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On-Demand

SOURDOUGH TECHNIQUES: SEEDS & SOAKERS

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TOOLS CHECKLIST

MIXING DOUGH:

- ☐ BENCH KNIFE OR SHARP KNIFE
- ☐ BOWL COVER
- ☐ BOWL SCRAPER
- ☐ FLEXIBLE SCRAPER OR SPATULA
- ☐ LIQUID MEASURING CUP
- ☐ MEASURING SPOONS
- ☐ MIXING BOWLS
- ☐ PASTRY BLENDER
- ☐ SCALE
- ☐ STAND MIXER WITH DOUGH HOOK*

SHAPING AND PROOFING:

- ☐ 8" x 3½" ROUND OR 10" x 3½" OVAL PROOFING BASKETS (BROTFORMS)
- ☐ DOUGH DOCKER OR FORK
- ☐ FINE-MESH SIEVE
- ☐ PARCHMENT PAPER
- ☐ RIMMED BAKING SHEETS
- ☐ ROLLING PIN
- ☐ TAPE MEASURE OR RULER

BAKING AND FINISHING:

- ☐ BAKER'S PEEL OR RIMLESS COOKIE SHEET
- ☐ BAKING STONE OR STEEL
- ☐ CAST IRON PAN OR CAKE PAN FILLED WITH LAVA ROCKS
- ☐ COOLING RACKS
- ☐ COVERED BAKER OR LIDDED DUTCH OVEN
- ☐ DIGITAL THERMOMETER
- ☐ LAME, RAZOR BLADE, OR SERRATED KNIFE
- ☐ OVEN MITTS
- ☐ PIZZA WHEEL OR SHARP KNIFE

**Note on mixers and attachments: The Ankarsrum mixer works particularly well for making bread recipes, so we've chosen to use it in the video lessons demonstrating how to make the following recipes.*



Before you begin: Understanding dough and water temperature

When thinking about dough temperature, it helps to view it as the average temperature of all the ingredients, plus the room itself. Many bakers use a water temperature formula to calculate the exact water temperature needed on a given day — a precise, reliable method commonly used in professional settings. For home bakers making just a few loaves, however, a more intuitive approach can work just as well, allowing for flexibility when managing ingredient temperatures.

To achieve the desired dough temperature (DDT), adjustments are often needed based on room and ingredient temperature. If the room or flour is cool, warmer water can help compensate; on a hot day, cooler water prevents the dough from overheating. This is especially important during long or intensive mixes, as friction from the mixer generates heat that can quickly raise dough temperature.

Fermentation time also plays a role: Over time, dough will move toward the ambient temperature, regardless of the initial temperature. For that reason, it's important not only to consider the starting temperature of the dough but also to understand how temperature shifts during fermentation influence the rate of dough development.

Breakfast Porridge Bread

YIELD: TWO LOAVES

- Want to use leftover oatmeal instead of making a batch specifically for this bread? Substitute 125g (a generous ½ cup) cooled, unsweetened leftover oatmeal for the porridge in this recipe.
- To nod to classic breakfast porridge flavors, substitute 67g (about 3 ½ tablespoons) maple syrup in place of the honey in the final dough.

INGREDIENTS

Preferment

15g (1 tablespoon) ripe sourdough starter
57g (¼ cup) water, cold (55°F to 60°F)
100g (¾ cup plus 1 tablespoon) King Arthur Unbleached Bread Flour
3g (½ teaspoon) table salt

Porridge

28g (¼ cup plus 1 tablespoon) old-fashioned rolled oats
0.75g (¼ teaspoon) table salt
142g (½ cup plus 2 tablespoons) water

Dough

425g (1¾ cups plus 2 tablespoons) water, warm (100°F to 110°F)
125g (generous ½ cup) cooked, cooled porridge (from above)
67g (generous 3 tablespoons) honey
507g (4 ¼ cups) King Arthur Unbleached Bread Flour, plus more for dusting
104g (¾ cup plus 3 tablespoons) King Arthur Whole Wheat Flour
122g (1¼ cups plus 2 tablespoons) old-fashioned rolled oats
15g (2½ teaspoons) table salt
2.5g (scant 1 teaspoon) instant yeast

