



Maintaining A Liquid Sourdough Culture (Levain)

Tips From Sea Wolf Bakers

Feeding for Maintenance

Your sourdough culture is a living colony of microbes. These microbes feed on the natural sugars in flour. Because the microbes replicate very rapidly, the growing colony can quickly consume all of the available sugars at which point it will start to die off.

To maintain your sourdough colony, you need to feed it regularly with fresh water and flour to keep the culture healthy. A good ratio for feeding is 40 grams flour + 40 grams water + 10 grams mature levain. Mix all the ingredients together into a homogeneous slurry. An old yogurt container is perfect for storing your levain.

Note: *When feeding to maintain the levain, you will only use a small amount of the old, mature culture to start the next batch. The remainder will be discarded. This is a fact of baking.*

After mixing the fresh levain, leave it out on the counter for a few hours so that it can start to ferment. Once you see bubbles starting to form, you can toss it in the fridge. This will slow the growth of the microbial colony and extend its lifespan.

However, even in the fridge, your levain will eventually exhaust itself; a good rule of thumb is to feed it at least every two weeks.

In this way, you can maintain your levain between baking projects.

Reviving Your Levain

After more than a couple days in the fridge, your levain will be cold and sluggish. You will want to revive it with a feeding before you build it up to mix dough.

To revive your levain, simply feed it as described above, but leave it out on the counter rather than putting it back in the fridge. Watch it to see that it rises and begins to fall within about 12 hours.

To better judge your levain's readiness, mix it in a clear container.

A healthy levain will double in volume within 12 hrs if kept in a warm spot. A levain that does not rise easily might need another feeding and 12 hrs in a warm spot to become fully reinvigorated.

Building Your Levain to Mix

If your levain has been in the fridge for a while, you'll want to pull it from the fridge 24 hrs before you plan to mix it into your dough.

First you'll feed it to revive it as described above. After those first 12hrs, your levain is hopefully healthy and active.

At this point, you will want to *build* your levain up so that you have enough extra to mix into your dough while retaining a small amount to continue the feeding cycle.

Mix your levain as described in your bread formula and leave it in a warm place. Watch for the levain to dome and then slightly recede. This is the ideal time to mix it into your dough, but don't stress if you have to use it a little before or after.

Most of your levain will be mixed into your dough, but be careful to retain a small amount to start a new batch!

A Few Tips and Tricks

A healthy levain will double in size. Always mix in a large-enough container!

Like other fermented foods (beer, kombucha, kimchi, etc) your levain can build up surprisingly powerful hydraulic pressure. We recommend against keeping it in a glass container with an airtight lid.

To judge the health of your levain, keep an eye on the bubbles; bigger, irregular bubbles are good.

Once the bubbles start to diminish in size and become more homogenous and fizzy-looking, your levain is on the decline.

If a foam develops on top and the levain becomes very loose and liquid, you've left it out too long (or the ambient temp is quite warm) and you'll want to feed it before putting it in the fridge.

Don't stress too much. These are all guidelines. Your levain is resilient so long as it isn't exposed to extreme temperatures or totally neglected. Even a really old, gross-looking levain can be revived with a few feedings.