



BAKING SCHOOL

On-Demand

SOURDOUGH FOR BEGINNERS

BAKING BEAUTIFUL BREAD FROM SCRATCH

Our Baking School

We love to bake and want to share our passion with you. Whether you're a beginner or a bakery professional, let us help you take your baking to the next level. Explore our hands-on classes. Relax and take in a seated demonstration. Bake with kids. Enjoy our special guest instructors. Whatever you wish, you're invited to come bake with us.

Baking for a better world.

Our mission is to share the pure joy of baking nationwide. But that's not all; our 227-year-old employee-owned Vermont company is a certified B Corporation, dedicated to environmental stewardship and helping those in need – because after all, baked goods and doing good go hand in hand.

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**SOURDOUGH FOR BEGINNERS:
BAKING BEAUTIFUL BREAD FROM SCRATCH**

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TOOLS CHECKLIST

- ☐ LARGE BOWLS
- ☐ BOWL COVERS
- ☐ DIGITAL SCALE
- ☐ WOODEN SPOON
- ☐ SHEET PANS
- ☐ BENCH KNIFE
- ☐ BOWL SCRAPER
- ☐ SOURDOUGH CROCK
- ☐ PARCHMENT PAPER
- ☐ ROUND BROTFORM AND LINER SET
- ☐ STANDARD 8½" x 4½" BREAD PAN
- ☐ COVERED BAKER OR DUTCH OVEN
- ☐ BAKING STONE OR STEEL
- ☐ CAST IRON SKILLET
- ☐ LAME
- ☐ SILICONE SLING
- ☐ COOLING RACK



KING ARTHUR
- BAKING COMPANY -



Nutrition

about 76 servings per container
Serving size 1 1/4 cups
Amount per serving

Calories	
Total Fat 1g	
Saturated Fat 1g	
Trans Fat 1g	
Cholesterol 1mg	
Sodium 1mg	
Total Carb 1g	
Dietary Fiber 1g	
Total Sugars 1g	
Includes 1g Added Sugars	
Protein 1g	
Vitamin D 1mg	
Iron 1mg	
Calcium 1mg	
Phosphorus 1mg	

INGREDIENTS: Unbleached
All-Purpose Flour, Enzyme.
DISTRIBUTED BY
KING ARTHUR BAKING COMPANY
NORWICH, VERMONT
KingArthurBaking.com

Sourdough Starter

YIELD:

ENOUGH FOR ONGOING BAKING

- The path to sourdough bread begins in your own kitchen, with your homemade sourdough starter. The method you'll read here for making sourdough starter is the tried-and-true method we use for making starter here at King Arthur.

INGREDIENTS

To begin your starter

1 cup (113g) King Arthur Pumpernickel Flour or King Arthur Whole Wheat Flour

½ cup (113g) water, cool

To feed your starter

scant 1 cup (113g) King Arthur Unbleached All-Purpose Flour

½ cup (113g) water, cool (if your house is warm), or lukewarm water (if your house is cool)

