

# Discovering Authentic Ciabatta

This Italian loaf boasts a crisp, flavorful crust and a chewy, open crumb—in the hands of a master. Where does that leave the rest of us?

≧ BY KEITH DRESSER ≦



A secret ingredient and a few good turns give this bread just the right amount of air and lift.

I'm an armchair baker. I love looking at a gorgeous, perfectly formed loaf and imagining all the artistry that went into it—but when it comes to actually baking one, I'll usually leave it to the masters. Especially when the bread is ciabatta.

In the right hands, this low-rising, rustic Italian loaf boasts a flour-streaked crust and tangy, open crumb with so much flavor, you can eat it straight up without any toppings (though just as often the bread is cut horizontally, stuffed, and grilled for panini). As much as I admire ciabatta's taste and form, it's the need to set aside time for the starter that keeps me from rolling up my sleeves and baking it myself. Most bread starters need at least 12 hours to ferment, and at an ideal temperature for best flavor, before you even get to the fun part of mixing and kneading.

With ciabatta available everywhere these days—even Blimpie sandwich outlets—why would anyone

bother to make it? Because unless your source is an artisanal bakery, most of the loaves you find just aren't any good. Some lack flavor, others are too flat, still others have holes so big there's hardly any bread. Uninterested in yet another lackluster loaf from the supermarket, I decided get out of my armchair and head into the kitchen to learn how it's done.

## Bread Basics

As a first step, I reviewed the mechanics of making bread. Reduced to its essence, all bread making is simple. First you create dough out of flour, water, yeast, and salt. Then you knead the dough, let it rise, and bake it into bread. The catalyst for the transformation from dough to risen loaf is fermentation, the process whereby the starches and sugars in the flour break down to feed the yeast, which then releases carbon dioxide. As the carbon dioxide bubbles up and attempts to escape, this gas gets trapped by elas-

tic gluten (the network of proteins that gives bread structure and chew), and the dough rises.

Ciabatta follows this basic formula, with some twists. First, instead of mixing all of the ingredients together at once, it begins with that inconvenient bread starter, also known as a sponge, or in Italian as a *biga*. Like stock in soup, the biga provides a strong foundation for flavor. The biga is made with a little flour and water along with a scant amount of yeast. The mixture ferments for several hours before being added to more of the same ingredients.

Second, unlike most bread dough, ciabatta dough is extremely wet. Its hydration is a whopping 80 percent, which means there are 8 ounces of water for every 10 ounces of flour (compared to the hydration of standard sandwich bread, which can be as low as 60 percent). So much water was certain to make the dough unwieldy, but it's essential for the final texture. Not only does water reinforce gluten development, it also develops the bread's signature holes. As the water turns to steam during baking, the moisture rushes out, filling the existing bubbles created by the carbon dioxide and then enlarging them.

## Biga Deal

The first thing to decide on was the flour—bread or all-purpose? By name alone, bread flour seemed the obvious choice, but I found I preferred all-purpose. Bread flour is made from hard wheat, which has a high protein content that leads to lots of gluten development, but in ciabatta it proved too much of a good thing: These loaves were tough and overly chewy. All-purpose flour, on the other hand, is made from both hard and soft wheat and has slightly less protein. It produced loaves with a more open, springy texture. (They were still a bit flat, but I would deal with that later.)

The next step was to build flavor through the biga. As it ferments, the yeast in the biga produces a byproduct of lactic and acetic acids, which give the bread its characteristic sourness. Most recipes called for a ratio of 25 percent biga to 75 percent dough, but after trying this and finding it lacked character, I changed the proportions to half biga and half dough. Bad move—the bread became boozy-tasting from the yeast. Cutting back, I settled on 30 percent sponge and 70 percent dough as the ideal proportion for nonalcoholic tang.

