# **Sourdough Starter - Maintenance Instructions**

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This tutorial contains information that I have been taught, or that I have picked up on the way. It doesn't claim to be the *right* way to do things, just a method that I have found works for me.

The article covers the maintenance and use of a bread starter for either traditional sourdough, or other natural yeast starters. It assumes that you have been given a starter to begin with. The easiest way to obtain a starter is to get one from someone already making sourdough bread. However, another tutorial will cover making a starter from scratch.

Note that wild yeast is everywhere, and unless good brewing hygeine is maintained – keeping the starter container closed, and avoiding cross-contamination – the yeast in your carefully cultured starter may be replaced by the local variety. This is not necessarily a disaster, as it will still usually make good-tasting bread, but it may not be as authentic and will probably take on a slightly different taste.

#### Basic Dos and Don'ts

- **Don't** use metal bowls or utensils to hold/stir your starter. Sourdough is acidic, and the use of metal will be detrimental to both the metal tools and the starter. Use plastic or glass bowls and plastic or wooden spoons.
- **Do** keep the starter covered whenever you are not working with it. At the same time, it should not be completely sealed, as the starter will give off gas, which will need to vent. I use a plastic jug, with a sealed lid, but a loosely-stoppered spout. A plastic container, loosely covered in clingfilm also works.
- **Do** keep the active starter in a warm place on a sunny windowsill, near (but not on) a radiator, or in a conservatory or airing cupboard.
- **Don't** use cold water from the tap the water you use should ideally be warm, at about 30-40 degrees C. I use water from a recently boiled kettle, allowed to cool.
- **Don't** use anything except strong white bread flour for feeding. You may wish to use other flours when actually making bread, but keep what goes into the starter as basic as possible.
- Once opened, **do** keep the flour you use to feed the starter in a sealed container, and **don't** use for other purposes. This is to minimise the possibility of it being cross-contaminated with other baking products or airborne wild yeasts.
- The starter will also form a layer of brown liquid on or just under the surface, which we call hooch. This is alcohol, but **don't** attempt to drink it, as it is unpleasant to taste.
- **Don't** feed after midnight (or was that something else?)

# Feeding Your Sourdough

- Your starter should normally be fed once a day, or once a week, if refrigerated.
- To feed a live starter, remove 1-2 cups of the starter, and replace with the equivalent 50/50 mix of flour and warm water. So if you remove 1 cup of starter, replace with half a cup of flour and half a cup of warm water. Give it a good stir, until the flour is well mixed, and the starter is smooth.
- When feeding or using the starter, do not remove more than half the volume of the starter.
- If hooch has developed on the surface, simply stir it back in. It is part of what gives the sourdough its taste. If you feel there is too much hooch, then some can be poured off before feeding, but I simply stir it in.
- The starter you have removed can either be used to create a dough, or if you are merely maintaining the starter simply poured away. Alternatively, pass it on to a friend, with these instructions!
- If refrigerated, feed as above, but only remove 1 cup of starter, and feed only once a week.
- To revive a refrigerated starter, take it out of the fridge and leave it out overnight. The next day, feed it one cup of warm water and one cup of flour, stir, and then leave it for 3-4 hours or more. Then give it a stir, and remove two cups of starter for your baking purposes, returning the container to the windowsill or fridge, depending on your future baking plans.
- If the starter has been constantly refrigerated for more than a month (i.e. not revived in the meantime), you may find you need to repeat the above process for a couple of days to wake it up.

# **Using Your Sourdough Starter**

To make a 1lb loaf, you need the following ingredients (double for 2lb loaf).

1 cup of sourdough starter

2 cups of bread flour

1/3 cup warm water (or less)

1 tsp salt

Note: Unlike "normal" bread, sourdough does not require sugar – the natural yeasts work on the carbohydrates in the flour.

#### Method

- Mix ingrediants until a smooth dough is formed, then knead by hand for approximately 15 minutes. Use only as much water as necessary to make a workable dough depending on the consistancy of the starter, sometimes I need no water at all.
- Dust outside of dough with flour, place in plastic or glass bowl and cover with cling-film.
- Rest in a warm place for 6-8 hours, or until dough has doubled in size.
- Remove dough from bowl, place it on a floured top, and punch it down (knock out the air in it). Then knead again: Use the heel of your hand to compress and push the dough away from you, then fold it back over itself. Rotate the dough, and repeat, and continue until gluten forms this is when the dough is smooth, shiney and stretchy.
- Shape into loaves, rolls, or baguettes, and place on a greased or floured baking sheet, and cover with a clean cloth
- Leave in a warm place for 5-6 hours, or until dough has doubled in size.
- With a sharp knife, slash the tip of the bread a few times this allows it to rise evenly
- Place roasting dish on botton shelf of over, with 2 inches of water in it. Preheat oven to 425 F/220 C/Gas Mark 7. If not using a water pan, lower the oven temperature to a medium oven
- When oven is hot, and water steaming, place dough in middle of oven, and bake for 30-45 minutes, until done.
- Allow to cool for at least an hour before slicing.

# If It All Goes Wrong

If you feel that your sourdough bread has become too sour in taste, try one of the following:

- Start pouring off the hooch daily, before feeding the starter, and see if this improves things.
- Take a cup of the old starter to make a new starter, as instructed below. Make sure that the new starter takes before pouring the old one away.

If your sourdough starts growing mould, or the hooch turns red/pink/orange, then it has gone bad, and you should pour it away and start afresh. For this reason, it is a good idea to have some frozen starter, from when the sourdough was good and working well.

I've been doing this with some success by freezing in single cup portions. It is worth having a couple of portions in the freezer, in case the first one doesn't take.

However, I've recently read that a more reliable method is to dry the starter first, by spreading it out on a layer of cooking parchment or similar, then freezing it.

 To create a new starter from a frozen portion, defrost at room temperature for two days, and then follow the instructions below.

# Making A New Starter From An Existing One

You may want to do this either to revive a starter that is going sour, or to share your starter with a friend.

- In a clean container, stir one cup of starter, one cup of flour and one cup of warm water, cover, and leave in a warm place.
- After 4 hours, stir in another cup of flour and another cup of warm water.
- After another 4 hours, stir in yet another cup of flour and another cup of warm water.
- Leave overnight, and the next day, pour away one cup of starter, and replace with half a cup of flour and half a cup of warm water.
- Repeat that last step for 7 days, after which you should have a new healthy starter.

#### **Bread Machines**

Sourdough, like all wild yeasts, needs longer to prove than commercial baker's yeast. For this reason, sourdough is not immediately suitable for making in a standard bread machine.

One way around this is if your machine has "dough only" and "bake only" settings. In which case, you can use the dough setting to knead the dough, then leave it for 5-6 hours before using the bake setting.

Some bread machines have user-programmable settings, which may allow you to set a long enough period for the various stages.

I've read other reports of people successfully using a "French Bread" setting, with decent results.

Alternatively, a small amount of instant yeast (¼ teaspoon) may be mixed into the water at the initial mixing, together with 1 teaspoons of sugar. This is a bit of a cheat, in that you are now relying upon the sourdough for taste only, and the instant yeast and sugar as the rising agent. I have also read of people using baking soda (¼ teaspoon) instead of instant yeast/sugar.

I haven't tried any of these methods, but feel free to experiment.