



# Sourdough

TIPS & RECIPES



**Feed  
Me!**

Just received your King Arthur starter?  
It's hungry! Please feed within 24 hours.

## GETTING STARTED

Your sourdough starter, a descendant of one that began its life decades ago, may look a little the worse for wear after its trip. It may also have a sharp, astringent odor; this is normal. What it needs is food and water. Be careful not to consume raw starter yourself.

Find more info at: [KingArthurBaking.com/guides/sourdough](https://www.kingarthurbaking.com/guides/sourdough)

## FEEDING YOUR STARTER FOR THE FIRST TIME:

The best way to maintain and bake with a starter is to measure starter, flour, and water by weight, rather than volume.

1. Add 57g (¼ cup) lukewarm water to the starter container, and stir to partially dissolve the starter and loosen it from the container. Place the starter/water in a large bowl; save your sourdough crock for Step 2. Add 227g (1 cup) lukewarm water and 241g (2 cups) King Arthur Unbleached All-Purpose Flour. Mix, then cover the bowl loosely with plastic wrap, lid, or disposable shower cap, so the starter doesn't dry out on top. Let sit at cool room temperature (about 68°F to 70°F) for 8 to 24 hours. The starter should expand and start to become bubbly.
2. Stir the starter and measure out 113g (about ½ cup) to feed. The remaining starter (called “discard”) can be thrown away or used in recipes calling for sourdough discard. To the 113g, add 113g (½ cup) water and 113g (1 scant cup) flour. Stir well, cover, and let sit until the starter bubbles and increases in volume, about 6 to 8 hours.
3. Repeat feeding process from Step 2 until starter is ready to use (“ripe”). Once the starter is ready, if you don't plan on baking with it right away refrigerate it in your sourdough crock or similar food-safe storage container.



hungry starter    starter after feeding    ripe starter

## WHAT A RIPE SOURDOUGH STARTER LOOKS LIKE:

The more feedings you do, the more active your starter will be and the better your results. See images to the left of a hungry (neglected) starter; a starter right after feeding, and a ripe starter. The time it takes for your starter to become ripe may vary.



**NEED HELP  
WITH YOUR  
SOURDOUGH?**

Call our Baker's Hotline  
at 855-371-2253.

## USING YOUR STARTER:

Your starter expands as it grows and becomes bubbly, so using a measuring cup is less accurate. For best results, we recommend weighing your starter. If you don't have a scale, be sure to stir down your ripe starter before measuring.

1. If your starter has been refrigerated, you'll need to feed it before you use it in a recipe. Measure out 113g (about ½ cup) of starter (discard or store the rest; see step #3, below). Feed the 113g starter with 113g (½ cup) water and 113g (1 scant cup) flour. Stir well and let it sit at room temperature for 4 to 12 hours, until very bubbly and expanded in size.
2. Repeat the process of measuring out 113g starter (discarding the rest) and feeding with 113g each flour and water every 12 hours, until the starter is very bubbly and has doubled in size within 6 to 8 hours of feeding. This may take only a single feeding or it may take multiple feedings, depending on how vigorous your starter is to begin with. Measure out the amount of starter called for in your recipe, then feed the remainder again before refrigerating.
3. Discard starter can be stored in the refrigerator; for best results, use it within a week or two. Discard starter is a great ingredient in pancakes, biscuits, crackers, English muffins, and a host of other treats. Find sourdough discard recipes on our website.

## MAINTAINING YOUR SOURDOUGH STARTER:

**A maintenance feeding:** 113g (½ cup) starter + 113g (½ cup) water + 113g (1 scant cup) flour

**Refrigerator storage:** Feed at least once a week using typical maintenance feeding amounts, discarding all but the 113g you're feeding each time. Cover the starter and let it rest on the counter until it starts bubbling (2 to 4 hours), before returning to the refrigerator.

**Room-temperature storage:** Feed every 12 hours (twice a day) using typical maintenance feeding amounts, discarding all but the 113g you're feeding each time.

## GLOSSARY

**Discard**—the portion of starter disposed of when feeding a starter as part of its routine maintenance. Use sourdough discard in pancakes, muffins, and other recipes as specified.

**Feeding**—adding flour and water to a portion of the starter to maintain its balance of yeast and bacteria.

**Naturally leavened**—a term for sourdough bread that uses no commercial yeast.

**Maintenance**—the regimen used to sustain a sourdough starter for use in baking.

**Ripe**—starter that has been fed at room temperature and allowed to rise to its highest point, or is just beginning to fall.

