# Basic Fermentation Starters

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Pablo Puluke Giet PPG Baker

> Yeast-water, Poolish, Sourdough

Beginners' Handbook Part 1

#### Dear Sourdough Friends,

This is a little beginner's guide for the first stage of sourdough baking. With it you can learn three ways to cultivate natural, wild yeast starters: Fermented water, "poolish" and classic flour-based sourdough starter. I myself find it a real challenge to find clear, understandable instructions for the simple processes that are such a big part of my professional life. It is easy, when writing instructions for the beginner, to complicate things by offering too many options. That's because there are many different ways of cultivating a sourdough starter. Every way has a lot of different procedures and options.

Addressing all of those options all makes a set of instructions very detailed. That kind of detail is important and interesting for the professional baker, but from the feedback I've gotten tells me that the beginner is easily confused by such detail, and wants simple, "do this..." instructions. So the procedures described here are those that I personally find to be the easiest.

I won't give you lots of options even if there are many, once you get started you'll be able to discover on your own the creative aspects of the art. Since I'm assuming you're a newbie, I'll be giving you some advice in the form of instructions that has more to do with good baker's habits than with our fermentation project. Please forgive me for that, I can't resist! I'm always glad to get feedback or questions; simply send me a private massage on Facebook @ppg.baker or e-mail me @ ppg.baker@gmail.com and I will gladly and quickly respond.

Lets get started have fun and enjoy

Pablo Giet PPG Baker





### Preparation

To start with, get all your tools, ingredients and containers ready. Everything needs to be cleaned with clear, hot water, so you don't contaminate your cultures.

All containers and tools should get cleaned, too, right after using them. We're growing bugs here, and we only want them growing where they should! Besides, cleaning up can become really hard and messy if you wait to long.

Always use pure water for cultures. Get informed about the quality of your tap water Quality. If it is chlorinated (as most is) or known to contain even trace contaminants, find a source of good, purified water. This may simply be bottled water from your local store, but you can also consider installing a water purification system. Choose a convenient time for you at which to feed your classic sourdough starter. It should be fed everyday at the same time. The other two, your poolish and your fermented water, will be less demanding. Keep in mind, that choosing a time in the middle of the day will prevent you from having to wake up early on the weekend just to feed the starter or from staying up late during the week.











# Step 1

#### **Fermented Water**

Days 1-4 (4 days' initial fermentation)

First we are going to make fermented water, which will be the basis for all three cultures. Again, it is very important that all tools and containers be clean and sterile. Rinse every thing with hot water and dry it with fresh, clean kitchen cloths.

Measure and follow the steps precisely.

Add to the glass bottle:

- 1 date
- 50g sugar
- 500g water (drinking grade, bottled water!)

Shake well, and after shaking, open the lid just enough so that fermentation gasses can escape but fresh air cannot enter. Keep the bottle at room temperature 24-28C (75- 82F) Your initial fermentation will now begin and last for 4 Days. Everyday you'll need to shake the bottle at least two times. Make sure you close the lid before shaking, and open it again, just enough, afterwards.

Shaking prevents mold and encourages the growth of the culture.







Step 2

#### **Refreshing the Culture**

Days 5-8 (4 days' further fermentation)

The fermented water should already show some activity by now. Little bubbles can be seen rising in the bottle and foam is forming on the surface.

Now we are going to refresh the water to strengthen the culture. We'll do this simply by adding water, a date and sugar to the existing mixture. As always in baking, use precision in measuring and follow the given steps carefully.

Measure and follow the steps precisely.

Add to the bottle:

1	date
20g	sugar
400g	of water (again, drinking grade bottled water!)

#### (Here we go again!)

Shake well, and after shaking, open the lid just enough so that fermentation gasses can escape but fresh air cannot enter. Keep the bottle at room temperature 24-28C (75- 82F) This fermentation stage will also last for 4 Days. Everyday you'll need to shake the bottle at least two times. Make sure you close the lid before shaking, and open it again, just enough, afterwards. Remember, shaking prevents mold and encourages the growth of the culture.







# Step 3

#### **Start Fermented Flour**

Day 9 First 24-hour cycle

By now the fermented water should be very active and ready for use. As you begin, remember that it is Important that all tools and Containers be clean, free of anything that could contaminate your culture. Rinse everything with hot water and use fresh, clean kitchen cloths for drying.

Pour the bottle's contents carefully into a clean, convenient container, straining out the dates.

Measure and follow the steps precisely.

Add into one of the 0.5l jars, as described below:

- 100g organic white all purpose flour (type 0.55)
- 100g of your strained fermented water
  - 1 date

First add the flour, then the fermented water. Stir with a spatula. Make sure you get an homogenous paste, free of lumps. Now place the date in the middle of the jar and push it to the bottom. Keep the jar at room temperature 24-28C (75-82F) for 24 hours. Don't forget to clean up right afterwards!













### Step 4.1

#### **Feed fermented flour**

Day 10 2nd 24-hour cycle

Your beginning batch of fermented flour should now have doubled in volume. It may not quite have doubled, but you should clearly see that it has expanded and is biologically active. Now you are going to use the second 0.5l glass jar. Remember, rinse everything with hot water and use fresh, clean kitchen cloths for drying.

Measure and follow the steps precisely.

