Sourdough Made Easy

HOBBY



Imprint

Publisher and responsible person
Stefan Ruhmkorf
In den Alleegärten 21
76297 Stutensee
Deutschland
support@ruhmkorf.de

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Your First Starter

What this is about

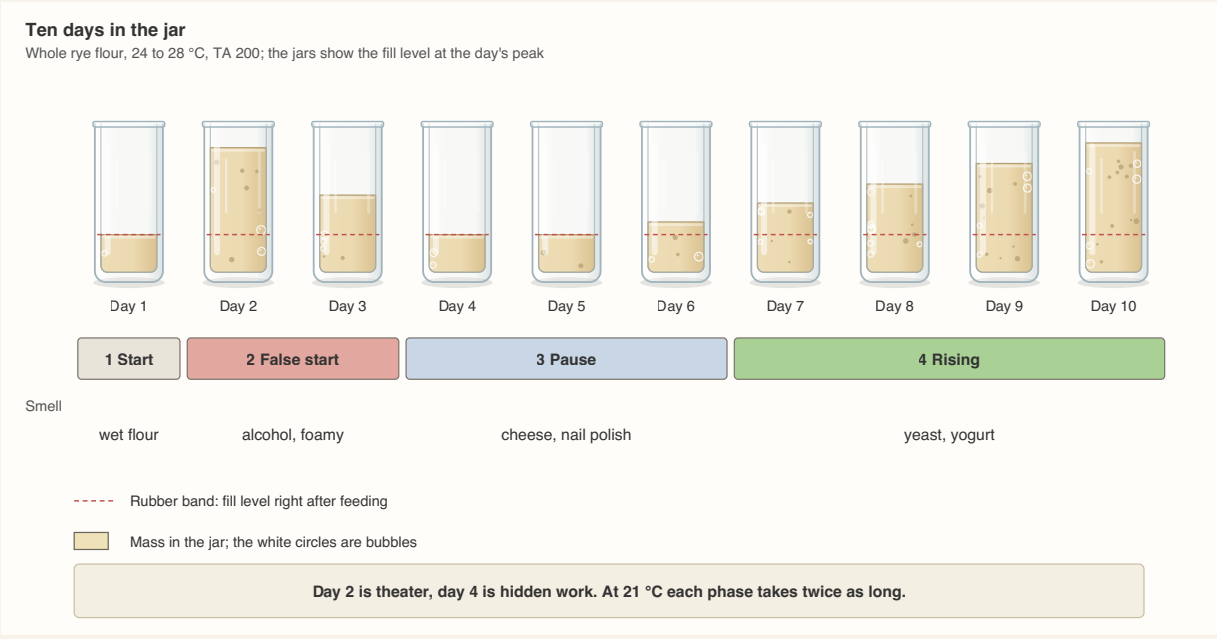
In ten days, flour and water turn into a starter: the living dough that will later raise your bread and give it its sour taste. You need nothing store-bought and no additives, only patience. From day 4 on, the mixture looks like it has failed, and that is exactly when it works hardest.

How to do it

You need a straight-sided clear glass jar with a loose lid, a rubber band as a marker, a scale, a thermometer, and whole rye flour. Rye starts fastest and most reliably. Use flour and water in equal parts. Keep the jar at 27 °C; read the temperature at the jar, not at whatever warms it. Tap water is fine.

1. **Day 1:** Stir 50 g whole rye flour and 50 g water (35 to 40 °C warm) until smooth. Slide the rubber band to the height of the mixture, so you can see later how far it has risen. Rest the lid on loosely so the gas can escape, and put the jar in a warm spot.
2. **Days 2 and 3:** Stir vigorously twice a day, but do not feed. Note the bubbles and the smell.
3. **Day 4:** First feeding, even if nothing seems to be happening. Keep 40 g of the mixture, discard the rest, and add 40 g whole rye flour and 40 g water.
4. **Days 5 and 6:** Feed once a day at the same time, with the same amounts as on day 4.
5. **From day 7:** Feed when the dome falls back after its peak, usually twice a day: 40 g mixture, 40 g flour, 40 g water.
6. **Day 10:** Check whether the starter is ready (see below). If not, carry on in the same rhythm.

Discard first, then feed. Throwing away most of it each time is part of the process; it keeps the amount small. Put the discard from the first days in the trash, not in the oven.



This is how your jar looks when everything goes normally. Day 2 is theater, day 4 is hidden work.



Three jars, same mark: day 2 is tall and foamy, day 4 lies flat on the rubber band, and on day 8 a smooth dome stands with fine bubbles along the glass wall. The smell tells you where you are.

How you know it is right

On days 2 and 3, the mixture foams and smells unpleasant. That is theater: yeasts make gas, bacteria make acid, and at the start the wrong bacteria arrive first and produce the gas. On days 4 to 6 it stands still and smells like cheese or nail polish remover; this is where most people give up, but you don't, because inside the jar the acid is building up. From day 7 on, it rises steadily after every feeding, domes, and smells mildly sour, yeasty, and like yogurt.

The starter is ready for baking when it doubles three times in a row within four to eight hours and smells pleasantly sour. What matters is the short time to the peak, not the height: rye rises flat and is strong anyway. After that, feed it daily for two weeks, then bake. From day 1, write down when you fed it, how warm the jar was, and how long the starter took to reach its peak. That time is the measure of its strength, and you will need it on baking day.