Following standard protocol, I combined the biga ingredients in a bowl, covered the bowl, and left it out on the counter overnight. About 12 hours later,

## EQUIPMENT TESTING: Bowl Scrapers

The best way to remove sticky bread dough or runny batter from a bowl is with a bowl scraper—a hand-held spatula that fits in your palm. We tested five models to find a curved scraper with enough grip to scrape the bowl clean and enough rigidity to move heavy dough easily. We tried scrapers made of plastic, metal, silicone, and combinations of these materials, zeroing in on contoured silicone covering a metal insert as our favorite. For complete testing results, go to [www.cooksillustrated.com/apr09](http://www.cooksillustrated.com/apr09). —Peggy Chung Collier



### CLEAN CONTOURS

#### iSi BASICS Silicone Scraper Spatula

Price: \$5.99

**Comments:** The rigidity and generous surface area of this winning scraper left no dough or batter behind. Another plus: a straight edge that doubles as a bench scraper



### LIMITED FLEXIBILITY

#### ATECO Bowl Scraper

Price: 80 cents

**Comments:** This rectangular plastic scraper (the cheapest of the lot) was stiff enough to efficiently move large quantities of dough, but it couldn't match the iSi scraper when it came to sweeping up batter trails.



### THICK AND FLIMSY

#### TRUDEAU Silicone Bowl Scraper

Price: \$6.95

**Comments:** This thick, floppy silicone scraper lacked the metal insert that made our winner so effective. It left trails of batter behind and was awkward to hold.

it bubbled and had a pleasant, sour aroma. Some recipes were very particular about the temperature of the room where the biga ferments, but I found that as long as it was between 60 and 70 degrees—typical ambient room temperature—the biga turned out fine. (At higher room temperatures, however, the biga overfermented and produced bread that was too sour and poorly leavened, while biga left in a chilly room fermented too slowly and yielded bland loaves.)

After combining the biga with the dough ingredients, the next step was kneading. The dough was simply too wet to knead by hand, so I turned to a stand mixer. Most of the recipes I consulted kneaded the dough for only a few minutes—just long enough to activate the gluten in the flour. But when I put these loaves in the oven, they spread out instead of rising. Clearly, I needed better gluten development, so I increased the kneading time to 10 minutes at medium speed. Alas, the bread baked from this dough still barely rose. But anything beyond 10 minutes of kneading and the loaves turned out tough.

In our recipe for Rustic Dinner Rolls (November/December 2008), we used a gentler approach to coaxing out gluten: turning. This involves using a rubber spatula or bowl scraper to fold the dough over itself several times in movements similar to folding egg whites into batter, and then letting it rest to rise. Ten minutes of kneading augmented by one series of turns was helpful, but repeating the process for a total of 16 turns was the perfect pick-me-up, producing loaves that rose about 2 inches.

### Milky Way

As it stood, my recipe now yielded ciabatta with good flavor and just the right domed shape, but when I cut into it, I got lost in its gigantic holes. My kneading and turning had encouraged strong strands of gluten, which are good for structure but also sup-

port oversized holes. I retraced my kneading times, flour choice, sponge and water ratios, and turning steps, but every time I altered the recipe, I upset the delicate balance and the dough either lacked structure or lost flavor. I wondered if olive oil, an optional ingredient in one of the original recipes I consulted, would weaken the gluten strands enough to yield smaller holes. I tried my recipe with varying amounts, but the oil had no impact until I reached 3 tablespoons. At that point the bread's sour flavor was overwhelmed by the oil's taste—better to save it for dipping.

Another ingredient mentioned in a few recipes I found was milk. I initially thought the milk was added solely for flavor, but when I tried it in my recipe, the results surprised me. Cutting into this ciabatta revealed a uniform crumb pockmarked with medium-sized bubbles. Success at last! Curious about why this addition worked, I did a little digging and learned that milk contains a protein fragment called glutathione, which acts to slightly weaken the gluten strands. A mere ¼ cup of milk was enough to moderately reduce the size of the bubbles. (For more information, see “Ridding Bread of Oversized Air Holes,” above.)

With the crumb issues resolved, I could turn to shaping. I hoped to use the simplest method: stretching portions of dough into loaves. Unfortunately, this produced homely, unevenly baked bread. Trying another common approach, I shaped a portion of dough into a rectangle, then folded the shorter ends over each other like a business letter to form a stubby rectangle. Much better. To avoid extra handling of the dough, I simply formed the loaves on parchment paper and then slid the parchment onto the baking surface.

Now it was time to refine the actual baking of the bread. Most recipes I consulted recommended using a baking stone set in a 500-degree oven. After

## SCIENCE EXPERIMENT:

### Ridding Bread of Oversized Air Holes

While developing our recipe for ciabatta, we kept encountering a vexing problem: loaves pitted with air holes so big, there was hardly any bread. Would adding a small amount of milk—a technique often used by commercial bakers—fix the problem?

