



Sourdough

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The Beginning

Where Did Sourdough Come From?

The sourdough we know today has come from thousands of years of tradition, spread across multiple continents. From the Swiss, the ancient Egyptians to ancient Greece and Rome, Californian Gold Miners in the American West and Klondike Gold Miners in Western Canada and Alaska, sourdough has a rich tapestry of international use.

And while sourdough techniques have certainly progressed over many years, one thing remains the same this amazing bread has always been made with a combination of flour and water (and more recently salt). While ancient Egypt is generally heralded as the birthplace of sourdough, evidence of fermented bread has been found in Bern, Switzerland, said to date back 3600BC (around 5000 years ago). There are a few different dates floating around, both for the discovery of yeasted bread in Switzerland and Egypt. It's safe to say that the process of fermenting sourdough bread is indeed very old and can be traced back to both Northern European and Ancient Egyptian societies (source) in a time well before ours.

What Is The Oldest Sourdough Starter Known Today?

The oldest known sourdough starter is said to have originated from clay pots unearthed in Egypt. Seamus Blackley baked a loaf of sourdough bread using yeast harvested from 4500 year old clay pots. Now it's pretty cool that this happened and while the Egyptian sourdough starter may have been added to the flour and water used, the actual yeast he baked the bread with after a week of feeding this starter would have also been localised yeast and not exactly the same as the wild yeast spores that the ancient Egyptians baked with (simply because feeding a sourdough starter with different flour and water, combined with the yeast on your hands and in the air changes the composition of the sourdough starter).

How Did Sourdough Bread Find It's Way To The United States?

The history of sourdough bread in the United States can be traced to the Californian Gold Rush where miners, who couldn't always access newly developed baker's yeast, used sourdough starter to make bread in the gold fields. It's likely that their bread wasn't all that great, but it kept them fed all the same. There are many stories of miners who became sick after eating the sourdough baked on the camp fires of the Californian gold fields. Sourdough bread became steeped in American culture when the Isidore Boudin, master baker from France, heard about the special flavor held in these sourdough starters and started making sourdough bread with it. The establishment of the Boudin Bakery made San Francisco Sourdough famous. And in fact it is now a huge tourist draw card for visitors to San Francisco and has provided a goal post for baker's wishing to recreate the famous San Francisco sourdough flavor at home. The Boudin Bakery still uses the same sourdough starter in their bread today and can be traced back over 150 years to a gold miner's starter.



Starter

Your starter is your leavening, your yeast, your rising agent. You've probably used or seen "ActiveDry Yeast" or "Instant Yeast", this is a dried and dormant form of yeast that actually becomes active when it comes in contact with warm water.

In this same way, when you mix flour and water, the yeasts in the flour, the air, on your hands and surfaces of your home activate. This process of activation takes longer when the yeasts are not concentrated like "ActiveDry Yeast". In the case of creating a starter, it takes days for it to become active enough to be usable! This is because feeding wild yeast takes careful cultivation. You must give it water to active or "wake up" and flour to feed it! But continually adding new flour and water daily, you are continuing to strengthen and grow your yeasty babies till they are strong enough to use in a recipe, which can contain yeast inhibitors like salt which pull moisture away from the yeast and can weaken the yeast if it is not strong enough!

Once you have an active starter, you can choose to use it daily or store in your fridge for a week or more!



"Starting" from Scratch

Flour & Water

Day1: Mix 25g flour & 25g water
Day2: Add 25g flour and 25g water
Day3: Add 25g flour and 25g water
Day4: Add 25g flour and 25g water
Day5: Add 25g flour and 25g water

By day 5 your starter may be active enough to use, you will know if it has doubled in size at least twice

If not consistently doubling every 12 hrs continue with

Day6am: discard all but 50g and add 50g water and 50g flour
Day6pm: repeat am.
Day7-10: repeat am/pm as needed

If you don't have a scale you can use: 2 Tbs Flour (20g) 1 1/2 Tbs Water(20g)

Rehydrating Dried Starter

Day1am: Combine 50g water and 15g dried starter. Let sit for 1-2 hrs to absorb moisture. Add 35g flour. Let sit at room temp for 12-14 hrs

Day1pm: Add 50g water and 50g flour

Day2am: Transfer 50g to a new jar and add 50g water and 50g flour

Day2pm: repeat am

Repeat am/pm feedings till consistently doubling



Keeping Starter "Alive"

Feeding

A starter can be fed in different ratios the most common is 1-1-1 Where you use an equal amount of starter, water and flour, though you can use several different ratios, 1-2-2, 1-3-3, 1-4-4, up to 1-5-5 where 1 is the amount of starter and 2/3/4/5 is the amount of water and flour used in relation(1-1-1=10g starter, 10g water, 10g flour. 1-4-4=10g starter, 40g water, 40g flour)

To feed your starter, choose a ratio and stick to it, starters like consistency(though it's not required), and then feed your starter 6-12 hrs before you want to use it! This will allow enough time for activation! You can use your activated starter anytime from Peak activity(risen to at least double in size) to several weeks old from the fridge! You WILL want to store your starter In the fridge if not using/feeding daily, otherwise mild will occur!

Storage

A starter can either be kept at room temperature and fed and used(or discarded from) daily or you can feed it once and then keep it in the fridge for a weeks and use it as needed.

