

## Sourdough Baking

Sourdough bread is bread made without added yeast. By making a "starter" in which wild yeast can grow, the sourdough baker can raise bread naturally, as mankind did for thousands and thousands of years before a packet of yeast was an available convenience at the local market. Not all sourdough is sour-tasting; Amish Friendship Bread and other types of live-yeast breads are also sourdough.

To become a sourdough baker, all you need are some basic ingredients (flour, water, salt, and sugar), some basic tools (a mixing bowl, an oven, and a baking sheet), and a basic interest. This page is for the novice sourdough baker, but assumes that the reader is familiar with regular yeast-based baking. If you can make bread, you can make sourdough bread.

There are only a few simple steps to becoming a sourdough baker. First, you must create a starter: This is a bubbly batter that you keep in your fridge. The starter is mixed into a dough, and it causes the bread to rise. Bake and serve. Yum!

### Creating Your Starter

The novel thing about sourdough baking is that it requires that you keep something alive in your fridge. I think of my starter as a pet, kept and fed so that Sandra and I will have all the bread we need. Sourdough "starter" is a batter of flour and water, filled with living yeast and bacteria. The yeast and bacteria form a stable symbiotic relationship, and (as long as you keep the starter fed) can live for centuries, a thriving colony of microorganisms. To make sourdough bread, you blend the starter with some flour and make dough. The yeast propagates, and leavens your bread. This is how you make your starter:

- **Select a container that your "pet" will live in.** A wide-mouthed glass jar is best. I use a glass jar with a rubber and wireframe seal; you can find these for \$2-\$4 in any antique or junk shop. A small crock with a loose lid is also great; these can be bought in cheap sets for serving soup. You can also use a rubbermaid or tupperware container. I've begun starters using the plastic containers that take-out Chinese soup comes in, and then transferred them to jars later! A wide-mouthed mayonnaise or pickle jar will also do just fine. Metallic containers are a bad idea; some of them are reactive and can ruin your starter (for the same reason, avoid using metal utensils to stir your starter).
- **Blend a cup of warm water and a cup of flour, and pour it into the jar.** That's the whole recipe! I use plain, unbleached bread flour most of the time, but I've had good results with all-purpose and whole-wheat flour, too. If you want, you can add a little commercial yeast to a starter to "boost" it. If you do this, sourdough snobs will look down their nose at you - but who cares about snobs? I personally find that (at least here where I live) no yeast "boost" is necessary, and I can make "real" sourdough with no trouble. But if you are having trouble, go ahead and cheat. I won't tell. Note that starter made with commercial yeast often produces a bread with less distinctive sour flavor than the real thing.

- **Every 24 Hours, Feed the Starter.** You should keep the starter in a warm place; 70-80 degrees Fahrenheit is perfect. This allows the yeast already present in the flour (and in the air) to grow rapidly. Temperatures hotter than 100 degrees or so will kill it. You can take comfort from the fact that almost nothing else will do so. The way you feed the starter is to **(A)** throw away half of it and then **(B)** add a half-cup of flour and a half-cup of water. Do this every 24 hours. Within three or four days (it can take longer, a week or more, and it can happen more quickly) you should start getting lots of bubbles throughout, and a pleasant sour or beery smell. The starter may start to puff up, too. This is good. Here's the gist: *When your starter develops a bubbly froth, it is done. You have succeeded.* If this sounds brain-dead simple, that's because it is. People who didn't believe the Earth was round did this for millenia.
- **Refrigerate the Starter.** Keep the starter in your fridge, with a lid on it. Allow a little breathing space in the lid. If you're using a mayo or pickle jar, punch a hole in the lid with a nail, that kind of thing. Once the starter is chilled, it needs to be fed only once a week. Realistically, you can get away with less; it's important to remember that your starter is a colony of life-forms that are almost impossible to kill (except with extreme heat). Even starving them is difficult.

### Care and Feeding: Hooch

Aside from weekly feeding, the only other thing you need to worry about is hooch. Hooch is a layer of watery liquid (often dark) that contains alcohol. It smells a bit like beer, because it is a bit like beer - but don't drink it! Hooch builds up in your starter, especially in the fridge. Just pour it off or stir it back in. It doesn't hurt anything. If your starter is looking dry, stir it back in. If your starter is plenty wet, pour it off. Just remember that hooch is nothing to worry about!