Mold means throw it out: fuzzy spots in pink, orange, gray, or black, or a rotten smell. Clean the jar thoroughly and start over. Almost everything else only means the starter is hungry, for example gray liquid on top or a sharp smell: pour the liquid off and feed.

Rules to remember

- Use whole rye flour, a jar with a loose lid, and 27 °C at the jar.
- Day 2 is theater, day 4 is hidden work. Do not give up, and do not feed before the peak.
- Ready for baking means repeatable: doubled three times in a row within four to eight hours.

In the Pro edition: wheat and lievito madre starters, why the pause comes, the reserve on day 4, converting to a different flour, and the most common mistakes and how to fix them.

Caring for Your Starter

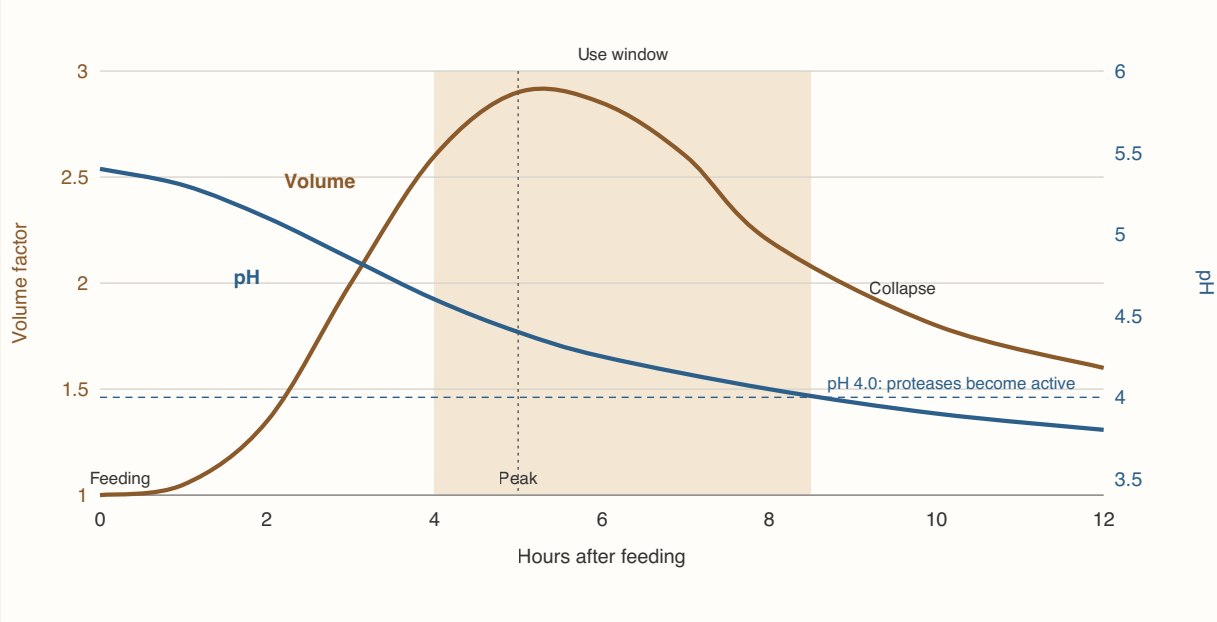
What this is about

Your starter is alive and needs fresh flour and water on a regular basis. If you feed it on a fixed pattern and recognize when it is ripe, it will be ready on baking day.

How to do it

You still need the jar with the rubber band, the scale, and the thermometer. Feed it with the flour you used to start it, and do not switch flours.

1. **Feeding at room temperature:** Take 20 g starter, add 20 g flour and 20 g water, and stir until smooth. This is the ratio 1 : 1 : 1, meaning equal parts starter, flour, and water. Discard the rest before you feed, and always weigh; never guess. Put the rubber band at the height of the mixture and rest the lid on loosely.
2. **Wait for the peak:** At 24 °C, it takes 4 to 6 hours until the starter stands at its highest. The cooler the room, the longer it takes: at 18 °C it is 8 to 12 hours. Measure the temperature at the jar before you decide a sluggish starter is weak.
3. **Feed again only after the peak:** If you discard and feed before then, you weaken it. At 24 °C this usually means once a day.
4. **Fridge:** If you don’t bake every day, the starter belongs in the cold. Feed it as in step 1, let it sit for one to two hours, and put it in the fridge at 4 °C with the lid loose. Once a week, take it out, discard all but 20 g, feed it as in step 1, let it sit again for one to two hours, and put it back.
5. **Refresh twice before baking day:** You don’t bake straight from the fridge; the dough would turn sluggish and the bread sour. The weekend plan: On Friday at 8:00, take the starter out and feed it 1 : 1 : 1 with 20 g, 20 g, and 20 g. On Friday at 20:00, feed it a second time, this time with 10 g starter, 50 g flour, and 50 g water. With more flour and water, it takes longer to reach its peak, so it is ripe by the next morning.
6. **Saturday at 8:00:** Your starter is now at its peak. You start the levain, the build made for this one dough: 20 g starter, 90 g flour, 90 g water. This is the start of baking day.



One feeding cycle at 24 °C: steep rise, peak, collapse. The band shows when you use it.



The rubber band sits at the height of the freshly fed mixture. Above it you see the domed top and the network of bubbles along the glass wall: this is what the peak looks like. AI-generated.