Crust

67g (¼ cup) old-fashioned rolled oats

INSTRUCTIONS

1. **Day 1: Make the preferment.** In a large bowl, combine the starter, water, flour, and salt. Mix by hand until no dry patches of flour remain, then knead by hand in the bowl until a stiff, smooth dough forms. Cover and let stand at room temperature overnight, 12 to 16 hours.
2. **To make the porridge:** In a small saucepan, combine the oats, salt, and water. Bring to a boil over medium heat and cook, stirring constantly, until the water is absorbed and the mixture is thickened, 2 to 3 minutes. Transfer to a small bowl to cool to room temperature, then cover and refrigerate overnight. (Alternatively, you can use 125g/generous ½ cup leftover cooked oatmeal.)
3. **Day 2: Make the dough.** To the bowl with the preferment, add the water, porridge, and honey. With a bowl scraper or spatula, use a chopping motion to break up the ingredients in the bowl. Add the bread flour, whole wheat flour, oats, salt, and yeast. Mix the dough using the same scraper or spatula until the ingredients are combined and no dry patches remain, about 1 to 2 minutes. Turn the dough out onto a lightly floured surface and knead by hand until the dough is elastic and bouncy, about 6 to 8 minutes.

Note: Bulk fermentation or the "first rise" will take 1½ hours, during which time you'll attend to it once. After a 45-minute rest, you'll perform one set of bowl folds. Then the dough will rest, covered and undisturbed, for an additional 45 minutes.
4. **To bulk ferment the dough:** Once you've mixed the dough, cover and let rest for 45 minutes. Using a wet hand, grab a section of dough from one side of the bowl, then lift it up and press it into the center. Repeat this motion, grabbing a new section of dough each time, until you've made a full circle around the bowl, about 6 to 8 times or until the dough resists stretching.
5. Cover and let rest until the dough is very puffy and marshmallowy, about 45 minutes.
6. **To divide and preshape the dough:** Lightly dust a work surface with flour, then use a bowl scraper to ease the dough out of the bowl and onto the work surface. With a bench knife, divide the dough into two equal portions (each about 763g).

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7. Working with one piece of dough at a time on a lightly floured surface, gently pat the dough to remove any large bubbles, then stretch the outside edges of the dough slightly away from its center. Next, fold the edges of the dough back to its center, working your way around the entire dough piece in five or six sections, and press down to gently seal. Set the preshaped dough to rest on a lightly floured surface, seam-side down and cover for 10 to 15 minutes.
8. Lightly sprinkle two 8" x 3½" round proofing baskets with oats while the dough rests.
9. **To shape the dough into a boule:** Using cupped hands and keeping them in contact with the work surface, wrap your hands gently around the side of the dough farthest away from your body. The dough should slightly stick to the work surface; the resulting tension should tuck the dough under the mass. If the dough slides instead of sticking slightly, scrape some of the flour off your work surface or wipe your work surface with a damp towel and try again. Repeat the dragging motion two to three times; avoid the inclination to overwork the dough. If it tears or small rips appear, stop — you've reached the stretching capacity of the dough.
10. Place the shaped dough seam-side up on a floured surface, and repeat the shaping process with the remaining dough.
11. **To add the oat crust:** Spread the oats on a rimmed baking sheet or piece of parchment paper. Wet a clean kitchen towel, then wring it out; it should still be pretty damp.
12. Working with one loaf at a time, roll the shaped loaf over the towel to moisten the loaf, then into the oats to coat. Transfer seam-side up to the prepared proofing baskets. Cover and let rise until the dough feels light and marshmallowy and when pressed with a floured finger, a small impression remains, about 1½ hours. About 30 minutes into the proofing time, prepare the oven for baking (next step).
13. **To bake:** Arrange a rack in the center of the oven and preheat the oven to 450°F, with the lidded baker set on the rack. Allow the oven and baker to preheat for at least 45 minutes to ensure they are thoroughly heated. Turn one loaf out of its proofing basket onto a 9" round of parchment paper with a sling. (Keep the second loaf refrigerated while you bake the first.) Use a baker's lame, razor blade, or serrated knife to score the top of the loaf.
14. Remove the lidded baker from the oven, uncover, and use the parchment paper as a sling to carefully lower the loaf into the pan, taking care not to burn your knuckles. Place the lid on the baker, return to the oven, and bake for 25 minutes. Uncover and continue baking until the loaf is deeply browned, the crust is firm, and the internal temperature is at least 210°F, about 10 to 15 minutes more.
15. Remove the pan from the oven, carefully lift out the loaf, and transfer to a wire rack to cool completely before slicing. Return the covered baker to the oven and let preheat for 15 to 30 minutes, then score and bake the second loaf as directed above.



