HOW TO DRY SOURDOUGH STARTER

The most important part in this process is to use starter which has not yet fully consumed all 'the food' from its last feeding. 'The food' meaning the undigested flour and sugar that you fed it just hours before it gets to a state like shown in this picture.

Have a look at this starter. It is bubbling and full of life, has just about doubled in size but is clearly still on the way up with lots of activity within. There are no sunken-in areas which indicate the yeast and bacteria in that area of the starter have run out of food.

See how clean the sides of the bowl are? That tells me it hasn't collapsed yet because if it had, there would be evidence of a film of dough up the sides and higher than the current level of the sourdough starter. This is the optimal time to save some sourdough starter in your container in the fridge or dry it. The following are instructions on how to dry it.

Drying sourdough starter is the safest way to preserve and share sourdough starter. Think of dried starter as your insurance policy for future use. If you forget to feed your starter for months and discover a science experiment in your fridge in place of your sourdough starter, you will be grateful for having dried some previously. If you go on holiday or are moving, just dry your starter and it will literally wait for years until you are ready to revive it. Drying your starter puts it in a dormant state: it is not dead but it is not active either. Archaeologists have found, revived, and successfully baked with sourdough starter discovered in Egyptian tombs that are thousands of years old. Dried sourdough starter will outlast you and I, and is what makes it possible for me to share it with you.







EXAMPLE OF SOURDOUGH STARTER WHICH HAS BEGUN TO COLLAPSE AND RUN OUT OF FOOD

Doesn't this starter look voluptuous and lovely? Let's look a little closer...it's not as great as you might think.

Look closely at the areas where the arrows are pointing. The most obvious signs of deflation are along the sides of the bowl. See where the starter looks like it's stretching or being pulled down? This starter has begun to fall. It is on the way down and starting to die because it is running out of food. The less obvious indicators are sunken depressions among mounds of bubbles that are both large and small. Notice the differences between the picture before this and this one. The first picture of the starter has bubbles that are somewhat tighter and better defined. This 2nd picture shows more puffy and inflated areas which tells me the yeast and bacteria has travelled through the starter fully and consumed anything that it was able to eat. There's nothing left.

Do not dry or store your starter when it is in this state because it has more dead bacteria in it than live ones. I would use this starter to make pancakes or crepes, brownies or scones.

Remember, you can always remove a small portion of this dying starter, feed it generously with flour, sugar and water and it will come back to life... slowly, but it will still come back. If you dry it in this state it will continue to die off as it dries and you may kill so many bacteria off in the drying process that there's nothing left to come back to life.

Just because I put my starter to dry doesn't mean it stops consuming food immediately. As it dries, it slows down but doesn't go into a fully dormant state until it is completely dry. The quicker you can get it to dry out, the more bacteria you will save. Therefore, spreading it thinly makes a big difference in how quickly you can get it to dry. If not spread thinly enough, it could collect mold from the air and start to grow fungus before it is fully dry.



Line a sheet pan (cookie sheet) with parchment paper.

Start with a small amount of active starter and spread it thinly. You can always add more or remove some if you add too much.

I use an offset pallet knife to spread my starter. This is a tool that bakers use to frost/ice cakes. A flexible spatula works well, too.



Hold the parchment paper and gently spread the starter to the edges and over the entire surface of the parchment.

Work it several times to get it to spread as thinly as possible.



Add more starter if you need. The goal is to have a very thin layer of sourdough that fully covers the sheet of parchment paper.

You want the starter to dry as quickly as possible and that only happens if it is thin enough. If the starter takes several days to dry it is likely that all the bacteria will die long before it goes into a dormant state.



This is the goal – it's as thin as I can spread it.

It will take some effort but you will eventually get a nice thin layer of sourdough starter which will dry quickly.

Within a day, the moisture will be greatly reduced which slows the bacteria down as they cannot metabolize the starch without it. To ensure the starter has fully dried, leave it to dry at room temperature for at least 4-5 days.

To dry properly, the starter needs air movement. I have room on top of my fridge at home to slide the sheet of starter up there. At the Well Bread kitchen I dry the starter on racks and use a fan on low to circulate air over the starter to speed the drying. I also use silicone non-stick mats on industrial sized sheet pans in place of the parchment paper because they don't slide around and wrinkle like the parchment does. Most home bakers don't have those mats but if you do, use them as they work the best and are reusable. The parchment is quite altered after the sourdough starter has dried on it – it has tiny holes torn in it from the flex of the sourdough starter as it dries. I find it usually has to be thrown away after just one round of drying the starter on it.

Do not put your starter in the oven to dry it. Heat kills bacteria and yeast so don't place it somewhere it will get too warm. There is no air movement in an oven when the door is closed so that is not a good place to dry it either. On top of a cabinet or counter is more suitable. You could use a food dehydrator with no heat on to dry it as well.



DRIED STARTER IS READY TO BE STORED

After 4-5 days the starter is completely dry and ready to be stored in an airtight container. The layer of starter, if done properly, is about as thick as the sheet of parchment when it's dry.

In this stage, these pieces of starter are extremely sharp and will cut into your hands if you're not careful. I snap them into smaller pieces and put them into my blender or food processor.

By pulsing the food processor the shards of dried sourdough starter are easily broken down into a powdery form. My blender does the best job but I must be careful to not overheat the starter due to the friction that is created between the blade and the product.

I keep the powdery starter in an airtight container in a dark cabinet. Keep it out of the sunshine because the sun is a natural bacteria killer. At room temperature and properly stored, this dried sourdough starter will last for years and years.

Some people freeze it at this point but I don't believe that is necessary as it is stable at room temperature and extreme temperatures in their direction can harm the bacteria so why risk it?



WHAT IT MAY LOOK LIKE UNDERNEATH IF IT WENT DORMANT IN A HEALTHY STATE

The top side of the dried starter looks flat and dry so it's hard to tell if this sourdough starter was put to sleep in a healthy condition: well fed but still lots of food to eat.

The bubbles underneath are a great indicator that there was vigorous life happening as the starter slowed down and became dormant. You may not see as many bubbles as are in this picture, but some bubbles are a great sign.

If you see no bubbles whatsoever; do a test run on some of the dried sourdough just to make sure it is healthy and will come back to life when you need it. Just because you dried your sourdough starter doesn't mean it's actually viable for future use. If your starter dies in the drying process (this can happen if it takes too long to dry out) then it's not the insurance you actually need for the future. Just test it out (read the rehydrating instructions) and if it has life then great!

When in doubt, just feed it again and dry it when it's on the way up (as explained in the previous pages).

