

# Lesson 1: The Starter

*Make it, feed it, read it. By the end of this lesson you can keep a starter alive and know when it is ready to bake with.*

Weigh it while you are learning. Once you know what you are looking for, feeding a starter is a ninety-second job. The scale is training wheels. The jar is the teacher.



## What a starter is

Flour, water, and time. Wild yeast and friendly bacteria live on the flour and in the air. Give them a jar and a feeding routine and they settle in. The yeast make the gas that lifts your bread. The bacteria make the tang. Your job is to keep them fed, comfortable, and read what they are telling you.

## Starting one from scratch

You need a clean quart jar, unbleached all-purpose flour, water that is not straight from a chlorinated tap (filtered, spring, or tap left out overnight), a rubber band, a spatula, and a scale for the first week.

Equal weights, every day, same time of day if you can manage it. On camera I use 120 grams of each so you can see what is happening. At home, 60 and 60 is the right size for a quart jar and a daily feed. Same starter, less waste.

|                    |                                                                                                                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Day 1</b>       | 60 g flour + 60 g water. Stir hard until no dry flour is left. Scrape the sides down. Band the jar at the level of the mix. Cloth or loose lid. Counter, out of direct sun.                            |
| <b>Day 2</b>       | You may see a few bubbles or none. Either is fine. Discard all but about 60 g (roughly half). Feed 60 g flour + 60 g water. Stir, scrape, band.                                                        |
| <b>Day 3</b>       | Often the jar goes wild: lots of bubbles, a rise, a funny smell. This is not yeast yet. Keep going. Discard, feed, band.                                                                               |
| <b>Day 4 and 5</b> | The wild jar usually goes quiet and flat. This is the day most people give up. Do not. The early bubbles were bacteria clearing the way. The yeast are moving in now. Discard, feed, band.             |
| <b>Day 6 and 7</b> | Real bubbles come back, smaller and steadier, and the smell turns clean and yeasty, like beer or fresh dough. Discard, feed, band, and start watching the clock only to learn its pace.                |
| <b>Ready</b>       | It doubles within about 8 hours of feeding, three feedings in a row, and the top is gently domed at peak. In a warm kitchen this is about a week. In a cool kitchen it can take two. Slow is not dead. |

### **The day-three trap**

A brand-new jar bubbles like mad on day two or three, then goes flat on day four. That early activity is bacteria, not yeast, and the quiet stretch after it is normal. If you throw it out here you will start over every week forever. Feed it and wait.

Want it faster? A spoon of whole wheat or rye flour in the first few feeds gives the yeast more to work with. Pick one flour for your daily feed and stay with it until the starter is established.

## **Feeding an established starter**

### **Feed by weight, finish by eye**

Discard first. Leave a few tablespoons in the jar, roughly 60 g. Add 60 g unbleached all-purpose flour and 60 g room-temperature water. Stir hard, scrape the sides, move the band to the new level, lid on loosely. Then look. It should be thick, hold a ridge from the spatula for a second, and still fall off in a slow, heavy drop. If it runs like pancake batter, add a spoon of flour and stir again. If it stands up like dough, a splash of water. The number gets you close. The texture is right.

Once you know that look, a half-cup scoop of flour and a half-cup of water gets you there without the scale. Adjust with a spoon of flour to the texture you know. Do it the same way every time and you will land in the same spot in the jar every time. I have not moved my rubber band in years.

### Feeding schedule

- **Baking this week:** counter or proofer, feed once a day (twice if it peaks and falls before you get to it).
- **Not baking:** feed, let it get going for an hour, then fridge. Feed once a week.
- **Bake day coming:** pull it from the fridge two days ahead and feed daily until it is doubling on schedule.