TO BAKE ON A BAKING STONE OR STEEL:

Prepare the dough through adding the oat crust and proofing for 30 minutes (through step 12). When there's about 1 hour left in the proof time, arrange racks in the center and bottom third of the oven and preheat to 475°F with a baking stone or steel on the center rack and an empty cast iron skillet (or a cake pan filled with lava rocks) on the lower rack. If possible, adjust the stone and pan so that the skillet isn't directly under the stone, making it easier for steam to reach the baking bread. Turn each loaf out of its proofing basket and onto a sheet of parchment paper. Use a baker's lame or razor blade to score the tops of the loaves. Using a baker's peel or an inverted baking sheet to aid you, transfer the loaves (still on the parchment) into the oven, placing them on the stone or steel side by side, and pour about 227g (1 cup) 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. Bake the bread until the crust is deeply browned and firm, 40 to 45 minutes. Remove from the oven and let cool completely on a wire rack before slicing.

Pecan, Cranberry, and Raisin Couronne

YIELD: 2 LOAVES

- This loaf is packed with dried fruit and nuts, making it a perfect addition to cheeseboards. We use a combination of dried cranberries, golden raisins, and pecans, which lend a buttery sweetness, but you can vary the dried fruit and nuts to suit your taste.
- Because of the shape of the loaves (the name couronne, which translates to "crown," refers to the curved shape), these can only be baked on a baking stone or steel, not in a covered baker.

INGREDIENTS

Preferment

23g (scant 2 tablespoons) ripe sourdough starter
150g (½ cup plus 3 tablespoons) water, cold (55°F to 60°F)
231g (2 cups plus 1 tablespoon) King Arthur Whole Wheat Flour

Soaker

115g (1 cup plus 3 tablespoons) whole pecans
81g (¾ cup) dried cranberries
81g (¾ cup plus 1 tablespoon) golden raisins
46g (generous 3 tablespoons) water, hot (120°F)

Dough

228g (1 cup) water, warm (100°F to 110°F)
231g (1¼ cups plus 3 tablespoons) King Arthur Unbleached All-Purpose Flour
12g (2 teaspoons) table salt
3g (1 teaspoon) instant yeast

INSTRUCTIONS

1. **Day 1: Make the preferment.** The evening before you want to bake, in a large bowl, combine the sourdough starter, water, and flour and mix, then knead in the bowl by hand until a stiff, cohesive dough forms. Cover and let stand at room temperature overnight, 12 to 16 hours.
2. **Day 2: Make the soaker.** Preheat the oven to 350°F. Spread the pecans on a rimmed baking sheet in an even layer. Bake until the nuts are lightly browned and fragrant, 8 to 10 minutes. Let cool and coarsely chop. In a medium bowl, combine the pecans, cranberries, and raisins and pour the hot water over. Cover and let stand at room temperature while you prepare the dough.
3. **To make the dough:** Add the warm water to the preferment, then squeeze the mixture between your fingers to break it up. Holding your hand in a clawlike position, mix the preferment into the water until well combined. The mixture will look like lumpy pancake batter and be somewhat foamy. Add the flour, salt, and yeast and mix well until no dry spots remain.
Note: Bulk fermentation or the "first rise" will take 2 to 2½ hours. During this time, you'll attend to the dough four times, folding the dough every 15 minutes for the first hour. Then the dough will rest, covered and undisturbed, for the final 1 to 1½ hours.
4. **To bulk ferment the dough:** Once you've mixed the dough, cover and let rest for 15 minutes.
5. After the first rest, using a wet hand, grab a section of dough from one side of the bowl, then lift it up and press it into the center. Repeat this motion, grabbing a new section of dough each time, until you've made a full circle around the bowl, about 8 to 12 times or until the dough resists stretching. Round out the dough by cupping your hand and applying pressure toward the bottom of the dough, forcing it into the bottom and side of the bowl to create tension. Cover and let rest for another 15 minutes.

