

What is sourdough bread?

- Naturally, leavened bread
- Uses a starter instead of commercially produced yeast
- Is a chewy, slightly sour bread with many uses



Best Uses for Sourdough



- \circ Bread bowls
- \circ Sandwiches
- o Dips, spreads and toppings
- o Cubed as a topper (croutons, etc.)
- o Freezes well

What is starter?

- Made of fermented flour and water
- Contains wild yeast and good bacteria found in the flour
- Provides a tangy flavor and chewy texture





Starter Ingredients - Water

- 60 g warm water (75 82°F)
 - Filtered water does not have Chlorine and other chemicals, like tap water may have
 - Hard and soft water, distilled and reverse osmosis water cannot be used
 - Certain fruit juices can replace water
 - We're using bottled filtered water to start

The quality of the water you choose will affect the viability and health of your sourdough starter and the results of your sourdough bakes.

T THE

Bad water: Distilled Water, Reverse Osmosis Water, Chlorinated Tap Water, Hard Water, Soft Water

Good water: Clean Spring Water, Bottled Water (but read the source of it), Filtered Tap Water (jug filter, fridge filter or house filter), Rainwater (preferably filtered)

Healthy water contains important minerals such as magnesium, calcium and sodium. These minerals have been deposited into the water as it travels across rocks, earth and sand and are not only essential to the health of humans, but also to the health of your sourdough starter. If the water you are using is devoid of these minerals, or in fact has too many of these minerals, you will find it hard to foster the right fermentation for your starter.

Ideally, you should use water with a pH of just below 7 - it needs to be not too hard and not too soft (somewhere around 100 - 150 PPM).

In many cities and towns around the world, tap water is treated with chloramine or chlorine. Chloramine is not a desirable chemical to have in a sourdough starter because it will kill the good bacteria in the starter and inhibits the starter's strength and ability to rise. Chloramine in tap water will not kill the yeast, but it will not help.

Filtered water does not have Chlorine and other chemicals, like tap water may have. If you are using unfiltered tap water in your sourdough starter and it is not rising or forming bubbles, this may be the reason. To fix the issue, you will need to either dechlorinate or filter the tap water - or swap for a different water source.

There are two easy ways to remove chlorine or chloramine from tap water without a filter.

- Boil the water and let it cool naturally then it is safe to use in your starter.
- Fill a glass with water and let it sit out overnight then it is safe to use in your starter.

Both methods are easy; however, we will need forward planning to ensure you have dechlorinated water ready for feeding your starter. You can read more about this process at

https://www.waterlogicaustralia.com.au/resources/whats-in-my-tapwater/how-to-remove-chlorine-from-water/

• Reverse Osmosis Water is like distilled water in that it has had all the precious minerals removed from it. It is a popular choice of water filtration in many homes.

• There are many theories around replacing the water in your sourdough starter with other liquids. These can include whey, beer, honey, pineapple juice, apple juice and even sauerkraut juice. <u>https://www.pantrymama.com/what-water-touse-for-sourdough-starter/</u>

Temperature

• The ideal temperature for a sourdough starter is between 24 - 28°C (75 - 82°F).

• If you are working in a cold climate, feeding your sourdough starter with warm water will help to boost the activity of the bacteria and yeast. Warm water is also useful if you're feeding your starter right out of the fridge. Similarly, if you are in a particularly warm environment, using cooler or cold water will slow the activity of the starter down. This can be useful if you want to prolong the starter's peak or lengthen the fermentation time.



Ideally your strong flour should be between 12.5-14% protein and non-organic. If you are new to sourdough bread making, non-organic flours are stronger and will make your introduction into sourdough smoother. <u>https://foodbodsourdough.com/flour/</u>

Organic vs. Non-Organic Flour – Which Type of Flour Should You Use? The primary nutrients needed for the bake are water, starch, and protein, so organic flour is technically not necessary to make a successful sourdough. However, you should make sure your flour is unbleached because the chlorine can seriously affect the success of the starter.

The science behind the comparisons between organic and non-organic flours is that organic flour has a different mineral content, without added chemicals, so when it ferments, it has a more natural and diverse

range of flavors than the non-organic wheat flour. While there are pros and cons to both the organic and non-organic type of flour, you shouldn't worry too much about your choice if you are on a budget, or unable to source one flour over the other. If you make the effort to feed your starter with the best sourdough bread flour you can, it should be strong enough to still bake excellent bread, whichever flour you use for the rest of your baking.