How you know it is right

The starter is ripe when the dome flattens, bubbles sit on the surface and along the glass wall, the mass is as airy as mousse, and it smells sour with a trace of sweetness. What matters is the combination of these signs, not the height above the rubber band. Right after feeding, it is dense, without bubbles, and sweetish: never use it at that point.

If the middle has sunk and streaks remain on the glass wall above the fill level, it is overripe. It still works, but the bread will be more sour; it is better to feed it once and wait for the next peak. If it smells of acetone or alcohol, or gray liquid sits on top, it is hungry: pour off the liquid and feed. Mold, meaning fuzzy spots or pink and orange films, means throw it out and start a new one. If it does not rise after the second feeding, put the jar somewhere warmer, at 24 °C, feed it once more, and move the baking day back by one day.

Rules to remember

- Always weigh when you feed, and feed only after the peak.
- You recognize ripeness by dome, bubbles, and smell, not by height.
- In the fridge, feed it once a week; before baking day, refresh it twice, Friday at 8:00 and 20:00.

In the Pro edition: a backup copy, drying and freezing, feeding ratios and hydration compared, starter diagnosis, and how to rescue a neglected starter.

The Bread and Its Levain

What this is about

In this course you bake one bread and follow one plan. Everything else comes later.

The bread

The bread is a wheat-rye loaf with 80 parts wheat and 20 parts rye. These are the ingredients for one large loaf:

- 800 g bread flour (in Germany: Type 1050)
- 200 g medium rye flour (Type 1150)
- 700 g water, of which 20 g held back (step 3)
- 200 g ripe levain
- 20 g salt

That is about 73 % hydration, meaning about 73 percent water on the total flour, the levain included. German bakers call this TA 173: the flour counts as 100, and the water adds 73 to it. The levain is the build made for this one bread: starter that you multiply with fresh flour and water into a pre-ferment. It makes up about one tenth of the total flour. You don’t need to calculate anything more: weigh what is listed.

You need a scale accurate to the gram, a thermometer, a large bowl, a banneton, and a pot with a lid that fits in your oven. Keep the levain and the dough in a spot at 24 °C; if your kitchen is cooler, read the paragraph under the plan.

The levain

Here is how to make it:

1. **Saturday at 8:00:** Your starter from the fridge has been refreshed twice and is at its peak. Put 20 g starter in a clean jar with straight walls.
2. **Flour and water:** Add 90 g flour and 90 g water. Take the flour from the same mix as for the bread, most easily 72 g wheat and 18 g rye, or use only bread flour. It comes in addition to the 1000 g of flour in the main dough. Stir until smooth.
3. **Mark and wait:** Put a rubber band at the height of the mixture and rest the lid on loosely. Put the jar in a spot at 24 °C and measure the temperature at the jar. After about 7 to 8 hours the levain is ripe, which is shortly before 16:00. Feed the rest of your starter as in the chapter before and put it back in the fridge; that way it is ready again for the next baking day.



A ripe levain is airy: when you lift it with a spoon, it pulls into strands, and bubbles sit throughout the mass. AI-generated.

How you know it is ripe

The levain is ripe when the surface domes and bubbles sit throughout the mass, including along the glass wall. It smells sour with a sweetness behind it, similar to yogurt. It stands clearly higher than the rubber band, at least doubled. What matters is the combination of these signs, not the height alone.

If the middle has sunk and streaks remain on the glass wall above the fill level, it is overripe. You can still use it, but your bread will be more sour.

Baking day at a glance

This is how the weekend goes, from refreshing to the first slice. Read the plan through once and hang it in your kitchen; each following chapter explains one part of it. The times apply to 24 °C at the dough.

- **Friday 8:00 and 20:00:** Refresh the starter
- **Saturday 8:00:** Start the levain
- **Saturday 16:00:** Mix flour and water, 30-minute rest
- **Saturday 16:30:** Work in the levain and salt; bulk fermentation begins, the first fermentation of the whole dough at 24 °C
- **Saturday 17:00, 17:30, 18:00, and 18:30:** four rounds of stretch and fold
- **Saturday 20:30:** The dough is done, about one and a half times its volume; preshape
- **Saturday 21:00:** Shape, put it in the banneton, put it in the fridge at 4 °C
- **Sunday 7:00:** Preheat the oven with the pot to 250 °C

- **Sunday 8:00:** Bake, 20 minutes with the lid, then 25 minutes without at 230 °C
- **Sunday 9:00:** Let it cool, first slice from 11:00

If your room is colder, everything takes longer. The times apply to 24 °C, and you measure the temperature at the dough, not in the kitchen. Below 21 °C the dough needs much longer, and you push the plan back.

> ## Rules to remember
>
> - The plan is for 24 °C: measure the temperature at the dough and at the jar.
> - You recognize a ripe levain by dome, bubbles, and smell, not by the clock.
> - Weigh every ingredient; one bread, one plan.

In the Pro edition: baker’s percentages, the levain builds, how you control sourness with the amount of levain, backward planning for every day of the week, and the plan for people with a job.

Making the Dough

What this is about

Now flour, water, levain, and salt become a dough that can hold gas. You don’t knead for this; you give the flour time and stretch the dough in the bowl, four times at half-hour intervals.

How to do it

All times belong to the baking day from the chapter before and apply to 24 °C at the dough.