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6. Using a wet hand, press indentations all over the dough and add the soaked nuts and fruit, plus any remaining soaking liquid, to the bowl of dough.
7. Perform a second set of bowl folds, until the dough resists stretching. Round out the dough again, cover, and let rest for 15 minutes.
8. Perform a third set of bowl folds until the dough resists stretching, round out the dough, cover, and let rest for 15 minutes before performing the fourth and final set of bowl folds until the dough resists stretching. Cover and let the dough rest until the dough is noticeably puffy and feels marshmallowy, 1 to 1½ hours.
9. **To divide the dough:** Lightly flour a work surface with whole wheat flour, then use a bowl scraper to ease the dough out of the bowl onto the work surface. Using a bench knife or a knife, divide the dough into two equal portions (each about 600g).
10. **To preshape the dough:** Working with one piece of dough at a time, gently pat the dough into a flat 9" x 5" rectangle to remove any large bubbles. Fold the short sides of the dough toward the center, gently patting to adhere. Starting from the top, gently roll the dough into a log about 6" to 7" long. Repeat with the second piece of dough. Place seam-side down on the work surface, then cover and let rest for 15 minutes.
11. **To shape the couronne:** Working with one piece of dough at a time, flatten into a rectangle with the seam-side up. Starting with the edge farthest from you, fold the dough two-thirds of the way toward yourself. Then press gently to seal. Turn the dough 180° and repeat the fold: take the edge of the dough that is farthest from you and fold it two-thirds of the way down, pressing gently to seal. Next, fold the dough in half along the east-west axis, bringing the farthest side to the edge closest to you. Press gently to seal the dough with the palm of your hand.
12. Starting in the middle of the now tubular dough, with the seam-side down, begin rolling the dough back and forth with a cupped hand. (It will begin to look like a dog bone, with a thinner center and thicker ends.) Once the dough is about 10" long, in the narrow section of the center, bring both hands in and roll gently back and forth, moving your hands outward toward the tips of the log. Your dough should be about 15" to 17" long by now. Once you reach the end of the dough piece, apply a slight amount of pressure to taper the ends.
13. Sift a light dusting of whole wheat flour over the loaf, then score a vertical cut in the middle of the loaf with a baker's lame or razor blade. Holding the lame at a 45-degree angle to the original vertical slash, score slashes along the entire rest of the loaf about 1" apart.
14. Repeat the shaping and scoring process (steps 10 through 13) with the second piece of dough.
15. Curve the loaves into a horseshoe shape, then place side by side on a piece of parchment paper. Cover and let rise at room temperature until the bread feels light and puffy, 1 hour to 1 hour 15 minutes (it may not have gained much volume; this is normal). About 30 minutes into the rise time, arrange racks in the center and bottom third of the oven and preheat to 450°F with a baking stone or steel on the center rack and an empty cast iron skillet (or a cake pan filled with lava rocks) on the lower rack. If possible, adjust the stone and pan so that the skillet isn't directly under the stone, making it easier for steam to reach the baking bread.
16. **To bake:** Using a baker's peel or an inverted baking sheet to aid you, transfer the bread (still on the parchment) onto the stone or steel and pour about 227g (1 cup) of warm water into the empty cast iron 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. Bake the bread for 30 to 35 minutes, until the crust is deeply browned and firm.
17. Remove the loaves from the oven and transfer to a rack to cool completely before slicing.

Marbled Rye

YIELD: 2 LOAVES

- This loaf is perfect for making deli-style sandwiches. If you want more traditionally-shaped slices, shape the loaves according to the recipe, then place each loaf in a lightly greased 9" x 5" loaf pan. Allow them to proof and bake as directed (included steaming the oven) for best results.

INGREDIENTS

Preferment

44g (3 tablespoons) ripe sourdough starter
131g (½ cup plus 1 tablespoon) water, cold (55°F to 60°F)
145g (1 ½ cups) whole rye flour
73g (½ cup plus 2 tablespoons) King Arthur Unbleached Bread Flour

Dough

298g (1 ½ cups) water, warm (100°F to 110°F); divided
2 large eggs
73g (¼ cup plus 2 tablespoons) olive oil
508g (4 ¼ cups) King Arthur Unbleached Bread Flour
36g (3 tablespoons) granulated sugar
18g (1 tablespoon) table salt
9g (1 tablespoon) caraway seeds
7g (2 ¼ teaspoons) instant yeast
22g (¼ cup) black cocoa
20g (1 tablespoon) unsulphured molasses (not blackstrap)