INSTRUCTIONS

- Day 1:** Combine the pumpernickel or whole wheat flour with the cool water in a non-reactive container. Glass, crockery, stainless steel, or food-grade plastic all work fine for this. Make sure the container is large enough to hold your starter as it grows; we recommend at least 1-quart capacity.
- Stir everything together thoroughly; make sure there's no dry flour anywhere. Cover the container loosely and let the mixture sit at warm room temperature (about 70°F) for 24 hours.
- Day 2:** You may see no activity at all in the first 24 hours, or you may see a bit of growth or bubbling. Either way, discard half the starter (113 grams, about ½ cup), and add to the remainder a scant 1 cup (113 grams) all-purpose flour, and ½ cup (113 grams) cool water (if your house is warm) or lukewarm water (if it's cold).
- Mix well, cover, and let the mixture rest at room temperature for 24 hours.
- Day 3:** By the third day, you'll likely see some activity — bubbling; a fresh, fruity aroma; and some evidence of expansion. It's now time to begin two feedings daily, as evenly spaced as your schedule allows. For each feeding, weigh out 113 grams starter; this will be a generous ½ cup, once it's thoroughly stirred down. Discard any remaining starter.
- Add a scant 1 cup (113 grams) all-purpose flour and ½ cup (113 grams) water to the 113 grams starter. Mix, cover, and let cool at room temperature for approximately 12 hours before repeating.
- Day 4:** Weigh out 113 grams starter and discard any remaining starter. Repeat step #6.
- Day 5:** Weigh out 113 grams starter and discard any remaining starter. Repeat step #6. By the end of day 5, the starter should have at least doubled in volume. You'll see lots of bubbles; there may be some little "rivulets" on the surface, full of finer bubbles. Also, the starter should have a tangy aroma — pleasingly acidic, but not overpowering. If your starter hasn't risen much and isn't showing lots of bubbles, repeat discarding and feeding every 12 hours on day 6, and day 7, if necessary — as long as it takes to create a vigorous (risen, bubbly) starter.
- Once the starter is ready, give it one last feeding. Discard all but 113 grams (a generous ½ cup). Feed as usual. Let the starter rest at room temperature for 6 to 8 hours; it should be active, with bubbles breaking the surface.
- Remove however much starter you need for your recipe — typically no more than 227 grams (about 1 cup). If your recipe calls for more than 1 cup of starter, give it a couple of feedings without discarding until you've made enough for your recipe plus 113 grams to keep and feed again.
- Transfer the remaining 113 grams of starter to its permanent home: a crock, jar, or whatever you'd like to store it in long-term. Feed this reserved starter with 1 scant cup (113 grams) of flour and ½ cup (113 grams) water, and let it rest at room temperature for several hours, to get a little bubbly, before covering it. If you're storing starter in a screw-top jar, screw the top on loosely rather than airtight.
- Store this starter in the refrigerator and feed it regularly, using your normal process: Discard all but 113g starter; feed that remaining 113g starter with a scant 1 cup (113 grams) flour and ½ cup (113 grams) water. We recommend feeding once a week, if possible. The more frequently you feed it, the less time and effort it takes to get your starter ripe and ready for baking.





TO BUILD THE EXACT AMOUNT OF RIPE STARTER NEEDED FOR A RECIPE:

1. Look at the amount of ripe starter called for in the ingredient list (e.g. 300 grams). Your goal is to build up to this weight by combining ripe sourdough starter, flour, and water,
2. First, multiply the weight of the ripe starter called for in the recipe by 0.1 to calculate 10% — this will be the amount of ripe sourdough culture you feed. (In this example, $300 \times 0.1 = 30$, so you will use 30 grams of starter.)
3. Return to the total amount of ripe starter in the recipe (300 grams) and subtract out the weight of the initial starter (30 grams) to see how much water and flour you'll need for feeding it (in this case, that's 270 grams). Since you'll be feeding the starter equal parts flour and water, you can divide this number by 2 to calculate how much room temperature water and all-purpose flour you need (here, that's 135 grams).
4. Mix together the ripe starter, room temperature water, and all-purpose flour (in this example, 30 grams starter, 135 grams water, and 135 grams flour, which totals 300 grams — the exact amount you need!) until thoroughly combined. Cover and let rest at room temperature for 12 to 16 hours. Your starter should have doubled in size and be bubbly and light.
5. Remember to feed your remaining sourdough starter according to the directions in the "Sourdough Starter" recipe (pg. 6) so that you have healthy starter for future baking.

AMOUNTS FOR THE RECIPES IN THIS ON-DEMAND CLASS:

Sourdough Sandwich Bread

30g ripe sourdough starter, 135g water, 135g all-purpose flour

Naturally Leavened Sourdough Bread

46g ripe sourdough starter, 204g water, 204g all-purpose flour

Whole Wheat Sourdough

56g ripe sourdough starter, 256g water, 256g all-purpose flour

Sourdough Focaccia

34g ripe sourdough starter, 153g water, 153g all-purpose flour

Sourdough Sandwich Bread

YIELD: 2 LOAVES

- When you think of sourdough bread, you probably envision a crusty, chewy, artisan-style loaf. But this bread is a richly flavored, soft-textured sandwich loaf, perfect for all your favorite sandwich fillings

INGREDIENTS

1 ½ cups (300g) ripe (fed) sourdough starter*
5 ¼ cups (630g) King Arthur Unbleached Bread Flour
6 tablespoons (42g) King Arthur Baker's Special Dry Milk or nonfat dry milk
¼ cup (50g) granulated sugar
2 ½ teaspoons (15g) table salt
2 teaspoons instant yeast
4 tablespoons (57g) unsalted butter, at room temperature
1 ½ cups (340g) water, at room temperature (70°F to 80°F)

*To build ripe starter for this recipe, follow the guidelines on page 7: Thoroughly mix 30g ripe sourdough starter with 135g room temperature water and 135g all-purpose flour. Cover and let sit at room temperature for 12 to 16 hours.