1. **Saturday at 16:00, mix flour and water:** Put 800 g bread flour, 200 g rye flour, and 680 g water in the large bowl; keep the remaining 20 g of water ready for step 3. The water should be lukewarm, around 25 °C. This is the guide value for a kitchen at 22 °C: the dough then ends up at about 24 °C. If your kitchen is warmer, use slightly cooler water; if it is colder, slightly warmer. Mix by hand until no dry flour is visible. Do not knead.
2. **Rest, 30 minutes:** Cover the bowl and let the mass stand. During this time the flour soaks up water on its own. The dough becomes smoother and holds together better, and you need less work afterward.
3. **16:30, work in the levain and salt:** Place the 200 g levain on the dough as a dollop. Wet one hand, pinch the levain into the dough, and fold the dough over itself in the bowl until the levain is evenly spread and nothing is lumpy. Then sprinkle the 20 g salt on top, add the 20 g of water you held back, and work it in by pinching and folding until it no longer feels gritty. From now on, bulk fermentation is running, the first fermentation of the whole dough.
4. **Measure the dough temperature:** Stick the thermometer into the middle of the dough. The target is 24 °C. Write the value down.
5. **17:00, 17:30, 18:00, and 18:30, stretch and fold:** Wet your hands. Grab the dough at one edge, pull it up until you feel resistance, and lay it over the middle. Turn the bowl a bit and repeat until you have pulled all four sides. That is one round. Cover the bowl again afterward. Pull only as far as the dough can still be folded; if it tears, wait half an hour. After folding, the dough sits as a bundle in the bowl and spreads out again over the next half hour. That is right.



One hand pulls the edge of the dough up until it tightens; it has not yet been laid over the middle. Note that the hands are wet and the dough stays smooth and slightly glossy. AI-generated.

How you know it is right

After the last round at 18:30, the dough is smooth and elastic. It keeps its shape and feels silky. Then do the windowpane test: tear off a piece the size of a ping-pong ball, press it flat, and let it rest for two minutes. Then slowly pull it apart and hold it up to the light. It should hold and show light and dark spots against the light. That is enough for your bread. If the piece tears right away, wait two minutes and test again; after a short rest, the dough often stretches further.



Three stages of the windowpane test against the light. For your bread, the middle stage is enough.

At 16:30 the dough is at 24 °C if you choose the water as described above. If it is below that, bulk fermentation runs slower: it then takes longer than four hours, and you push the plan back. How you recognize this is in the next chapter.

Rules to remember

- First mix only flour and water and let them rest for 30 minutes; levain and salt come afterward.
- Measure the dough temperature in the middle: 24 °C is the target.
- Stretch and fold with wet hands, four times at half-hour intervals, no more often.

In the Pro edition: kneading by hand and by machine, autolyse and fermentolyse, calculating the dough temperature from the water, coil fold and lamination, and how the gluten network builds.

Bulk Fermentation

What this is about

Bulk fermentation is the first rise of the whole, undivided dough: it ripens in the bowl, and the yeasts make gas while the bacteria make acid. It decides how airy your bread will be later, and you read the ripeness from the dough, not from the clock.

How to do it

Bulk fermentation has been running since 16:30, when you worked in the levain and salt. All times apply to 24 °C at the dough.

1. **16:30 to 18:30, stretch and fold:** You have stretched and folded the dough four times (17:00, 17:30, 18:00, and 18:30). Between rounds the bowl stays covered so the dough does not form a skin.
2. **18:30, after the last fold:** Measure the dough temperature in the middle; it should be 24 °C. Then mark the height of the dough on the bowl, for example with a strip of tape or a rubber band. A straight bowl with vertical walls shows the growth best. Cover it and do not touch the dough until 20:30. It now rests for two hours.
3. **20:30, check:** Look at the mark from the side and read the height at the edge, because in the middle the dough domes higher. The dough should stand about one and a half times as high as at 18:30. Then do the jiggle test: shake the bowl gently and tilt it a little. A ripe dough pulls away from the edge and wobbles like pudding.
4. **If the signs are there,** go on to the preshape. If they are missing, wait and check again every 30 minutes. Do not go by the clock; go by the dough.
5. **If your kitchen is warm** and the signs are there before 20:30, preshape earlier.



Tilt the bowl and the finished dough pulls away from the side, showing many bubbles underneath. The surface is domed and carries a few bubbles. AI-generated.

How you know it is right

The finished dough stands about one and a half times as high as after the last fold. Its surface is domed, and bubbles sit at the edge and on top. When you tilt the bowl, it pulls away from the edge, and when you shake it, it wobbles like pudding. It smells mildly of yogurt. All the signs count together; a single one is not enough.

If it was too early, it has hardly grown and is dense, the surface is flat, and there are hardly any bubbles. Keep waiting then. If it was too late, it has collapsed, is very soft and sticky, and smells sharply sour. In that case preshape it right away so it does not get even softer.

The four hours are a guide value for 24 °C at the dough and 20 percent levain, not an order. If the dough is below 24 °C at 18:30, it grows more slowly. Then it is not ready until after 20:30, and you push everything after it back, including shaping and the fridge. If the dough sits in a warm kitchen, it goes faster, and you preshape earlier. The dough keeps fermenting after the preshape, so in the bowl it must not rise by more than one and a half times.