**Sourdough starter**—a culture of wild yeast and bacteria that, when properly maintained, leavens and flavors sourdough bread.

### TIP FROM OUR BAKERS:

What makes the sour in sourdough bread? It's not the sourness of the starter itself, but rather the accumulation of organic acids (including lactic and acetic acids) created as the dough rises and ferments. Refrigerating dough changes the balance of acetic acid production relative to lactic, which affects the bread's flavor.



## SOURDOUGH WAFFLES + PANCAKES

Crisp, light waffles and tender, high-rising pancakes will both have delightful flavor when made with sourdough starter. This batter, which uses your discard starter, works equally well for waffles or pancakes.

### INGREDIENTS

#### Overnight sponge

- 1 cup (227g) **discard** sourdough starter
- 2 cups (241g) King Arthur Unbleached All-Purpose Flour
- 2 tablespoons (28g) sugar
- 2 cups (454g) buttermilk

#### Waffle or pancake batter

- All of the overnight sponge
- 2 large eggs
- ¼ cup (50g) vegetable oil or melted butter (57g)
- ¾ teaspoon salt
- 1 teaspoon baking soda

**Yield:** 1 dozen 8" waffles or about 2 dozen medium pancakes

### DIRECTIONS

1. To make the overnight sponge, stir down your refrigerated starter, and measure out 1 cup.
2. In a large mixing bowl, stir together the 1 cup starter, flour, sugar, and buttermilk.
3. Cover and let rest at room temperature overnight.
4. In a small bowl or mixing cup, beat together the eggs, and oil or butter. Add to the overnight sponge.
5. Add the salt and baking soda, stirring to combine. The batter will bubble.
6. Make waffles according to the iron manufacturer's instructions. For pancakes, pour batter by the ¼-cupful onto a heated, greased griddle; cook as you normally would.
7. Serve immediately; or keep warm in a 200°F oven until ready to serve.

## SOURDOUGH PIZZA CRUST

Think sourdough is an odd fit for pizza? Think again. We like the way it complements almost any pizza topping. This recipe is a great way to use your sourdough discard.

### INGREDIENTS

- 1 cup (227g) **ripe or discard** sourdough starter
- ½ cup (113g) lukewarm water
- 2 ½ cups (298g) King Arthur Unbleached All-Purpose Flour
- 1 teaspoon salt
- ½ teaspoon instant yeast
- 4 teaspoons Pizza Dough Flavor, optional

**Yield:** Two 12" thin-crust pizzas

### DIRECTIONS

1. Combine all the ingredients. Mix then knead the dough, by hand, mixer, or bread machine, until smooth and slightly sticky. Let it rise in a lightly greased, covered container until just about doubled in bulk, 2 to 4 hours depending on whether you use ripe or discard starter.
2. Divide the dough in half and shape each into a flattened disk. Drizzle two pieces of parchment paper with olive oil. Place half the dough on each piece of parchment. Cover, and let rest for 15 minutes. Gently press the dough into 12" circles, letting it rest for about 15 minutes if it starts to shrink back.
3. Cover the circles, and let the dough rise until it's the thickness you like, about an hour with ripe starter.
4. Toward the end of the rising time, position a baking steel or stone (if you have one) in the center of your oven. Preheat the oven to 450°F.
5. Transfer the dough circles to the hot steel or stone (or a baking sheet), and bake for 4 to 5 minutes. Add half of the toppings of your choice to each of the circles then bake for an additional 8 to 10 minutes.
6. Remove the pizzas from the oven. Cool on a rack to help keep the bottoms crisp.

# NATURALLY LEAVENED SOURDOUGH BREAD

This bread, with its deep brown crust, rich, deep flavor, and mild tang, relies on ripe, active starter for its rise. Without the addition of commercial yeast, it's a true purist's loaf. For beginning sourdough bread bakers, we recommend starting with the Rustic Sourdough Bread recipe (see back cover).