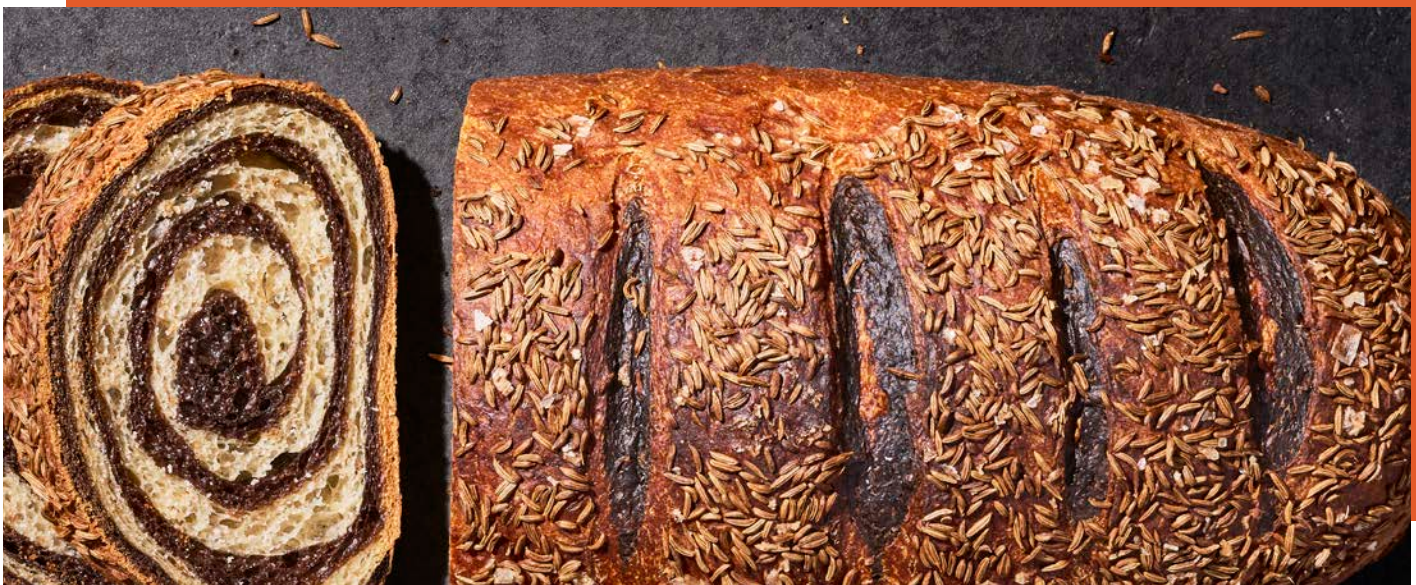
Crust

36g (¼ cup) caraway seeds
9g (1 tablespoon) coarse sea salt

INSTRUCTIONS

- Day 1: Make the preferment.** The evening before you want to bake, in a stand mixer bowl or a large bowl, combine the ripe sourdough, water, rye flour, and bread flour and mix by hand until no dry patches of flour remain. (A flexible bowl scraper is a helpful tool here.) Knead by hand in the bowl until a compact, somewhat sticky dough forms. Cover and let rest at room temperature overnight, 12 to 16 hours.
- Day 2: Make the dough.** Add 283g (1 ¼ cups) of the water, eggs, olive oil, bread flour, sugar, salt, caraway seeds, and yeast, to the bowl with the preferment. Using the dough hook attachment, mix on medium-low speed, stopping to scrape down the bowl as necessary, until a sticky dough with no dry patches of flour forms, about 2 minutes. Increase the speed to medium and mix until the dough cleans the sides of the bowl and is smooth and only slightly sticky, 8 to 10 minutes.
- Lightly flour a work surface, then use a bowl scraper to ease the dough out of the bowl onto the work surface. Using a bench knife or a knife, divide the dough into two pieces: one 900g and one 520g. Place the larger piece of dough in a large bowl, cover, and set aside.
- Return the smaller piece of dough to the mixer bowl and add the remaining 15g (1 tablespoon) water, black cocoa, and molasses. Continue mixing with the dough hook on medium-low speed until mostly combined, stopping to scrape down the bowl as necessary. Increase the speed to medium and mix until homogeneous, an additional 2 to 3 minutes. Transfer the cocoa dough to a lightly floured surface, gently knead the dough a few times by hand to smooth it out, place it in a medium bowl, cover, and set aside.
Note: Bulk fermentation or the "first rise" will take 1 1/2 hours. During that time, you'll attend to it once: After a 30-minute rest you'll perform one set of folds on each dough. Then each dough will rest, covered and undisturbed, for the final hour.
- To bulk ferment both doughs:** Let both doughs rest for 30 minutes. Working with one dough at a time, use a wet hand to grab a section of dough from one side of the bowl, then lift it up and press it into the center. Repeat this motion, grabbing a new section of dough each time, until you've made a full circle around the bowl, about 6 to 8 times or until the dough resists stretching, then turn the dough over so that the smooth side is facing up. Cover each dough and let rest for 1 hour.

