Pain au Levain, 69% Hydrated

This is the bread I made in order to learn how to make bread. Lionel Vatinet taught me this bread when I was at the San Francisco Baking Institute, and it was in heavy rotation when I got back to Bettie. I was baking in our home oven as much as I could, but I had also started baking hearth breads at Windansea, the newest fine-dining restaurant on the Crystal Coast. They opened a few months after I returned from San Francisco and had a wood-fired oven built by a local mason from Alan Scott’s plans. At home I was able to control the major variable—oven temperature—allowing me to more easily observe the characteristics of the final loaf based on dough variables such as dough temperature and hydration. But at the restaurant I needed to consider the needs of the dough in the context of a brand-new wood-fired oven—the first one I’d ever baked in. I learned how to bake and how to bake in a masonry oven at the same time.

Pain au Levain means (roughly) “bread with leaven.” But it’s not just any leaven. Pain au Levain is a naturally leavened bread. It is a typical French sourdough that is long on earthiness and short on sourness. Although it’s a dough that creates a milder lactic acid flavor profile, a retarding period will produce a more sour, acetic flavor.

Pain au Levain is probably the bread I have made more than any other. It’s simple, but you could bake it every day for years and still learn something new about the bread-baking process. If I were allowed to make only one bread, this would be the one; but that doesn’t mean I would be limited as to production schedule or variety. One of the beauties of naturally leavened breads is the flexibility of the production schedule. These breads can be slowed down by retarding. Pain au Levain is finicky, but it’s not fickle. Pay close attention to your starter health and dough temperature. A weak (or underripe) starter or a low dough temperature will create a sluggish dough and a dense, contorted loaf. Take action to ensure fluffy and active dough! This recipe is a base formula, great by itself—quietly unassuming and sustaining—but flexible enough to take on the personalities of the following variations: rosemary, olive, and roasted onion. If dog is man’s best friend, then Pain au Levain is humankind’s best bread friend.

Yield: 2 large loaves
Prefermented flour: 25%
Wood-fired oven temperature window:
425°F to 475°F (218–246°C)
Home oven: Preheat the oven to 450°F (232°C).

Levain

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Weight (g)</th>
<th>Volume</th>
<th>Baker’s %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread flour</td>
<td>227</td>
<td>1½ C + ½ C</td>
<td>100</td>
</tr>
<tr>
<td>Water</td>
<td>227</td>
<td>scant 1 C + 2 Tbsp</td>
<td>100</td>
</tr>
<tr>
<td>Liquid sour-dough starter</td>
<td>45</td>
<td>3 Tbsp*</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>499</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

* Best measured by weight; volume varies with ripeness.

Combine the flour, water, and starter. Mix until smooth. Cover and allow to ferment at 75°F (24°C) for 8 hours.

You can also mix the starter and allow it to ferment for 5 to 6 hours, then retard it in the fridge for an additional 12 hours. It’s important to achieve some visible activity before retarding the starter. If the starter isn’t moving before it goes into the fridge, it’s unlikely to become active during its tenure under cold storage: 40°F (4°C) is too cold to initiate fermentation. Activation before refrigeration!

Final Dough

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Weight (g)</th>
<th>Volume</th>
<th>Baker’s %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>400</td>
<td>1¼ C</td>
<td>69</td>
</tr>
<tr>
<td>Liquid sour-dough starter</td>
<td>454</td>
<td>2½ C*</td>
<td>—</td>
</tr>
<tr>
<td>Bread Flour</td>
<td>457</td>
<td>3⅔ C</td>
<td>75</td>
</tr>
<tr>
<td>Whole wheat flour</td>
<td>228</td>
<td>2 C</td>
<td>25</td>
</tr>
<tr>
<td>Salt</td>
<td>17</td>
<td>1 Tbsp + 1 tsp</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>1,556</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

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Desired dough temperature: Adjust the water temperature so the dough is 78°F (26°C) at the end of mixing.

Autolyse: Remove 45g of liquid sourdough starter from the levain. Pour the water around the edge of the ripe levain to help release all of the preferment. Add the water, levain, and flours to a mixing bowl, but hold back the salt. Mix by hand or mixer until thoroughly incorporated and homogeneous, but you needn’t develop the dough at this point. It’s okay if the dough is still shaggy. Cover to prevent a skin from forming and autolyse for 20 to 30 minutes.