#### EXPERIMENT

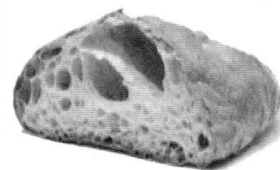
We replaced ¼ cup of water in the ciabatta dough with an equal amount of milk and compared the baked loaf to one prepared without milk.

#### RESULTS

The ciabatta with milk sported air pockets decidedly smaller than those in the no-milk loaf.

#### EXPLANATION

Milk contains a protein fragment called glutathione that slightly weakens gluten, the network of proteins that give bread its structure and chew. When the bonds in gluten weaken, more steam is able to escape from the dough, leading to smaller bubbles. —K.D.



**TOO AIRY**  
The air holes in this bread are so big, there's almost no bread.



**SIMPLE SOLUTION**  
Adding milk helps keep the size of air pockets under control.

some testing, I found that while the baking stone was key to developing a good crust (a preheated, overturned baking sheet was also an option), baking the bread at 500 degrees was excessive. At this temperature, the crust became too dark before the inside was fully cooked. Reducing the oven temperature to 450 degrees and baking the bread for a little longer solved the problem. My final enhancement was to spray the loaves with water in the first minutes of baking. This produced a crisper crust and loaves that rose a bit higher (steam delays crust formation and promotes a higher spring in the oven).

Finally, I had ciabatta with such airy texture, full, tangy flavor, and perfect lift, you might even say I'd mastered the form.

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#### HOW TO MAKE

• Ciabatta

#### VIDEO TIP

• How to handle a wet dough

## CIABATTA

MAKES 2 LOAVES

Two tablespoons of nonfat milk powder can be used in place of the liquid milk; increase the amount of water in the dough to 1 cup. As you make this bread, keep in mind that the dough is wet and very sticky. The key to manipulating it is working quickly and gently; rough handling will result in flat, tough loaves. When possible, use a large rubber spatula or bowl scraper to move the dough. If you have to use your hands, make sure they are well floured. Because the dough is so sticky, it must be prepared in a stand mixer. If you don't have a baking stone, bake the bread on an overturned and preheated rimmed baking sheet set on the lowest oven rack. The bread will keep for up to 2 days, well wrapped and stored at room temperature. To re crisp the crust, place the unwrapped bread in a 450-degree oven for 6 to 8 minutes. The bread will keep frozen for several months wrapped in foil and placed in a large zipper-lock bag. Thaw the bread at room temperature and re crisp using the instructions above.

### Biga

- 1 cup (5 ounces) unbleached all-purpose flour
- 1/8 teaspoon instant or rapid-rise yeast
- 1/2 cup (4 ounces) water, at room temperature

### Dough

- 2 cups (10 ounces) unbleached all-purpose flour
- 1/2 teaspoon instant or rapid-rise yeast
- 1 1/2 teaspoons table salt
- 3/4 cup (6 ounces) water, at room temperature
- 1/4 cup (2 ounces) milk, at room temperature (see note)

1. **FOR THE BIGA:** Combine flour, yeast, and water in medium bowl and stir with wooden spoon until uniform mass forms, about 1 minute. Cover bowl tightly with plastic wrap and let stand at room temperature (about 70 degrees) overnight (at least 8 hours and up to 24 hours).

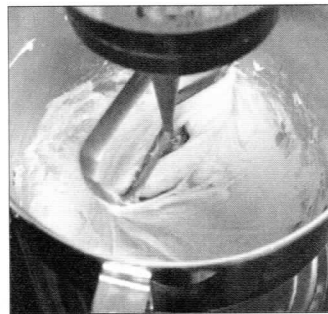
2. **FOR THE DOUGH:** Place biga and dough ingredients in bowl of stand mixer fitted with paddle attachment. Mix on lowest speed until roughly combined and shaggy dough forms, about 1 minute; scrape down sides of bowl as necessary. Continue mixing on medium-low speed until dough becomes uniform mass that collects on paddle and pulls away from sides of bowl, 4 to 6 minutes. Change to dough hook and knead bread on medium speed until smooth and shiny (dough will be very sticky), about 10 minutes. Transfer dough to large bowl and cover tightly with plastic wrap. Let dough rise at room temperature until doubled in volume, about 1 hour.