## INGREDIENTS

- 2 cups (454g) **ripe** sourdough starter, stirred down
- 5 cups (602g) King Arthur Unbleached All-Purpose Flour
- $\frac{3}{4}$  cup (85g) King Arthur Premium 100% Whole Wheat Flour
- 1  $\frac{3}{4}$  cups (397g) room-temperature water
- 2  $\frac{1}{2}$  teaspoons salt

*Yield:* 2 loaves

## DIRECTIONS

1. Combine the starter, flours, and water in a large bowl and mix well, until all of the flour is moistened and the dough has formed a cohesive mass. Add extra water or flour if needed to form a soft, tacky dough.
2. Cover the dough and let rest for 20 minutes.
3. After the rest, add the salt and knead the dough until it's smooth and supple, though still somewhat soft and tacky. When fully kneaded, place dough back in bowl, cover, and let rise for 1 hour.
4. Give the dough a fold: Turn it out onto a floured surface and, using a bowl scraper or bench knife, fold like a business letter. Turn the dough 90 degrees. Gently flatten it, and repeat the letter fold. Return dough to the bowl, cover, and let rise for another hour.
5. At the end of the rise, turn the dough out onto a lightly floured surface and divide it in half. Gently shape into two rounds, cover, and let rest for 20 minutes.
6. After this rest, shape the loaves into rounds or ovals, and place them seam-side up in bowls lined with floured cloth, or on a cloth couche. Cover and let rise until light and airy, about 2 to 2  $\frac{1}{2}$  hours.
7. About 60 minutes before the bread is ready to bake, preheat the oven with a baking stone in it (if you have a stone) to 450°F. Place empty cast iron frying pan on oven rack below the stone to preheat.
8. When the loaves are risen, gently turn them out of their bowls onto parchment, slash them with a sharp knife or lame, and slide the parchment directly onto the stone in the oven. If you're not using a stone, turn them out onto a parchment-lined (or lightly greased) baking sheet, slash them, and place the baking sheet in the oven. Pour 1 cup of boiling water into the cast iron frying pan. Be sure to wear good oven mitts to prevent steam burns.
9. Bake until bread is crusty and golden, about 35 to 40 minutes. Remove from the oven and cool on a rack.



# TROUBLESHOOTING YOUR STARTER

## Reviving a hungry starter:

If your sourdough starter sits in the refrigerator for a long time without being fed, it may look quite lifeless and develop a layer of liquid on top. If this happens, stir the liquid back into the starter and discard all but 113g ( $\frac{1}{2}$  cup). Feed with 113g ( $\frac{1}{2}$  cup) water and 113g (1 scant cup) flour. The starter will probably begin to bubble within 12 hours, even if minimally. Once this happens, measure out 113g ( $\frac{1}{2}$  cup) and feed once again with 113g each water and flour. The starter should develop more bubbles and expand, again within 12 hours. Continue feeding your starter every 12 hours until it's healthy again: very bubbly and at least doubled in size between 6 and 8 hours after feeding.

## Increasing your starter:

To build a larger quantity of starter, simply increase the amount of flour and water you add at each feeding, being sure to keep the flour and water in the same ratio. This should allow you to make enough for a large recipe with some left over to feed and maintain. For example, the last feeding before you bake, save 227g (1 cup) sourdough starter, and feed it 227g (1 cup) of water and 227g (2 scant cups) of flour.

## When to start over:

**If your sourdough starter begins to mold, or the odor is not the usual clean, sour aroma** (an alcohol smell is OK), **or if it develops a pink or orange color, throw it out.** It's very rare for this to happen, so don't worry.

Find more sourdough recipes at [KingArthurBaking.com/recipes](https://www.kingarthurbaking.com/recipes)



# RUSTIC SOURDOUGH BREAD

This full flavored, mildly sour bread is a good introduction to sourdough because of the added security that yeast provides. We love this bread for its chewiness and golden crust, ideal qualities for panini; try it with ham and cheese, for a new take on that favorite sandwich.

## INGREDIENTS

- 1 cup (227g) ripe sourdough starter, stirred down
- 1½ cups (340g) lukewarm water
- 1 teaspoon instant yeast
- 2½ teaspoons salt
- 5 cups (602g) King Arthur Unbleached All-Purpose Flour

**Yield:** 2 loaves

## DIRECTIONS

1. Combine all of the ingredients, kneading to form a smooth dough.
2. Allow the dough to rise in a covered bowl until it's doubled in size, about 90 minutes.
3. Gently divide the dough in half; it'll deflate somewhat.
4. Gently shape the dough into two oval loaves; or, for longer loaves, two 10" to 11" logs. Place the loaves on a lightly greased or parchment-lined baking sheet. Cover and let rise until very puffy, about 1 hour. Toward the end of the rising time, preheat the oven to 425°F.
5. Spray the loaves with lukewarm water and dust generously with flour.
6. Make two fairly deep diagonal slices in each. Use firm, quick motions; a sharp knife or lame works well here.
7. Bake the bread for 25 to 30 minutes, until it's a very deep golden brown. Remove it from the oven, and cool on a rack.