INSTRUCTIONS

1. In a large bowl, mix together all of the dough ingredients until thoroughly combined. Transfer the dough to a lightly floured surface and knead until smooth, supple, and not overly sticky, 5 to 6 minutes. Alternatively, mix and knead the dough in a stand mixer fitted with the dough hook on low speed for 3 to 4 minutes. Place the kneaded dough in a lightly greased bowl, cover the bowl, and let the dough rise for 1 to 2 hours, until doubled in size.
2. On a lightly floured or lightly greased surface, divide the dough in half (about 720g per piece) and shape each half into an 8" log. Place the logs in two lightly greased 8 ½" x 4 ½" bread pans. Cover the pans with lightly greased plastic wrap or your favorite reusable wrap, and let the loaves rise until the dough is marshmallowy and puffy and has crowned about 1" over the rim of the pan, about 1 to 2 hours.
3. Towards the end of the rising time, preheat the oven to 375°F with a rack in the center.
4. Bake the bread for 30 to 35 minutes, until the crust is golden brown and the internal temperature registers at least 190°F. Remove the loaves from the oven and turn them out of the pans onto a rack to cool. Let them cool completely before slicing.





Naturally Leavened Sourdough Bread

YIELD: 2 LOAVES

- A quintessential artisan-style loaf, this same-day bread has a crisp crust, a light, open interior, and a wonderful tangy flavor.

INGREDIENTS

2 cups (454g) ripe (fed) sourdough starter*
 5 cups (600g) King Arthur Unbleached All-Purpose Flour
 ¾ cup (85g) King Arthur Whole Wheat Flour
 1 ¾ cups (397g) water, at room temperature
 2 ½ teaspoons table salt

*To build ripe starter for this recipe, follow the guidelines on page 7: Thoroughly mix 46g ripe sourdough starter with 204g room temperature water and 204g all-purpose flour. Cover and let sit at room temperature for 12 to 16 hours.

INSTRUCTIONS

- In a large bowl, combine the starter, flours, and water and mix well, with a bowl scraper, dough whisk, or handle of a wooden spoon, 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.
- Scrape down the sides of the bowl, cover the dough, and let it rest for 20 minutes. (This rest, known as an autolyse, allows the flour to absorb the water, which starts the dough's gluten formation and makes it easier to knead.)
- After the rest, add the salt, using a chopping motion with a bowl scraper or bench knife to ensure it is fully integrated. Transfer the dough to a clean work surface and knead using the slap and fold method until it's smooth, springy, and supple though still somewhat soft and tacky. If the dough starts to stick, use your bench knife to clean the surface. When fully kneaded, place the dough back in the bowl, cover, and let it rise for 1 hour.
- Give the dough a fold:** Turn it out onto a floured surface. Grab onto the top of the dough, stretch it slightly away from you, and fold it toward the center, pressing down to gently flatten. Repeat the motion on all three sides to make a neat dough packet. Return the dough to the bowl smooth side up, cover, and let it rise for another 1 hour.
- At the end of the rise, turn the dough out onto a lightly floured surface and divide it in half (about 770g each). Gently preshape into two rounds, transfer seam-side up to a floured section of your work surface or a floured baking sheet, cover, and let rest for 20 minutes.
- After this rest, shape the loaves into tight rounds on a clean surface, adding additional flour only if the dough is sticking.
- Place the rounds seam-side up in towel-lined, flour-dusted brotforms or bowls. Cover and let rise at room temperature until light and airy, about 2 to 2 ½ hours. (Alternatively, let one or both of the loaves rest at room temperature for 1 hour, then refrigerate for up to 24 hours.)
- About 1 hour before the bread is ready to bake, preheat the oven to 450°F with a Dutch oven or covered baker (including the lid) in the center.
- When the loaves have risen, gently turn one out of its brotform and onto a piece of parchment. Slash the top with a sharp knife or lame and carefully lower it into the hot Dutch oven. Cover immediately with the hot lid. (Refrigerate the second brotform of dough while the first bakes.)
- Bake the bread with the lid on for 20 minutes, then remove the lid and continue to bake until the loaf is crusty and golden, about 15 to 20 minutes more. Remove the loaf from the Dutch oven and let it cool completely on a rack before slicing.
- Return the Dutch oven to the oven to come back up to the temperature, about 15 to 20 minutes, then score and load the second loaf.
- Store leftover bread, in a paper bag or loosely covered in plastic, for a day or so at room temperature; wrap and freeze for longer storage.