Whole Wheat vs. White Flour Both whole wheat and white bread flour are viable types of flour for sourdough, however using whole wheat bread flour will have a big impact on the flavor and texture of the bread. This is because whole wheat flour contains vitamins and healthy fats. In contrast, white bread flour contains much less of the grain of wheat, impacting the flavors and removing some of the nutritional value. https://bannetonman.com.au/blogs/news/what-flour-to-use-for-sourdough-breadstarters

Starter Ingredients - Fruit

- Dried fruit (optional)
 - Can speed up the accumulation of good bacteria like lactobacilli
 - \circ Put fruit with water and see the cloudiness that's the wild yeast
 - o Remove the fruit chunks and use only the water.
- Unwashed fresh fruit preferably organic or without pesticides
 - $\circ\,$ That haze on the grapes is a yeast called bloom. That's why we use unwashed fresh fruit.



The fermentation of the fruit encourages the ascendency of specific micro flora such as lactobacilli bacteria and those wild yeasts with a symbiotic relationship with the bacteria. The bacteria ferment sugars and starches and helps produce the food supply for the yeast as well as the signature "twangy" flavor. By-products are metabolized by the yeast which produces carbon dioxide gas, which leavens the dough. This process is not the same as some so-called sourdough breads which use additives to imitate the characteristic sour smell and flavor of traditional sourdough bread. In traditional sourdough bread, the bacteria and yeasts breakdown the flour converting it into components that the human digestive system is more attuned to and capable of absorbing. <u>https://www.sourdoughbreadrecipe.com.au/making-a-starter/</u>

Add 2 teaspoons of unwashed fresh fruit or dried fruit to a little water and stir. • The cloudiness will be the wild yeast. • Discard the fruit and add the yeasty water to the amount of water you are using for starter.



1. First mix dried fruit and water together in a small bowl. Stir thoroughly and discard the chunks of fruit. Use a scale to measure both the fruity water and water to 60g and add it to a jar.

2. Put the thermometer sticker on the glass jar to easily check the temperature 75 - 82°F.

3. Measure the flour carefully with a scale and add it to the jar. Stir thoroughly.

4. Place the lid on the jar but keep it loose fitting, not tight. Carbon dioxide gas must escape while making a starter.

- 5. Put the rubber band marker at the level of the mixture.
- 6. Place the jar in a warm area (use the thermometer) of 75 82°F.

Everyday Feeding

- 1. Discard half the starter (about 30g).
- 2. Add 30g of water and 30g of flour.
- 3. Stir to absorb the flour.
- 4. Recap and place it back in the warm spot.

There will be some activity the first few days while the good and bad bacteria are fighting. Discard half and feed your starter every day at about the same time. Usually on the third day the starter slows down. Keep feeding your starter. You will notice via the rubber band the rising and falling of your starter.



Starter - Day 4

- Feed every day at the same time or when the starter looks like it has stopped bubbling.
- Takes 7 or more days to realize a good starter.

Day 4 and Onwards

• Continue to discard and feed your starter every day at about the same time, especially whenever it looks like it has stopped bubbling.

• A good, strong starter will be fermented within 7-14 days (about 2 weeks).

How to know your starter is ready

• Put a drop of starter into a glass of water. If it floats, it is ready. If it sinks, it needs more feeding and fermenting.

• Use your starter about 4-7 hours after the last feeding.



Tips

- Some people feed their starter twice a day. Watch for rising and falling of the starter and feed when it is lowest.
- Miss a day? If it is after you have a robust starter, it'll bounce back.
- Changing types of flour in the early stages of starter may slow the process down.
- Be aware of temperature changes in your kitchen. Use the thermometer of gauge differences over time.

Some people feed their starter twice a day if they want to speed up the process or produce more starter. Watch the rising and falling of the starter to see when it needs to be fed.

- If you miss a day don't panic. Just discard and feed normally.
- If you change types of flour in the early stages of the starter may slow the process but it won't destroy it.
- Watch for big temperature changes where your starter is located.

• Once you have a strong starter, you can put it in the refrigerator if you feed it once a month. The cold air will slow down activity. When you want to use the starter, let it warm to room temperature before you use it.



There are many recipes for sourdough bread. Here are a few tips.

- Feed a sourdough starter 4-12 hours before starting the dough, ensuring it is active and bubbly.
- Preheat your oven early and make sure you turn it off when you're done. 500°F is one hot stove.
- Sourdough bread time and effort but it's worth it!