Add into the second 0.5l jar, as described below:

- 60g organic white all purpose flour (type 0.55)
- 60g of water (drinking grade, bottled water)
- 100g of your fermented flour (starter) the date from the fermented flour jar

Discard the contents of the first jar; the jar will be needed tomorrow!

Take out the date and put it aside. Now, weigh out 100g of the fermented flour for transfer into the clean jar.

Add the 60g white flour and the 60g pure water. This time we are not going to use the fermented water.

Stir with a spatula. Again, make sure you get an homogenous paste, free of lumps. Now place the date in the middle of the jar and push to the bottom.

Keep the jar at room temperature 24-28C (75-82F) for 24 hours. Always clean jar and tools right away!







Step 4.2

#### **Feed fermented flour**

Day 11 3rd 24-hour cycle

Today again, your fermented flour should have doubled in volume. (It may not quite have doubled, but you should clearly see that it has expanded and is biologically active.) You've already figured out that you're going to need the other jar. Good that you've rinsed everything with hot water and used fresh, clean kitchen cloths for drying.

Measure and follow the steps precisely.

Add into the fresh 0.5l jar, as described below:

- 75g organic white all purpose flour (type 0.55)
- 75g of water (drinking grade, bottled water)
- 70g of your fermented flour (starter) the date from the fermented flour jar

As you now know, you can toss out the remaining contents of the fermented flour jar.

Of course, the jar will be needed tomorrow!

Take out the date and put it aside. Now, weigh out 70g of the fermented flour for transfer into the clean jar. Add the 75g white flour and the 75g pure water. Prepare your homogenous paste, free of lumps. Again place the date in the middle of the jar and push to the bottom.

Keep the jar at room temperature 24-28C (75-82F) for another 24 hours.

Always clean jar and tools right away!







Step 4.3

#### **Feed fermented flour**

Day 12 4th 24-hour cycle

Today again, your fermented flour should have doubled in volume. (It may not quite have doubled, but you should clearly see that it has expanded and is biologically active.) You've already figured out that you're going to need the other jar. Good that you've rinsed everything with hot water and used fresh, clean kitchen cloths for drying.

Measure and follow the steps precisely.

Add into the fresh 0.5l jar, as described below:

- 85g organic white all purpose flour (type 0.55)
- 85g of water (drinking grade, bottled water)
- 50g of your fermented flour (starter) the date from the fermented flour jar

As you now know, you can toss out the remaining contents of the fermented flour jar. Of course, the jar will be needed tomorrow!

Take out the date and put it aside. Now, weigh out 50g of the fermented flour for transfer into the clean jar. Add the 85g white flour and the 85g pure water. Prepare your homogenous paste, and place the date at the bottom of the jar. Keep the jar at room temperature 24-28C (75-82F) for yet another 24 hours. Always clean jar and tools right away!





Step 4.4

#### **Feed fermented flour**

Day 13 5th 24-hour cycle

We're going to repeat this culture-strengthening cycle one last time. Remember to keep up your good habits, keeping everything strict, precise, and clean:

Measure and follow the steps precisely.

Add into the fresh 0.5l jar:

- 100g organic white all purpose flour (type 0.55)
- 100g of water (drinking grade, bottled water)
  - 20g of your fermented flour (starter) the date from the fermented flour jar

As you now know, you can toss out the remaining contents of the fermented flour jar. Of course, the jar will be needed tomorrow!

Take out the date and put it aside. Now, weigh out 20g of the fermented flour for transfer into the clean jar. Add the 100g white flour and the 100g pure water. Prepare your homogenous paste, and again place the date at the bottom of the jar. Keep the jar at room temperature 24-28C (75-82F) again for 24 hours. Always clean jar and tools right away!







# Step five

#### **Final procedure**

fermented flour Day 14 (ready for use!)

Now the starter should be ready and active enough to get your dough going. Take out the date and despose it. This is the "starter" called for in all the world's sourdough recipes. Congratulations!!

For your baking needs, you're going to keep this starter fresh and active indefinitely. Therefore, remove the date and continue the 5th 24 hour cycle, everyday at the same hour.

You now see why I suggested you pick a convenient time to do this little job every day!









## Further thoughts...

I hope everything worked out for you, and that your very own starter has provided delicious, healthy sourdough bread. Remember I'll be happy to answer and questions or help you troubleshoot your baking process.

Here is some further explanation on the nature and maintenance of the three culture stages you've created:

#### **Fermented Water:**

Fermented water can be used all by itself to leaven your dough. Simply use it as a replacement for the water in your initial hydration step. The culture can be kept for up to 2 month in the refrigerator without spoiling. The more often you feed (repeat the refreshment procedure) the fermenting water, the more active it will become. Refreshed often, it will keep indefinitely.

#### Poolish (Step 3./ 1st. 24 hour cycle):

The Poolish (50% flour, 50% fermented water, kept at room temperature for 24 hours) is very active and convenient to work with. You can make it the day before you bake, there is no feeding involved.

If you don't plan on baking everyday, I recommend to just use a poolish, made every time you bake from the fermented water.

#### Sourdough starter:

Needs to be fed everyday at the same time, with exacting measurements. (see Day 13, 5th 24 hour cycle) Leftover starter can be refrigerated for up to 2 Weeks. I always freeze the left over starter so I have some back up if needed. If you decide to bring up your starter again from a frozen state, start over with the feeding procedure using our 1st to 5th 24 hour cycles.



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#### Layout

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