Rules to remember

- Set the mark only after the last fold, at 18:30.
- The dough is ready when it stands one and a half times as high, is domed, has bubbles, and wobbles like pudding, not when the clock says 20:30.
- It is better to wait another half hour than to preshape too early.

In the Pro edition: the volume target against dough temperature, the temperature window of yeasts and bacteria, the test in the aliquot jar, the overnight bulk, the rescue of over- and under-fermented doughs, and what happens in the dough with gas and structure.

Shaping

What this is about

In shaping you turn the ripe dough into a loaf: you pull the surface into a smooth skin, and this skin holds the gas in the dough and gives the bread its height. It happens in two moves with a short rest between them: first the preshape, then shaping into a round (a boule).

How to do it

You need a work surface, a bench scraper (a flat piece of plastic or metal), a banneton (proofing basket), and a cloth or a clean bag. Dust the banneton thickly with rice flour or flour before you start.

1. **20:30, turn out onto the surface:** Dust the work surface lightly with flour. Loosen the dough from the edge of the bowl all the way around with the bench scraper and tip it onto the surface. Its gas should stay in the dough, so do not punch it down.
2. **Preshape:** This is the first, loose move that turns the flat dough into a rough ball. Run the bench scraper under the edge and fold it toward the middle. Go around like this until a loose ball forms. Then slide the scraper under the dough, lift it briefly, and turn it so that the folds are underneath.
3. **Bench rest, 30 minutes:** Cover the ball with a cloth or an upturned bowl and let it rest on the surface. The bench rest is this short pause: the dough gets softer and can be tightened afterward without tearing.
4. **21:00, shape into a round:** This is the second, firm move. Turn the ball over so that the folds are on top. Fold the edges from the top, the bottom, and the sides toward the middle. Turn the dough over so that the folds are underneath again. Put both hands or the bench scraper against the dough and pull it across the surface in small circles. The friction tightens the surface. Stop when it is smooth and taut.
5. **Into the banneton:** Lift the loaf with the bench scraper and place it in the banneton with the seam up. The seam is the spot with the folds. Dust the surface lightly with flour and cover the banneton with a cloth or a bag. Then it goes into the fridge.



The dough is pulled into a ball, the surface smooth and glossy. Only a little flour lies on the work surface; the bench scraper and the dusted banneton are ready. AI-generated.

How you know it is right

The loaf has a smooth, taut surface without tears. It holds its shape on the surface, stands round and tall, and does not spread out. When you pull it across the surface while shaping, you feel slight resistance, and the skin does not tear.

If you shaped too firmly, the surface tears, usually on top in the middle. Stop then, cover the dough, and let it rest before you put it in the banneton. If you shaped too loosely, the loaf spreads wide and has no outline. Then shape it again and pull a bit more firmly. Flour the surface as little as possible while you do this, because too much flour makes the dough slide, and what slides cannot be tightened.

If the dough is too sticky, wet your hands instead of taking more flour. If the dough sticks to the bench scraper during the preshape, moisten that too.

Rules to remember

- Flour the surface only lightly: the dough needs friction so you can tighten it.
- Let the ball rest for 30 minutes before you shape it into a round; then the skin does not tear.
- Pull until the surface is smooth and taut, but not until it tears.

In the Pro edition: the long shape, how the bench rest and the relaxing of the dough work together, how to dose the tension, stippling and free-standing loaves, and shaping rye doughs.

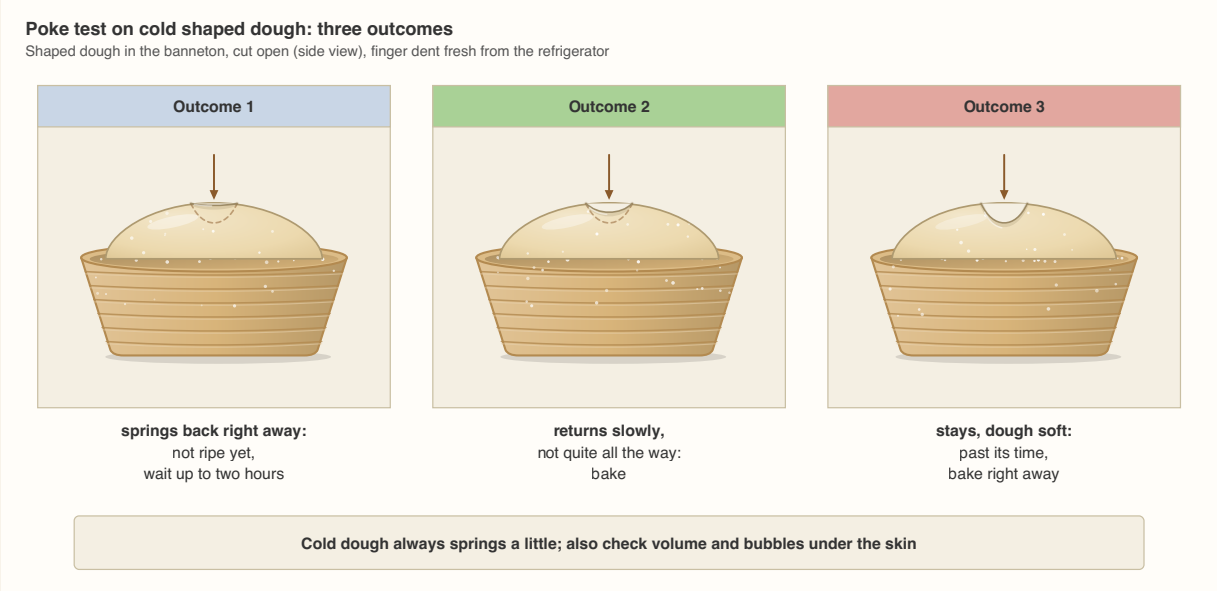
Overnight in the Fridge

What this is about

The night in the fridge makes your plan convenient and the bread flavorful: you shape in the evening and bake in the morning. The dough keeps ripening slowly in the cold, and this last ripening in the banneton is called the final proof. The yeasts keep making gas and the bacteria keep making acid, only much more slowly than in the warmth. Overnight the shaped dough gains volume, and the bread gains flavor.