### Sourdough Baking Step One: Proofing the Sponge

Several hours before you plan to make your dough (recipe below), you need to make a sponge. A "sponge" is just another word for a bowl of warm, fermented batter. This is how you make your sponge.

- **Take your starter out of the fridge.** Pour it into a large glass or plastic bowl. Meanwhile, wash the jar and dry it. You may also wish to pour boiling water over it, since you don't want other things growing in there with your pet!
- **Add a cup of warm water and a cup of flour to the bowl.** Stir well, and set it in a warm place for several hours. This is called "proofing," another word for fermenting. Sourdough bakers have their own language; use it to impress your friends ;)
- **Watch for Froth and and Sniff.** When your sponge is bubbly and has a white froth, and it smells a little sour, it is ready. The longer you let the sponge sit, the more sour flavor you will get.

The proofing-time varies. Some starters can proof up to frothiness in an hour or two. Some take 6-8 hours, or even longer. Just experiment and see how long yours takes. If you're going to bake in the morning, set your sponge out to proof overnight.

## **Sourdough Baking Step Two: The Actual Recipe**

Of course, there are a lot of recipes for sourdough bread. There are also recipes for sourdough rolls, sourdough pancakes, sourdough pretzels, sourdough bagels, and probably sourdough saltines for all I know. This is the basic recipe I use, though, and it's simple and makes a fine bread. You'll need the following:

- 2 Cups of sponge (proofed starter)
- 3 Cups of unbleached flour
- 2 tablespoons of olive oil or softened margarine
- 4 teaspoons of sugar
- 2 teaspoons of salt

First, let's talk about leftover sponge. You should have some. The leftover sponge is your starter for next time: Put it into the jar, and give it a fresh feed of a half-cup each of flour and warm water. Keep it in the fridge as above; you'll have starter again next time.

Now, for the recipe: To the sponge, add the sugar, salt, and oil (the oil is optional - you can use softened butter instead, or no oil at all). Mix well, then knead in the flour a half-cup at a time. Knead in enough flour to make a good, flexible bread dough. You can do this with an electric mixer, a bread machine on "dough cycle," or a food processor. You can also do it with a big bowl and your bare hands.

Keep in mind that flour amounts are approximate; flour varies in absorbency, and your sponge can vary in wetness. Use your judgement; treat it like ordinary white or french bread dough.

Let the dough rise in a warm place, in a bowl covered loosely with a towel (if you're using a bread machine's dough cycle, let it rise in the machine). Note that sourdough rises more slowly than yeast bread; my starter takes about an hour or so, but some starters take much longer. Let the dough double in bulk, just like yeast-bread dough. When a finger poked into the top of the dough creates a pit that doesn't "heal" (spring back), you've got a risen dough.

Punch the dough down and knead it a little more. Make a loaf and place it on a baking sheet (lightly greased or sprinkled with cornmeal). Slit the top if you like, and cover the loaf with a paper towel and place it in a warm place to rise again, until doubled in bulk.

Place the pan with the loaf in your oven, and then turn your oven to 350° Fahrenheit and bake the bread for 30-45 minutes. Do not preheat the oven. The loaf is done when the crust is brown and the bottom sounds hollow when thumped with a wooden spoon. Turn the loaf out onto a cooling rack or a towel and let it cool for an hour before slicing.

And that's that. If you double the recipe for two big two-pound loaves of bread, the total price tag will be less than a dollar.

## **Comments and Notes and Ramblings**

For good rising, I use my oven. Turn the oven on for a minute or so, then turn it off again. This will warm the oven and make it a great environment to raise bread. If you can't comfortably press your hand against the inside of the oven door, the oven is too hot. Let it stand open to cool a bit.

I'm continually amazed at the elegance of sourdough baking . . . Bread is simple and yet it's one of the most satisfying foods there is, and the most fundamental.

If any part of the article is unclear, refer to the [sourdough section](#) of my [FAQ](#) for help. For the sake of my health and good cheer, I am no longer accepting sourdough emails due to regrettable abuses of my preferred open-inbox policy. The good news is that the article and FAQ already include *everything* I've learned, so you should have plenty to begin with. Best of luck with it, and most of all remember to have fun, never mind getting messy, and enjoy sharing the results with those you love.

- *S. John Ross*