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6. **To divide and shape the dough:** Lightly flour a work surface, then use a bowl scraper to ease the plain dough onto the work surface. Divide it into two equal portions (each about 450g). Stretch each portion of plain dough into a 7" square, then cover.
7. Ease the cocoa dough onto a lightly floured surface and divide it into two equal portions (each about 280g). Stretch each piece of cocoa dough into a 5" square, then cover. Let both the plain and cocoa doughs rest for 10 minutes.
8. On a lightly floured work surface, roll each piece of plain dough into a 14" x 8" rectangle, then do the same with each piece of cocoa dough. Place one piece of the cocoa dough atop one piece of the plain dough, allowing the cocoa dough to contract slightly, so that it is slightly smaller and fits within the rectangle of plain dough. Orient the dough so that one of the short sides is facing you. Starting with the short side that's furthest away from you, roll the dough into a tight log, pinching the seam to seal. Repeat this process with the remaining plain and cocoa dough to make a second loaf.
9. **To add the seed crust:** Lightly dust two 10" x 3½" oval brotforms with flour. For the crust, spread the caraway seeds and flaky salt on a rimmed baking sheet or piece of parchment paper. Wet a clean kitchen towel, then wring it out; it should still be pretty damp. Working with one loaf at a time, roll the top and sides of one loaf over the towel to moisten, then through the seeds and salt to coat. Place the loaf seam-side up in the prepared proofing basket.
10. Cover and let the loaves rise until they are puffy and marshmallowy and a small impression remains when pressed with a floured finger, about 2 hours. About halfway through the proof time, prepare the oven for baking (next step).
11. **To bake:** Preheat the oven to 450°F with a baking stone or steel on the center rack and an empty cast iron skillet (or a cake pan filled with lava rocks) on a rack below it. If possible, adjust the stone and pan so that the skillet isn't directly under the stone, making it easier for steam to reach the baking bread. Allow the oven to preheat for at least 45 to 60 minutes to ensure the stone or steel is thoroughly preheated.
12. Turn each loaf out of its proofing basket onto one sheet of parchment paper. Use a baker's lame, razor blade, or serrated knife to score the top of each loaf. Using a baker's peel or an inverted baking sheet to aid you, transfer the loaves (still on the parchment) into the oven, placing them on the stone or steel, and pour about 227g (1 cup) 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. Bake the loaf until the crust is firm and deeply browned and the internal temperature is 210°F, 30 to 35 minutes.
13. Remove from the oven and let cool completely on a wire rack before slicing.



TO BAKE IN A DUTCH OVEN:

Prepare the dough through coating in seeds and proofing for about 1 hour (step 10). When there's about 1 hour left in the proof time, arrange a rack in the lower third of the oven and preheat to 450°F, with the lidded baker set on the rack. Once the oven and baker are fully preheated and the loaves are risen, turn one loaf out of its proofing basket onto a sheet of parchment paper. (Keep the second loaf refrigerated while you bake the first.) Use a baker's lame or razor blade to score the top of the loaf. Remove the lidded baker from the oven, uncover, and, using the parchment paper as a sling, carefully lower one loaf into the pan. Place the lid on the baker, return to the oven, and bake for 20 minutes. Uncover and continue baking until the loaf is browned, the crust is firm, and the internal temperature is 210°F, about 15 minutes more. Remove the pan from the oven, carefully lift out the loaf, and transfer to a wire rack to cool completely before slicing. Return the lidded baker to the oven and let preheat for 30 minutes, then score and bake the second loaf as directed above.