How to do it

1. **21:00, wrap it up:** Your shaped dough is in the banneton, the surface lightly floured. Pull a bag over the banneton, or lay a cloth over it and put on a shower cap. This keeps the skin from drying out. Otherwise it would tear during baking.
2. **Put it in:** Place the banneton in the fridge at 4 °C. It should stand on the coldest shelf. No feeling tells you which one that is: put a thermometer on the shelf once beforehand and read it after a few hours. You do not trust the number on the door. Do not warm up the dough, and do not move the banneton anymore.
3. **Wait until Sunday 8:00:** That is eleven hours, which puts you at the short end of the cold retard. The bread turns out mild, because acid builds up over time and eleven hours give little of it. Up to two hours longer is possible if the poke test in the morning calls for it.
4. **Sunday 7:00, preheat the oven:** Preheat the oven with the Dutch oven inside to 250 °C. How you bake then is in the next chapter. If your dough waits longer, you preheat correspondingly later.
5. **8:00, poke test:** Take the banneton straight out of the fridge and check the dough without warming it. It goes into the oven cold.



Three outcomes of the poke test straight from the fridge. If the dent springs back at once, wait longer; if it comes back slowly and not all the way, bake; if it stays, bake right away.

How you know it is right

The poke test is a pressure test: dip a finger in flour and press about one centimeter deep into the dough. There are three outcomes. First, a general point: a properly handled dough feels cold, firm, and taut and releases cleanly from the banneton. If it sticks to the cloth, it was too loose or too wet when you shaped it; you note that for next time, and now only careful loosening with your fingers helps.

The dent comes back slowly and not all the way: the dough is ripe, and you bake. If the dent springs back completely right away, it is not ripe yet. Wait up to two hours then and test again. On cold dough the test is easy to misread, because cold dough always springs back a bit. So look as well: the dough has visibly gained volume in the banneton, and bubbles show under the skin.

If the dent stays completely and the dough is very soft, it has gone past its time. Bake right away. The bread will be flatter, but it still tastes good.

Do not press too often or too hard, and do not bump the banneton. Any jolt makes a ripe dough collapse.

Rules to remember

- Put the dough on the coldest shelf at 4 °C and measure that shelf once with a thermometer.
- Do not warm up the dough in the morning: it goes into the oven cold.
- Decide by the poke test and by the volume, not by the clock alone.

In the Pro edition: the warm final proof, the time window of the cold retard up to 24 hours and longer, the cooling curve and the fridge shelves, the ripeness scale, the rescue of over- and under-proofed doughs, and freezing shaped dough.

Baking

What this is about

A bakery oven makes steam when the loaves go in, and the steam keeps the crust soft at first so the loaf can rise. Your Dutch oven replaces this oven: it traps the steam that the dough gives off itself. Without a pot it does not work as well. So for this chapter you need a cast-iron Dutch oven with a lid, with room for your loaf and a little air around it. The rest is patience while preheating and a sure grip when loading.

How to do it

1. **Sunday 7:00, preheat:** Put the cast-iron Dutch oven with its lid on the rack in the lower half of the oven. Set top and bottom heat to 250 °C and preheat for one hour. The pot needs this time to get hot all the way through. The oven shows its temperature earlier; the pot lags behind.
2. **8:00, prepare the dough:** Take the banneton straight out of the fridge. Lay a piece of parchment paper on the dough and flip the banneton onto it. The seam, the join from shaping, is now underneath, and the smooth surface is on top.
3. **Score:** Score the surface once with a razor blade or a sharp knife, in one stroke, about one centimeter deep and at a slight angle. The cut gives the loaf the place where it may burst open. A single cut is enough.
4. **Load it:** Put on oven mitts and take off the lid. Set it down where nobody will bump into it. Lift the dough by the paper into the hot pot, put the lid on, and slide the pot straight back into the oven.
5. **8:00 to 8:20, lid on:** Bake for 20 minutes at 250 °C. During this time the pot holds the steam, and the loaf grows.
6. **8:20, lid off:** Open the oven, take off the lid with oven mitts, and keep your face to the side, because hot steam rises. The loaf is now pale and glossy. Set the oven to 230 °C.
7. **8:20 to 8:45, uncovered:** Bake for 25 minutes, until the crust is dark brown. Look in briefly after 15 minutes, because the color comes quickly now.
8. **8:45, take it out:** Lift the bread out of the pot by the paper and put it on a rack. The pot stays hot; touch it only with oven mitts. Do not leave the bread standing in the pot, because the steam there would soften the crust again. What happens next is in the next chapter.