Mixing:

BY HAND: After the autolyse, add the salt and mix the dough with your hand and a plastic dough scraper for a minute to incorporate the ingredients. Turn the dough out of the bowl and knead by hand using the techniques described in chapter 6. Hand mixing will take about 8 minutes.

BY MIXER: After the autolyse, add the salt and mix on slow speed for 3 minutes. Increase the speed to medium and mix for 3 minutes. Stop occasionally while mixing to scrape the dough off the hook.

The dough will be sticky whether you’re mixing by hand or a mixer, but as always, don’t add any flour! The extended primary fermentation and numerous folds will eventually create a bouncy dough. Be patient and focus on creating a dough with a nice skin. When you handle it, strive to keep the skin intact and taut. Avoid poking or tearing the dough.

Primary fermentation: Place the dough in a covered container and let it ferment for 2 ¼ hours, folding twice approximately every 45 minutes.

Dividing/preshaping: Forty-five minutes after the last fold, turn the dough onto a lightly floured surface and divide into two pieces. Preshape each piece into a loose round ball, and place bottom up on a lightly floured surface. Cover the loaves and allow them to rest for about 20 minutes.

Shaping: Shape the loaves into boules or bâtards, place them seam side up in a well-floured proofing basket, and let them proof for approximately 2 hours. This is a pretty long proof time—you need to make sure the basket is well floured so the dough doesn’t stick when it’s turned out to score and bake, especially if the dough will be retarded in the baskets overnight. I prefer linen-lined bannetons instead of unlined brotforms for dough with a long proof time—the dough tends to stick more to the convolutions of the willow basket, while the linen-lined wicker gives a nice release.

Be patient! Cool dough or environment temperatures—or lack of an active dough at the shaping stage—will lengthen the proof time.

Scoring and baking: Just before baking, invert the baskets and turn the loaves onto a lightly floured peel. Score and bake in a steamed 450°F (232°C) oven for about 40 minutes.

VARIATION: OLIVE SOURDOUGH

For this variation, exchange the whole wheat flour for whole rye flour, which holds up well to the strong flavor of the olives. However, you can also make the bread with whole wheat flour with excellent results. Once the dough is developed after kneading, add 400g olives and continue mixing until evenly incorporated. (The baker’s ratio of olives is 44 percent.) I like whole kalamatas but have also made olive bread with other types, including a mix of black and green olives. I roughly chop about 75 percent of the olives but leave the others whole. Some of those whole olives will get broken up during the rest of the bread-making process (and when the baked loaf is sliced or ripped apart), but it’s satisfying to find some whole pieces of olive in the middle of the loaf. The smooth and oily olives tend to slip out of the dough; just keep tucking them back in as you fold, divide, and shape—they’ll eventually become incorporated. The addition of the olives will increase the yield of the dough, so you may want to divide this variation into three loaves—or make one into a fougasse.
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This is one of my favorite breads. I replace the whole wheat flour with white flour and add 28g fresh rosemary. The baker's percentage of rosemary is 3 percent. However, you may need to adjust this percentage depending on the pungency of your rosemary. Our grandmother rosemary was the first plant we put in the ground when we bought our property, and over the years we have planted many more; we now have a plentiful supply for bread without scalping any one plant.

Rosemary thrives in coastal North Carolina and stays in the ground through the winter. The stems grow into long spears that can be used for skewers. The leaves have a strong flavor—more so than purchased rosemary. I chop the rosemary during the autolyse period, as oxidation will cause the herb to turn black if it's chopped too far in advance. Add the rosemary right at the beginning of kneading.
-hot oven

VARIATION: ROSEMARY SOURDOUGH
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VARIATION: ROASTED ONION SOURDOUGH
This is a hearty loaf with nice flavor—a simple and inexpensive Pain au Levain variation. Keep the whole wheat flour (from the basic formula) but hold back a bit of the water—about 28g (1 ounce)—because the onions will add to the hydration. Add 226g caramelized onions. Remember that the post-cooking weight will be less, so start with about 283g raw onion—about 2 medium onions. Chop the onions coarsely, and toss them with olive oil, salt, and pepper. Caramelize until translucent. They should still be pretty wet, not crispy and dark. Add the onions once the dough is near the end of kneading, and make sure they're evenly distributed. This bread is great for savory applications, especially when beef is involved.