and you eat them. This can be as unpleasant and surprising as getting some sand on your lettuce, and there may be long-term negative consequences for your teeth.

Metal burrs can mill as finely as stone and ceramic burrs. They have higher heat conductivity, so they can absorb the heat from the flour, keeping it cooler (thus not destroying the oils, as I mentioned above).