### Label the jar



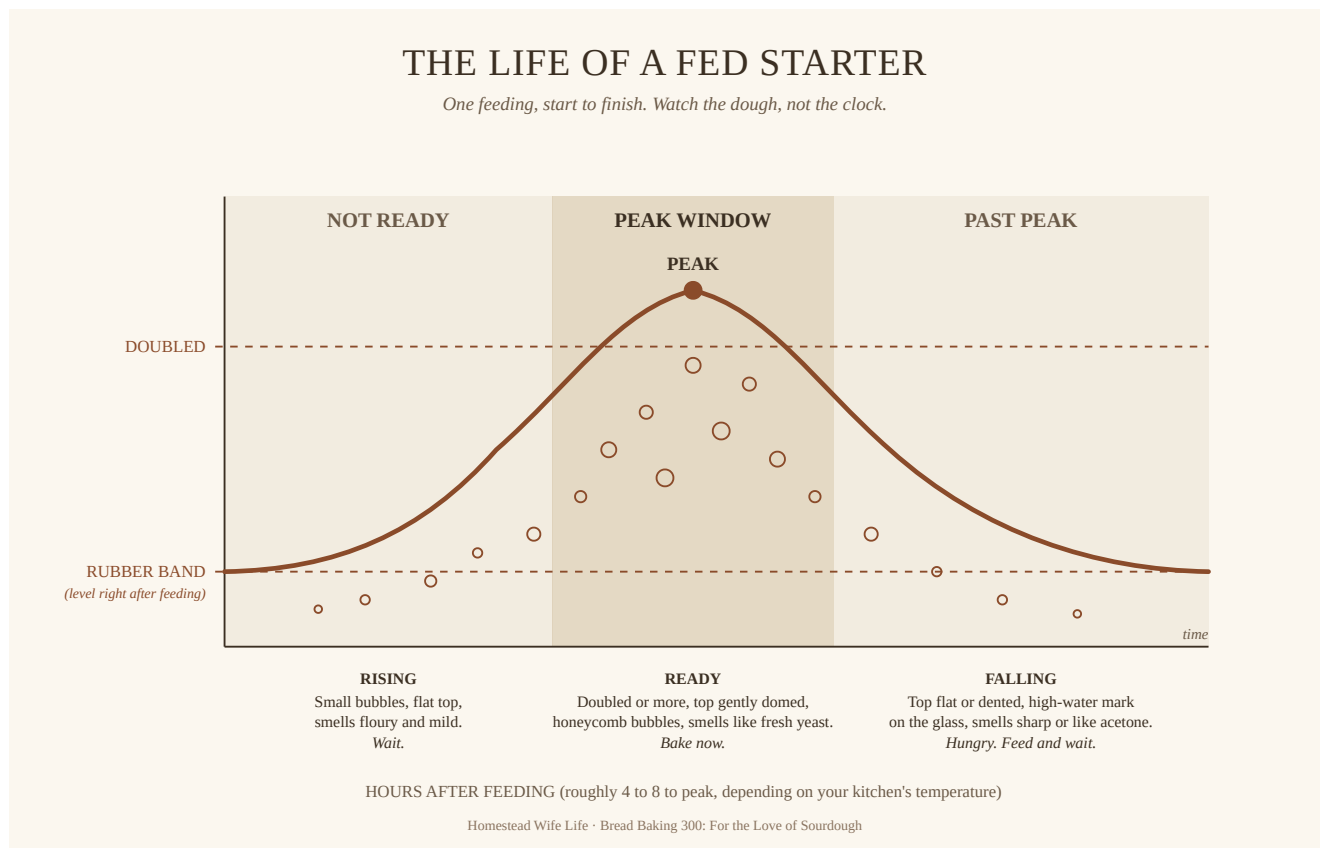
Masking tape and a marker. Write the date and time of the last feed. Move the band every feed while you are learning. Two seconds now saves a guess later.

### What to do with discard

Keep it in a lidded jar in the fridge. Quick flatbreads, crepes, scallion pancakes, muffins. Discard recipes come later in this series.

## Reading the jar

Stop watching the clock. Watch these instead.



### Four stages

#### Hungry

Flat and thin, gray or yellow, maybe a layer of hooch on top. Big bubbles that pop and do not hold. Smells sharp, like vinegar or nail polish remover. Not dead. Feed it.

#### Just fed

A smooth, thick paste with the spatula marks still in it. Level across the jar. A few pinprick bubbles under the surface after an hour or two. Smells like wet flour. Leave it alone.

#### Rising

The top starts to dome. Even, medium bubbles all through it, and columns of bubbles climbing the sides. Smells yeasty, like green apple or fresh cider. Getting close.