3. Spray rubber spatula or bowl scraper with non-stick cooking spray; 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 six more times (total of eight turns). Cover with plastic wrap and let rise for 30 minutes. Repeat folding, replace plastic wrap, and

## STEP-BY-STEP HOW TO MAKE CIABATTA



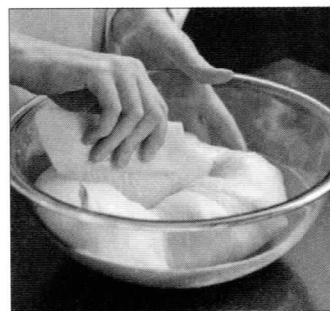
1. **MAKE BIGA** Combine yeast with small amounts of flour and water; let rest overnight to build flavor.



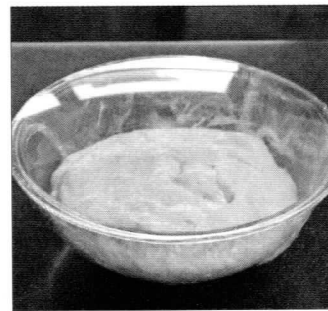
2. **MAKE DOUGH, KNEAD** Add biga to remaining dough ingredients; knead in stand mixer.



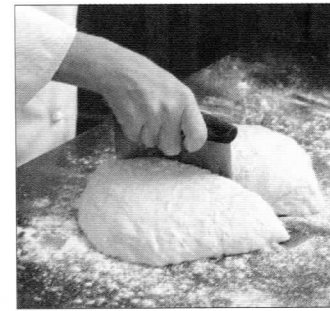
3. **LET RISE** Allow dough to rise at room temperature until doubled, about 1 hour.



4. **TURN 8 TIMES** Turn partially risen dough by folding it in on itself to gently encourage more gluten development. Let rise 30 minutes.



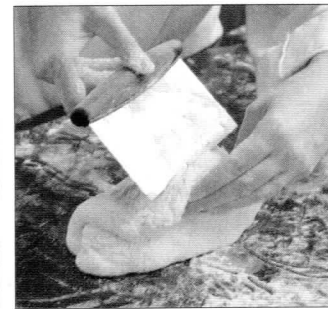
5. **REPEAT STEP 4** More turning and rising ensure a loaf with just enough lift.



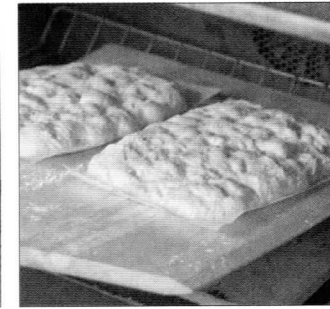
6. **DIVIDE DOUGH** Transfer dough to floured surface and halve with bench scraper.



7. **PRESS** Press each half into rough 12- by 6-inch rectangle.



8. **SHAPE** Fold each dough half like business letter into 7- by 4-inch loaf and let rest 30 minutes.



9. **PRESS, SPRAY, BAKE** Press out dough into 10- by 6-inch rectangles, spray with water, and bake.

let rise until doubled in volume, about 30 minutes longer. Meanwhile, adjust oven rack to lower-middle position, place baking stone on rack, and heat oven to 450 degrees at least 30 minutes before baking.

4. Cut two 12- by 6-inch pieces of parchment paper and liberally dust with flour. Transfer dough to liberally floured counter, being careful not to deflate completely. Following photos 6 through 9 above, liberally flour top of dough and divide in half. Turn 1 piece of dough so cut side is facing up and dust with flour. With well-floured hands, press dough into rough 12- by 6-inch shape. Fold shorter sides of dough toward center, overlapping them like business letter to form 7- by 4-inch loaf. Repeat with second dough piece. Gently transfer each loaf seam-side down to parchment sheets, dust with flour,

and cover with plastic wrap. Let loaves sit at room temperature for 30 minutes (surfaces of loaves will develop small bubbles).

5. Slide parchment with loaves onto inverted, rimmed baking sheet or pizza peel. Using floured fingertips, evenly poke entire surface of each loaf to form 10- by 6-inch rectangle; spray loaves lightly with water. Carefully slide parchment with loaves onto baking stone using jerking motion. Bake, spraying loaves with water twice more during first 5 minutes of baking time, until crust is deep golden brown and instant-read thermometer inserted into centers of loaves registers 210 degrees, 22 to 27 minutes. Transfer to wire rack, discard parchment, and cool loaves to room temperature, about 1 hour, before slicing and serving.