Dough with a fresh score in the hot cast-iron pot



Above, the dough on parchment paper with a fresh, still closed score; below, the same bread baked: dark brown, the score burst wide open. AI-generated.

How you know it is right

The crust is dark brown, not light brown, and the score has burst open. Tap the bottom of the bread with a knuckle: it sounds hollow. If you have a thermometer, push it in from the bottom into the middle: the internal temperature is then 98 °C. The color decides; the internal temperature confirms. If the crust is still too pale, bake a few minutes longer. If it is darker than you like, lower the temperature earlier next

time, right after taking off the lid, not only at the end. A sticky crumb inside means: baked too briefly. The dough goes cold into the hot pot, and that is right: cold, it can be scored more cleanly and keeps its shape until the heat sets it. So do not wait until it reaches room temperature.

Rules to remember

- Preheat the pot for an hour; the oven alone is not hot enough.
- The steam stays in the pot for 20 minutes, then the lid comes off.
- The color decides, not the clock.

In the Pro edition: how oven spring comes about, steam without a pot, baking stone and steel, bake times by weight, controlling the crust, and bake loss.

Cooling and Storing

What this is about

The bread is not done when it comes out of the oven. The crumb is still hot and rubbery inside. It only firms up as it cools, and water moves from the inside to the outside while it does. If you cut now, you get a wet, tough slice. This is the mistake that is easiest to avoid.

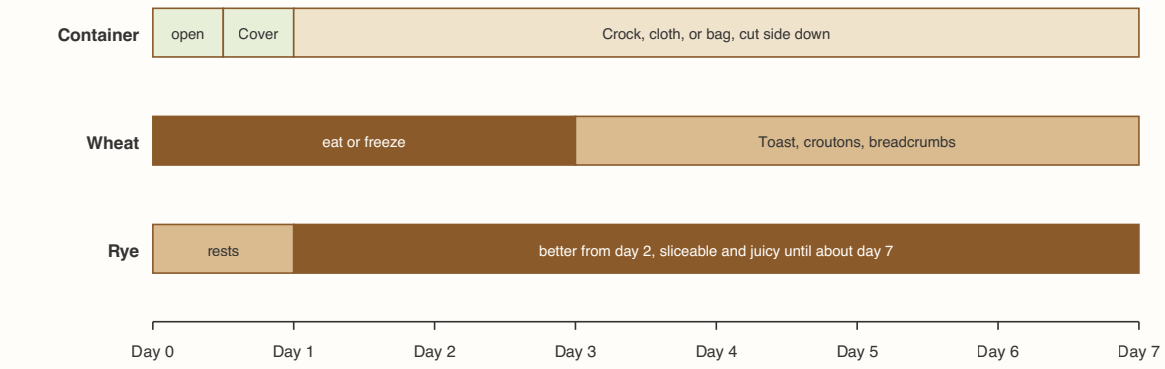
How to do it

1. **Sunday 8:45, onto the rack:** The bread is already on the rack. Stand it free, so that air reaches it on all sides, not next to the hot oven and not in the draft of an open window. Do not cover it.
2. **From 9:00, wait:** Let the bread cool and do not touch it. At first the crust crackles and pops. That is the sign that it is contracting. Let the crackling die down.
3. **At least two hours:** Do not cut before 11:00. Waiting longer does no harm; waiting less does.
4. **From 11:00, cut:** Take a serrated bread knife. Start in the middle of the loaf, not at the end, and saw with little pressure, without squashing.
5. **Baking day, store it open:** Lay the rest cut side down on a wooden board. You can put a cover over it that does not close tightly, such as a cake cover or an upturned bowl. This keeps the crust crisp.
6. **From Monday, in a cloth or bread crock:** Wrap the bread in a cloth (linen or cotton) or put it in a bread crock. The cut side stays down. The crust now gets softer, and the crumb stays moist. Do not put the bread in the fridge: the crumb dries out and turns firm fastest there.
7. **The rest, freeze sliced:** If you will not finish the bread within three to five days, cut the rest into slices, put parchment paper between them, and freeze them in a sealed bag. The bread must be completely cold for this. Take the slices straight from the freezer and toast them; they do not need to thaw.



The dark crust shows fine cracks, and the burst score is clearly visible. The knife lies beside the loaf, not yet put to it; no steam rises anymore. AI-generated.

Schedule for the first days: container, wheat, rye



Freeze: any time once the loaf is completely cold; rye on the second day, wheat early.

Guide values from consumer, baker, and home-baking sources, not measured.

The top track shows the container, and the baking day is day 0. The middle track is for light wheat bread, the bottom track for breads with a lot of rye, which come later. Your bread lies in between and keeps for three to five days.

How you know it is right

The crust is cool, and nothing crackles anymore. When you cut, the knife separates the crumb cleanly, and nothing sticks to the blade. Press gently on the cut surface with your thumb: the crumb springs back and is dry. If you cut too early, it is rubbery and damp, the slice collapses, and the knife smears. In that case lay the rest cut side down and let it keep resting; tough slices are better toasted.

Rules to remember

- After the oven onto the rack, and no cutting for two hours.
- Open on the baking day, from the second day in a cloth or crock, the cut side always down.
- Never in the fridge; freeze the rest sliced.