#### Ready

Doubled or better, top domed and pillowy, a lace of bubbles across the whole surface. Tip the jar and it jiggles instead of sloshing. Smells alive, a clean tang, nothing sharp. Bake now.

### The top of the jar

#### Rising

Small, even bubbles edge to edge. Not there yet.

#### Gently domed

Bake now.

#### Flat

You are at the edge of the window.

#### Dented, high-water mark

Missed it. Feed and wait. A high-water mark is a fresh wet line above the surface, not the old crust a working jar wears.



### Rising, from the side

Margaux and Jacques, mid-rise, the morning after a feed in a cool room. Real working jars. Yours will look like this too.



### Margaux, from above

Small, even bubbles edge to edge. Rising, not there yet.



### Jacques, from above

Same feed, same night. Fewer, bigger bubbles. A decent starter next to a strong one.

## Ready to bake

- Doubled or more since the band.
- Top gently domed, not flat.
- Honeycomb of bubbles through the glass, light and spongy like a mousse.
- Smells like fresh yeast and beer. Pleasant, mildly tangy.

## Missed the window

- Top has gone flat or sunk in the middle.
- A high-water mark on the glass above the starter: a fresh wet line, not the old crust your jar wears.
- Smells sharp, like vinegar or nail polish remover. That is a hungry starter, not a dead one.
- Just past peak: bake anyway, the dough will feed it. Collapsed: feed and wait about two hours.

## Two tests, in this order

**The time test** comes first. A rubber band at the feed line, then watch. Doubling within about 8 hours, three feeds running, means the starter is mature. Use this on a new starter.

**The float test** is for when you do not yet trust your eyes. Drop a teaspoon of starter into room-temperature water. Floats, there is enough trapped gas to lift bread. Sinks, wait. It is not reliable for a very young starter or a stiff one, which sinks even when it is ready.

## Where the jar lives

A happy starter sits around 75 degrees. It does not run, it does not drag, and it does not taste sour.

- **Comfortable kitchen:** the counter. Nothing to do.
- **Summer heat (over about 95 outside):** it races past peak and turns sharp. Move it somewhere steady: a proofer on its lowest setting, or the coolest interior cupboard you have. Fast and sharp means too

warm.

- **Winter:** it drags, rises small, and takes forever. Somewhere warm: a proofer at 76, or the oven with only the light on. Slow and small means too cold.
- Sour by accident is a starter telling you something is wrong. Sour on purpose is a later lesson.

### Don't panic: hooch and the one real danger sign

**Gray liquid on top.** That is hooch, alcohol the yeast make once they have eaten through the flour. It is the starter saying it is hungry, not that it is dying. Gray, brown, even nearly black is normal, and a fridge starter will almost always have some. Pour it off for a milder starter or stir it in for more tang. Feed either way.

### Pink or orange streaks, or anything fuzzy.

Throw it out, wash the jar, start over. This is the only time you do. Everything else on this page is fixable with a feed.

**Really neglected?** Discard and feed, wait about 8 hours, discard and feed again, and once more. Three feeds bring most starters back.

## Words for this lesson

|                               |                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Starter</b>                | The living culture of wild yeast and bacteria you keep in the jar.                                              |
| <b>Feed</b>                   | Adding fresh flour and water so the culture has something to eat.                                               |
| <b>Discard</b>                | What you take out before feeding so the jar does not overflow and the culture stays strong.                     |
| <b>Hydration</b>              | Water as a share of flour, by weight. Equal weights is 100 percent, a thick batter that drops from the spatula. |
| <b>Peak</b>                   | The top of the rise, when the dome is highest and the starter is strongest.                                     |
| <b>Hooch</b>                  | The gray liquid on a hungry starter. Alcohol. Not a problem.                                                    |
| <b>Levain</b>                 | A portion of starter built up for one bake. Lesson 2.                                                           |
| <b>Time test / Float test</b> | The two ways to check readiness, above. Time first, float when you need it.                                     |

## Your homework

Start a jar today. Band it, label it, feed it every day, and bring it to Lesson 2 having watched it rise and fall at least three times. Next week: the neglected jar, the rescue, and your first loaf straight from the starter.