Five-Seed Sourdough Bread

YIELD: 2 LOAVES

- If you only have one Dutch oven or covered baker and need to bake one loaf at a time, when it comes time to bake (step 17), keep the second loaf in the brotform and place it in the refrigerator to rest, covered, while the first loaf bakes. Reheat the Dutch oven or covered baker in the oven for 30 minutes before baking the second loaf.

INGREDIENTS

Stiff levain

18g (generous 1 tablespoon) ripe sourdough starter

110g (½ cup) water, cool (55°F to 60°F)

182g (1½ cups) King Arthur Unbleached Bread Flour

Soaker

36g (5 tablespoons) rye chops

58g (6½ tablespoons) flaxseeds

52g (6 tablespoons) sunflower seeds

36g (6½ tablespoons) old-fashioned rolled oats

16g (2¼ teaspoons) table salt

200g (¾ cup plus 2 tablespoons) water, cool (55°F to 60°F)

Dough

360g (3 cups) King Arthur Unbleached Bread Flour

182g (1½ cups plus 2 tablespoons) King Arthur Whole Wheat Flour

361g (1½ cup plus 1 tablespoon) water, warm (100°F to 110°F)

all of the stiff levain (above)

all of the soaker (above)

INSTRUCTIONS

1. **Day 1: Make the stiff levain.** In a large bowl, combine the sourdough starter, water, and flour. Mix the ingredients together so no dry patches of flour remain. The mixture will be stiff and slightly tacky. Transfer to a lidded container with at least a 1-quart capacity or cover the bowl thoroughly.
2. **To make the soaker:** In a large bowl or a lidded container with a 2-quart capacity, combine all the soaker ingredients and stir until evenly mixed, and then cover.
3. Allow both the stiff levain and soaker to rest at room temperature (68°F to 72°F) for 12 to 16 hours (overnight works well). The levain will expand and become full of bubbles. The soaker will absorb the water, and the grains and seeds will hydrate and become softer.
4. **Day 2: Make the final dough.** In the bowl of a stand mixer fitted with the dough hook, mix the flours and water together until a dough forms. Cover and allow this mixture to rest (autolyse) for 20 minutes.
5. Add the levain and mix on low speed to thoroughly combine and until the dough has developed some strength, about 3 to 4 minutes.
6. Add the soaker and mix on medium-low speed until the soaker is completely dispersed, and the dough has regained strength, another 5 to 7 minutes. During this process, you may need to scrape the sides of the bowl and coax the soaked seed mixture into the dough to become fully incorporated.
Note: Bulk fermentation or the "first rise" will take 3 hours. During this time, you'll attend to the dough twice, folding the dough at the one- and two-hour mark. Then the dough will rest, covered and undisturbed, for the final hour.
7. Cover the bowl and allow the dough to rest at room temperature for 1 hour. Using a wet hand, grab a section of dough from one side of the bowl, then lift it up and press it into the center. Repeat this motion, grabbing a new section of dough each time, until you've made a full circle around the bowl, about 6 to 8 times or until the dough resists stretching. Cover and let rest for another hour.

