

Whole-Wheat Sandwich Bread

From the episode: *Soup and Bread from Scratch*

Makes two 9 by 5-inch loaves

You can hand-knead the dough, but we've found that it's easy to add too much flour during the kneading stage, resulting in a slightly tougher loaf. Wheat germ is usually found either in the baking aisle near the flours or with hot cereals such as oatmeal. Leftover bread can be wrapped in a double layer of plastic wrap and stored at room temperature for 3 days. To freeze the bread for up to 1 month, wrap it with an additional layer of aluminum foil.

INGREDIENTS

BIGA

- 2** cups (11 ounces) bread flour
- 1** cup warm water (100-110 degrees)
- 1/2** teaspoon instant or rapid-rise yeast

SOAKER

- 3** cups (16 1/2 ounces) flour , plus extra for kneading
- 1/2** cup wheat germ (see note)
- 2** cups (16 ounces) whole milk

DOUGH

- 1/4** cup honey
- 4** teaspoons table salt
- 2** tablespoons instant or rapid-rise yeast
- 6** tablespoons unsalted butter , softened
- 2** tablespoons vegetable oil

Bread flour for work surface

INSTRUCTIONS

1. For the Biga: Combine bread flour, water, and yeast in large bowl and stir with wooden spoon until uniform mass forms and no dry flour remains, about 1 minute. Cover bowl tightly with plastic wrap and let stand at room temperature (70 degrees) overnight (at least 8 hours and up to 24 hours).

2. For the Soaker: Combine whole-wheat flour, wheat germ, and milk in large bowl and stir with wooden spoon until shaggy mass forms, about 1 minute. Turn out dough onto lightly floured work surface and knead until smooth, 2 to 3 minutes. Return soaker to bowl, cover tightly with plastic wrap, and refrigerate overnight (at least 8 hours and up to 24 hours).

3. For the Dough: Tear soaker apart into 1-inch pieces and place in bowl of stand mixer fitted with dough hook. Add biga, honey, salt, yeast, butter, and oil. Mix on low speed until cohesive mass starts to form, about 2 minutes. Increase speed to medium and knead until dough is smooth and elastic, 8 to 10 minutes. Turn out dough onto lightly floured counter and knead 1 minute. Shape dough into ball and place in lightly greased container. Cover tightly with plastic wrap and allow to rise at room temperature 45 minutes.

4. Gently press down on center of dough to deflate. Holding edge of dough with fingertips, fold partially risen dough over itself by gently lifting and folding edge of dough toward middle. Turn bowl 90 degrees; fold again. Turn bowl and fold dough 6 more times (total of 8 folds). Cover and allow to rise at room -temperature until doubled in volume, about 45 minutes.

5. Adjust oven racks to middle and lowest positions, place baking stone on middle rack, and heat oven to 400 degrees. Spray two 8½ by 4½-inch loaf pans with nonstick cooking spray. Transfer dough to well-floured counter and divide into 2 pieces. Working with 1 ball of dough at a time, pat each into 8 by 17-inch rectangle. With short side facing you, roll dough toward you into firm cylinder, keeping roll taut by tucking it under itself as you go. Turn loaf seam side up and pinch it closed. Place loaf seam side down in prepared loaf pan, pressing gently into corners. Repeat with second ball of dough. Cover loaves loosely with plastic wrap and allow to rise at room temperature until almost doubled in size, 60 to 90 minutes (top of loaves should rise about 1 inch over lip of pan).

6. Place empty loaf pan or other heatproof pan on bottom oven rack and bring 2 cups water to boil on stovetop. Using sharp serrated knife or single-edge razor

blade, make one ¼-inch-deep slash lengthwise down center of each loaf. Pour boiling water into empty loaf pan in oven and set loaves on baking stone. Reduce oven temperature to 350 degrees. Bake until crust is dark brown and internal temperature registers 200 degrees on instant-read thermometer, 40 to 50 minutes, rotating loaves 180 degrees and side to side halfway through baking.

7. Transfer pans to wire rack and let cool 5 minutes. Remove loaves from pans, return to rack, and cool to room temperature, about 2 hours.

TECHNIQUE

WHOLE-WHEAT EXTREMES

Whole-wheat sandwich breads typically fall into one of two categories: squishy, Wonder Bread-like loaves or rock solid specimens that are dense enough to support a brick.

LIGHTWEIGHT



HEAVYWEIGHT



TECHNIQUE

SOAKING WHEAT FOR BETTER BREAD

When developing the recipe for whole-wheat bread, our goal was to cram as much whole wheat into the dough as possible to create a seriously wheaty sandwich loaf. Fifty percent whole wheat wasn't enough to get us to this goal—but any more and the bread got too heavy and developed off-flavors. Would giving the whole-wheat flour a long soak before creating the final dough allow us to bump up its amount?

The Experiment

We baked two loaves, each with a 60:40 ratio of whole wheat to refined bread flour. We soaked the whole-wheat flour in the first batch overnight in the milk from our recipe before combining it with the other ingredients. In the second batch, we didn't give the whole-wheat flour any special treatment and proceeded with the recipe as usual.

The Results

The texture and flavor of the bread made with the soaked flour was markedly better than that of the loaf in which we didn't soak the whole wheat.

The Explanation

Soaking has a twofold effect on the final loaf. First, it dulls the flour's hard, fibrous bran, blunting its ability to disrupt gluten development and produce a denser crumb. Soaking also activates enzymes in the flour that convert some of the starches into sugars, thereby sweetening the bran's natural bitterness. The technique allowed us to pack our bread with roughly 50 percent more whole wheat than most recipes call for and still create a loaf with earthy-sweet flavor and a soft yet hearty crumb.

SOAKED FLOUR

Lighter texture, no bitterness



UNSOAKED FLOUR



TECHNIQUE

SECRETS TO SERIOUSLY WHEATY SANDWICH BREAD

1. MAKE BIGA Combine bread flour, water, and yeast and let mixture rest overnight to create bubbly aromatic starter dough.



2. MAKE SOAKER Steep whole-wheat flour and wheat germ in milk to hydrate bran and help reduce its bitterness.



3. KNEAD SOAKER Briefly knead soaker, then chill overnight to ensure that final dough reaches proper temperature.



4. COMBINE BIGA AND SOAKER Tear soaker into

1-inch pieces and mix with biga (and remaining ingredients). Knead, then let rise 45 minutes



5. FOLD AND TURN Deflate center of dough, then fold it in on itself. Turn bowl 90 degrees; fold again. Repeat for total of 8 folds. Let rise 45 minutes.

6. DIVIDE AND PRESS Halve dough and pat each portion into 8 by 17-inch rectangle, with short side facing you.

7, ROLL Roll each sheet toward you into tight cylinder. Keep roll taut by tucking it under itself as you go. Pinch seams to seal.

8. PLACE AND RISE Place each loaf seam side down in prepared loaf pans. Let dough rise until almost doubled in size, 60 to 90 minutes.

9. ADD STEAM Place empty loaf pan on lower oven rack and fill with boiling water. Steam prevents crusts from drying out before loaves expand.



10. SLASH TOPS Using knife blade, make shallow slash down center of each loaf to stop bread from tearing randomly when it rises. Bake 40 to 50 minutes.



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