OR you may choose to put sourdough baking on hold and dehydrate your own starter by spreading a thin layer of active starter on a piece of parchment paper and let it dry on the counter till completely dry then stored in an air tight container for a year(safely) or more(at your own risk)! Dehydrating a starter should only be done with a well established starter(over 3 months old)

Discard

Discard is whatever part of your starter you do not use at the time of being active. This discard can be active or inactive, but most cases "sourdough discard will be referring to inactive discard. There are tons of recipes that use discard! Just look up "Sourdough Discard Recipes".



Tools

Here is a list of popular tools!

1-8 are necessary but common tools for artisan and sandwich bread. 9-20 are not necessary but can be very helpful!

1. Oven
2. Baking Sheet/Pizza Stone
3. Bread Pan
4. Glass Jar
5. Measuring Cups/Spoons
6. Mixing Bowl
7. Knife
8. Oven Mits
9. Kitchen Scale
10. Dutch Oven
11. Sourdough Spatula
12. Razor Blade/Scoring Knife
13. Metal/Plastic scraper(rounded and flat edge)
14. Danish Dough Whisk
15. Tea Strainer/Confectioner Sugar Shaker
16. Unflavored Dental Floss
17. Sewing Scissors
18. Proofing Basket
19. Brush
20. Bread Bags



Making Sourdough Bread



Recipes

Mixing the Dough

Always start with the water!

This is a good rule of thumb that, just like anything, may not apply 100% of the time, but is still a good rule to stick by! It's always a good idea to mix your active starter and water together first, this is dissolving your starter in the water before you have added the the other ingredients and make for more even/easy distribution amongst the dough!

Another method to consider is Autolys. This is simply a method of mixing your flour and some of your water together and allowing to rest for 30-60 minutes to fully hydrate. This method is used because flour contains 2 proteins, gliadin and glutenin, thay when they come in contact with water combine to form gluten! So allowing your flour to have fully formed gluten by allowing the flour to fully hydrate in the form of autolyse is raved by some and unuseful to others. It's up to you!

Baking the Dough

There are several different methods of baking sourdough, wether it's an artisan loaf in a dutch over or a sandwich bread loaf in a bread pan, but here I will be addressing artisan loaves. A Dutch oven is useful because of its even heat distribution and moisture retaining lid, but it is NOT required! If you have a cookie sheet, pizza pan or pizza stone(recommend) and you put a pan of water on the shelf under it, this will allow for enough moisture, in the form of steam, to stay in the oven that your bread will not get to hard! You can also use a steal pot and lid or even a pan and tin foil, these will all allow for a 20 min "lid" on and 20 min "lid" off bake, which is how a loaf is usually baked(depending on your recipe)

Out of the Oven

Once your loaf is out of the oven it is important that you let it rest 30-60 min, or until room temp, this allow for the excess moisture trapped in the center to wick out to the crust, creating a beautiful soft/crispy crust and not a rock hard crust!

Artisan Loaf

350g water
50g starter
500g flour
5-10g salt

In Cups

1 2/3 C water
1/4 C starter
3 1/2 C flour
1/2 Tbs salt

Sandwich Loaf

230g water
150g starter
90g fat/oil
30g Honey
500g flour
5-10g salt

In Cups

1C water
2/3 C starter
1/2C fat/oil
2Tbs Honey
3 1/2C flour
1/2Tbs salt

Mix water and starter, add four and salt. Mix till well combined. Let rest 60 min. Stretch and fold(optional). Repeat every 30-60 min as desired(2-4 pulls). Let bulk ferment till doubled in size. Shape into loaf of desire, either round or batard(oval) and place in floured proofing basket. Let rest 1-2 hrs on counter or in fridge. Preheat oven to 450° with Dutch oven inside at least 30 minutes before baking. Turn out of basket onto parchment paper. Score and place in oven. If using a Dutch oven, bake 20 min lid on, 20 min lid off. If using a pizza stone and water pan, bake 40 min. Let rest 30 min or until room temp before cutting.

Mix water and starter. Add oil, flour and salt, mix together and knead for 6-10 min. Let bulk ferment till doubled in size. Form your loaf and place in bread pan for 1-2 hours or until doubled in size. Preheat oven to 375° and bake for 45min. Let rest 30 minutes or until room temp before cutting.



Dictionary

Here is a list of popular terminology found in the sourdough world and what it means!

Bulk Ferment- the first round of rising or proofing of your dough which can take up to 12 hours.

Bakers Percentage: the amount of any ingredient as a percentage of the weight of flour. (i.e. if there is 500g flour in a recipe, then 80% hydration would be 400g of water!)

Surface Tension: Forming your loaf into a ball or pulling up the side of an oval to form a tight surface on your dough.

Scoring: this is the cutting of the surface of your dough to control the splitting, you can use a knife or Scoring blade for this.

Leavening: any rising agent used in baking.

Discard: The unused portion of your starter, active or inactive, but if called for in a recipe it is most likely inactive.

Kneading: the act of stretching, aligning and strengthening the gluten in your dough.

Proofing Basket: a basket used to hold your dough in formation during the second rise or proof.

Hooch: The grey watery substance that forms on the top of a hungry starter.