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8. Repeat the folding process (step 7) and then let the dough rest for another hour, for a total of 3 hours.
9. Once the dough has risen, transfer it to a lightly floured work surface.
10. Divide in half (each about 795g).
11. **To preshape the dough:** Working with one piece of dough at a time on a lightly floured surface, gently pat the dough to remove any large bubbles, then stretch the outside edges of the dough slightly away from its center. Next, fold the edges of the dough back to its center, working your way around the entire dough piece in five or six sections, and press down to gently seal. Set the preshaped dough to rest on a lightly floured surface, seam-side up and covered, for about 20 minutes.
12. **To shape the dough:** Pull the edges of the round of dough upward and outward slightly, then fold toward the center, pressing gently to seal. Repeat this process, working your way around the entire round until the dough tightens noticeably. When you've made your way around the dough, flip it seam-side down.
13. Using cupped hands and keeping them in contact with the work surface, wrap your hands gently around the side of the dough farthest away from your body. The dough should slightly stick to the work surface; the resulting tension should tuck the dough under the mass. If the dough slides instead of sticking slightly, scrape some of the flour off your work surface or wipe your work surface with a damp towel and try again. Repeat the dragging motion two to three times; avoid the inclination to overwork the dough. If it tears or small rips appear, stop — you've reached the stretching capacity of the dough.
14. Place the shaped dough seam-side up in a floured 8" x 3½" round brotform and cover. Repeat the shaping process with the remaining piece of dough.
15. Allow the shaped loaves to rise at room temperature for 2 to 2½ hours, or in the refrigerator for 12 to 16 hours (overnight). About 1 hour before you plan to bake, prepare the oven (next step).
16. Preheat the oven to 450°F with a rack in the center. Place two lidded Dutch ovens or covered bakers (or one Dutch oven and one covered baker) on the rack to preheat along with the oven.
17. When the dough is proofed, it should look puffy and have expanded (though it won't double in size). Gently turn each loaf onto a piece of parchment or a dough lifter, seam-side down. Use a baker's lame or razor blade to score the tops of the loaves as desired.
18. Use the parchment or dough lifter to lower each loaf into one of the preheated Dutch ovens, cover with the lids, and bake for 25 minutes. Remove the lids, and bake for an additional 15 minutes, until the loaves are deeply browned with a firm crust. (The internal temperature should be about 210°F.) Remove from the oven.
19. Transfer the loaves to a wire rack and cool completely before slicing.

Sourdough Crackers

YIELD: ABOUT THREE DOZEN LARGE (2" x 4") CRACKERS

- A food processor makes quick work of making these crackers, if you'd prefer not to mix by hand. To do so, combine the flour and salt in the bowl of the food processor. Pulse briefly, then add the butter and pulse until the butter is reduced to very small pieces (about 10 to 15 one-second pulses), then add the sourdough starter and pulse to combine until a slightly tacky, cohesive dough forms (another 10 to 15 one-second pulses should do it). You can then proceed with recipe as written (step 5).
- If you're using a seasoning blend that includes salt, like Everything Bagel Topping or Artisan Bread Topping, there's no need to add additional salt. If you're using unseasoned seeds, include a pinch of flaky sea salt in the topping.
- For an additional flavor boost, add ¼ teaspoon cayenne pepper along with the salt in step 2. Your crackers will have a subtle zippy flavor!

INGREDIENTS

120g (1 cup plus 1 tablespoon) King Arthur Golden Wheat Flour
5g (scant 1 teaspoon) table salt
57g (4 tablespoons) unsalted butter, cold
227g (1 cup) ripe sourdough starter
¼ cup (about 50g) seeds, divided; optional
flaky sea salt, for topping; optional*

*See baker's tip above about using blends with added salt.

INSTRUCTIONS

1. Preheat the oven to 400°F with a rack in the upper and lower third.
2. In a large mixing bowl, combine the flour, salt, and butter.
3. Using a pastry blender or your fingertips, cut (or rub) the butter into the dry ingredients, until the butter resembles very small pieces.
4. Add the sourdough starter, and using a flexible bowl scraper or spatula, incorporate the starter into the dry ingredients, using a folding and pressing motion until the dough comes together.
5. Wrap the dough in plastic and shape into a rough 5" square that's about 1" thick. Allow it to rest for at least 15 minutes at room temperature.
6. Once rested, divide the dough in half (about 200g each). Roll each piece of dough on a lightly floured surface to a thickness of about ⅛" (about a 10" x 15" rectangle).
7. If desired, sprinkle about 2 tablespoons (25g) seeds and/or flaky sea salt on top of each piece of dough. Gently roll over the surface with the rolling pin to press the seeds and salt in slightly.
8. Transfer each piece of rolled-out dough to a piece of parchment. Use a dough docker or the tines of a fork to prick the dough all over the surface of each piece.
9. Using a pizza wheel or sharp knife, cut each piece of dough into evenly sized rectangles (2" x 4", or your desired dimensions). Leave the crackers as full sheets; there's no need to separate them at this point.
10. Use the parchment to slide each piece of dough onto a baking sheet.
11. Bake for about 14 to 18 minutes, rotating the pans halfway through baking. The crackers should be firm, with even golden brown coloring around the edges and on the bottom. Monitor the bake closely, as the crackers go from under-baked to burnt rather quickly.
12. Allow to cool completely, then store in an airtight container at room temperature for up to 5 days. Freeze for longer storage.





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