Whole Wheat Sourdough Bread

YIELD: 2 LOAVES

- **Whole wheat flour and a bit of honey create a complex, not too sour hearth bread that everyone will love. What's even better? Thanks to the large amount of ripe starter, this bread comes together in just a few hours.**

INGREDIENTS

2 ½ cups (568g) ripe sourdough starter*
3 cups (340g) King Arthur Whole Wheat Flour
2 ½ cups (280g) King Arthur Unbleached All-Purpose Flour
1 ½ cups (378g) water, lukewarm (90°F to 100°F)
1 tablespoon (18g) table salt
1 generous tablespoon (28g) honey

**To build ripe starter for this recipe, follow the guidelines on page 7: Thoroughly mix 56g ripe sourdough starter with 256g room temperature water and 256g all-purpose flour. Cover and let sit at room temperature for 12 to 16 hours.*

INSTRUCTIONS

1. Weigh all the ingredients into a large bowl and mix, with a bowl scraper, the handle of a wooden spoon, or a spatula, to bring the dough together; it should be fairly soft and tacky. If it seems too dry, add a bit of water, about 1 teaspoon at a time. Once the dough comes together, cover it and allow it to rest for 15 minutes.
2. **Perform a bowl fold:** Use a wet hand to grab a section of dough from one side of the bowl, then lift it up, tugging gently, and press it into the center. Repeat this motion 8 to 12 times, grabbing a new section of dough each time, until you've made a full circle around the bowl. Once you've circled the bowl and you've noticed the dough is tighter, flip the dough over so that the smooth side is up. Cover the bowl and allow the dough to rest for 10 minutes.
3. After the 10-minute rest, perform a second bowl fold. Then, invert the dough so the smooth side is up, cover the bowl, and let the dough rest for another 10 minutes. Repeat twice more for a total of 4 bowl folds with a 10-minute rest between each. After each fold, you should notice the dough getting smoother and stronger.
4. After the fourth bowl fold, cover the dough and let it rise for 1 hour.
5. Perform a fifth bowl fold; this time, the dough may need only 4 to 5 stretches before it resists stretching. Flip the dough, smooth side up, cover the bowl, and let rise for another 1 to 2 hours, until dough has about doubled in volume and is soft, fluffy, and marshmallowy.
6. Dust a baking sheet or a section of your work surface with flour. Lightly flour the surface of the dough, then invert it onto a lightly floured area of your work surface. Divide it in half (about 800g each) and preshape each half into a round. Transfer the preshaped rounds to the prepared baking sheet or floured section of your work surface, seam-side up. Cover the loaves and let the dough rest on for about 20 minutes.
7. **To bake on a stone or steel:** As the dough rests, preheat the oven to 500°F with a baking stone or steel on the center rack and an empty cast-iron skillet on the lower rack. If possible, adjust the stone and skillet so that the skillet isn't directly under the stone, making it easier for steam to reach the baking bread.
8. On a very lightly floured surface, shape the loaves into bûtons or boules and place them seam side down on a rimless baking sheet or baking peel lined with parchment. Cover and let rise until the dough is risen and puffy and springs back when pressed with a floured finger, 20 to 40 minutes.
9. Use a lame or razor blade to score the tops of the loaves. Load the loaves (still on the parchment) onto the stone or steel and pour about 1 cup (227g) of warm water into the skillet. Steam will billow from the pan upward to envelop the bread; be sure to wear good oven mitts to shield your hands and arms. Quickly close the oven door to trap the steam.
10. Immediately lower the oven temperature to 400°F and bake the bread until it's crusty and brown, about 30 to 35 minutes. Remove from the oven and let the loaves cool completely on a wire rack before slicing.
11. **To bake in a covered baker:** When the dough has completed its bulk rise, preheat the oven to 500°F with a covered baker a rack in the lower third. Shape the loaves into boules and proof and score as instructed.
12. Remove the lidded baker from the oven, uncover, and use the parchment to carefully lower the loaf into the pan. Place the lid on the baker, return to the oven, and lower the temperature to 425°F. Bake for 20 minutes, then uncover the baker and bake the loaf for 20 to 25 more minutes, until crusty and brown. Remove the loaf from the baker and let it cool completely on a wire rack.
13. Return the covered baker to the oven and let it preheat for 30 minutes, then score and bake the second loaf as directed above. (Keep the second loaf refrigerated, still in its basket, as the first one bakes.)