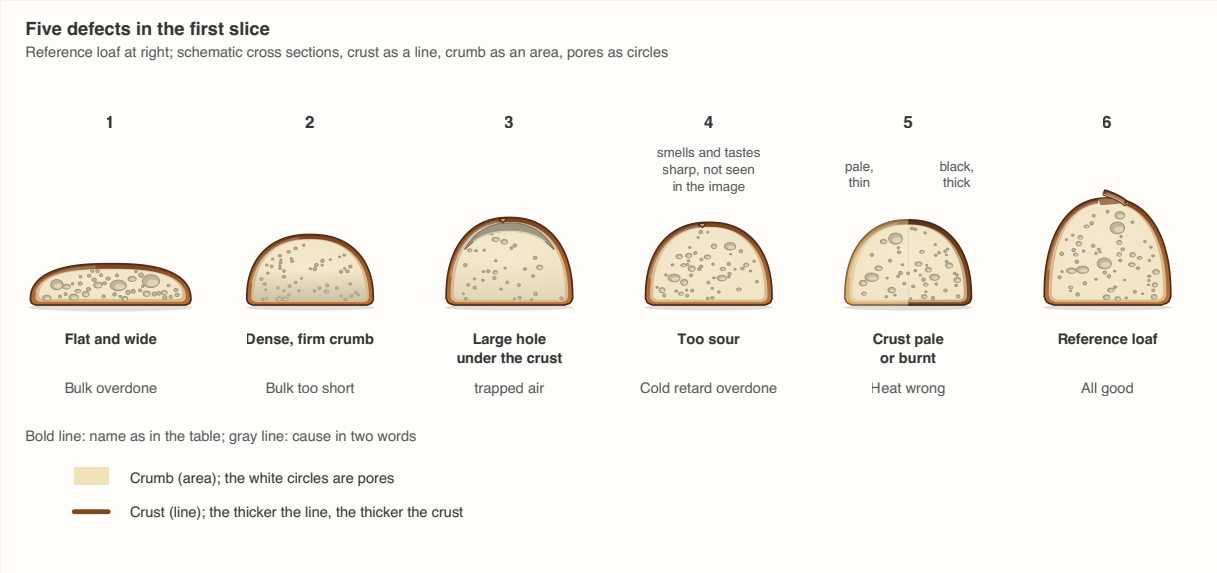
In the Pro edition: what happens in the crumb while it cools, cooling times by type of bread, the containers compared, freezing and refreshing, and mold and staling.

When It Doesn’t Work

What this is about

The first bread is rarely perfect, and that is normal. Five pictures cover most cases, and every one of these breads is edible.

Hold your verdict until the loaf has cooled, because a loaf cut too early always looks rubbery. Then cut it open in the middle, look at it from the outside and the inside, and find the picture in the table that comes closest to yours. Next time you bake, change only what the last column says. Often two pictures fit at once, because the same cause leaves several traces.



The five failure pictures as a schematic, with the reference bread on the right. You cannot see a too-sour bread in the cross-section; you taste it. The gray line names the likely cause.



Left, too short a proof: a small loaf with a dense crumb. Middle, right: tall, with open, even pores. Right, too long a proof: flat and wide, with irregular holes. AI-generated.

The five most common pictures

What you see	Likely cause	Next time
Flat and wide. The loaf spreads in the oven and has little height.	Bulk fermentation was too long, or the dough was shaped too loosely.	Check more strictly at 20:30 whether the dough is ready, and preshape sooner. Shape the dough tighter.
Dense, firm crumb with small holes. The bread is heavy.	Bulk fermentation was too short, or the starter was too weak.	Wait for the signs in the dough instead of the clock. Feed the starter daily for two weeks, and only then bake.
Large hole under the crust. The crust lifts off, and there is a gap beneath it.	Air or flour was trapped during shaping, or the dough dried out in the fridge.	Smooth out the air bubbles when you preshape, and use little flour. Cover the banneton tightly.
Too sour. The bread tastes sharp, almost like vinegar.	The cold retard was too long, or the levain was overripe.	Use the levain at its peak, and do not leave the dough in the fridge longer than 16 hours.
Crust pale or burnt. It is light and dull, or it is almost black.	Pale: the oven and pot were not hot enough, or the lid stayed on too long. Burnt: the lid was off too long, or the oven was too hot.	Preheat for an hour and bake 20 minutes with the lid on. Then watch the color, and if needed take the bread out five minutes earlier.

What you still have

Every one of these breads is edible and tastes of sourdough, even if it does not look good. Toasted, as croutons, or as breadcrumbs, even a failed loaf becomes something good. Write in your notebook what was different from usual, so that you can change it on purpose next time.

Rules to remember

- Go by the dough, not the clock.
- One bread, one change.
- Write down what you did.

In the Pro edition: reading the bread by its width, crumb pictures, rescue tables for every phase, and the typical mistakes with rye.

Afterword

In this course you have learned one bread, a plan for the weekend, and the signs in the dough that you follow instead of the clock. You need nothing more to bake a good sourdough bread every week. Repeat the same routine until you trust it, and then change only one thing at a time. Every bread, even a failed one, teaches you something.

Note: DoughCaptain takes the backward planning off your hands: you name the time the bread should be ready and get the window for every step back to the starter.

The Pro edition is available as an in-app purchase in the DoughCalculator app. It explains why the signs look the way they do, how you steer and rescue every bread, plus rye, scheduling for every day of the week, and reading the bread. Enjoy your baking.