Sourdough Focaccia

YIELD: ONE 13" x 18" FOCACCIA

- **Perfect for serving with a meal, turning into sandwiches, or enjoying as a snack, this fluffy, flavorful, and irresistible bread proves that sourdough starter is for more than artisan hearth loaves.**

INGREDIENTS

Dough

1 ½ cups (340g) ripe (fed) sourdough starter*
 1 ¾ cups (397g) water, lukewarm (90°F to 100°F)
 6 cups (720g) King Arthur Unbleached Bread Flour
 6 tablespoons (75g) olive oil, plus more for the bowl
 1 tablespoon (18g) table salt
 2 tablespoons (43g) honey
 1 teaspoon instant yeast

Pan & Topping

4 tablespoons (50g) olive oil, divided
 fresh rosemary or dried rosemary, for topping
 flaky sea salt, for sprinkling

**To build ripe starter for this recipe, follow the guidelines on page 7: Thoroughly mix 34g ripe sourdough starter with 153g room temperature water and 153g all-purpose flour. Cover and let sit at room temperature for 12 to 16 hours.*

INSTRUCTIONS

- To make the dough:** Combine the starter and water in a large mixing bowl.
- Weigh your flour; or measure it by gently spooning it into a cup, then sweeping off any excess. Add the flour and all of the remaining dough ingredients to the mixing bowl. Mix until all of the ingredients are thoroughly incorporated; the dough will be soft.
- Transfer the dough to an unfloured work surface. Knead the dough, using the slap and fold method, until smooth, bouncy, and strong. Alternatively, use a stand mixer fitted with the dough hook attachment and mix on the lowest speed for 5 to 7 minutes.
- Place the dough in a bowl that's been lightly coated with olive oil, cover, and allow to rise for 1 hour.
- Keeping the dough in the bowl, use a bowl scraper to gently fold the dough over itself 3 or 4 times. Turn the dough smooth side up, cover and let rise for another 1 hour, until the dough is puffy and airy but not necessarily doubled in volume.
- Drizzle 2 tablespoons (25g) of the olive oil into the center of a 13" x 18" half-sheet pan.
- Transfer the dough to the pan. With lightly oiled hands, gently stretch and press the dough into the edges and corners of the pan. As soon as the dough begins to shrink back, let it rest for 10 to 15 minutes so that the dough can relax. Gently stretch the dough again, repeating the rest once more if necessary, until the dough fills the pan.
- Cover the pan and let the dough rise at room temperature for 30 minutes, until slightly puffy. Then transfer the pan to the refrigerator to let the dough rise for 14 to 16 hours (overnight).
- The next day, remove the pan of dough from the refrigerator. Leave the dough, covered, on your counter for 30 to 60 minutes while the oven preheats to 450°F; the dough may not appear to change during this time – that's OK.
- Just before you're ready to bake, gently dimple the dough at irregular intervals with oiled fingers, pressing down firmly all the way to the bottom of the baking sheet; you don't want to deflate the focaccia too much.
- Drizzle the remaining 2 tablespoons (25g) olive oil, then sprinkle with rosemary and a bit of flaky sea salt.
- Bake the focaccia for 20 to 25 minutes, until golden brown.
- Remove the focaccia from the oven. Allow it to cool enough to handle, then turn it out of the pan onto a rack.
- Serve the focaccia warm or at room temperature; it's best the same day it's made. You can freeze any leftover focaccia and reheat defrosted slices in a toaster or 350°F oven, just until warmed through.

TIPS FROM OUR BAKERS

- **This recipe can also be baked in two 9" x 13" pans: one to keep, one to share. Or to make a smaller focaccia, cut the recipe in half and bake in a 9" x 13" pan.**



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