



CHAPTER 15

---

# THE PERFECT CROISSANT

---



MASTERCLASS

## THE PERFECT CROISSANT



**“Making croissants is a labor of love and dedication—a lifelong baking project.”**

Chef Dominique likens the croissant to an omelet: “It’s just a few ingredients,” he says, “but you need skills and to understand how everything works together.” This humble French pastry is all about mastering time-intensive techniques to produce perfect results. But do not be intimidated by this task; rather, with Chef Dominique guidance, you will learn how to make croissants, hone your skills with each subsequent batch you create, and spot the difference between a good croissant and an exceptional one by understanding how the intricate pastry is constructed.

Croissants begin with a levain, which is essentially the sourdough starter used to make bread. In the croissant, however, levain contributes a more tangy, acidic flavor, balancing out the richness of the butter fat. You will learn how to mix, proof, and fold the dough; how to make perfect lines and edges to keep everything neat; and how to build the hundreds of tiny layers that give croissants their rise. (Pro tip: buy a ruler, if you don’t have one already!)

Mastery over pressure is essential to making a perfect croissant. You must exert gentle pressure on the rolling pin while flattening the dough so that you don’t crush or tear the layers in the dough, and you must use barely any pressure at all to gently stretch the cut dough triangles and roll them into the final croissant shape. As Chef Dominique notes: “Making croissants is really difficult, but it’s not impossible; it just requires a lot of patience. If you make them for the first time at home, and they’re not perfect, don’t be afraid to make them again and again and again.”

### Baking Timeline



## THE PERFECT CROISSANT



**Makes:** 12 to 15 croissants

**Time:** 1 hour 30 minutes two days before; 2 hours one day before; 1 hour the day of. (This timing does not include at least 4 to 5 days needed in advance to make the levain starter.)

### INGREDIENTS

#### Levain Starter

200g ( $\frac{3}{4}$  cup + 1  $\frac{1}{2}$  tbsp) all-purpose flour,  
plus more for feeding

200g ( $\frac{3}{4}$  cup + 1  $\frac{1}{2}$  tbsp) water, room temperature,  
plus more for feeding

#### Croissant Dough

12g (4  $\frac{1}{4}$  tsp) dry instant yeast  
(preferably SAF Gold Label)

203g ( $\frac{3}{4}$  cup + 1  $\frac{1}{4}$  tbsp) cold water, cold

560g (4  $\frac{1}{4}$  cups + 2  $\frac{1}{2}$  tbsp) all-purpose bread flour,  
plus more as needed for dusting

### METHOD

#### 1 Week Before:

##### MAKE LEVAIN STARTER

---

#### Day 1:

In a large mixing bowl at least twice the size of your mixture, combine 50g ( $3\frac{1}{3}$  tbsp) flour and 50g ( $3\frac{1}{3}$  tbsp) water and mix with a spatula until evenly combined. Loosely cover with a dish towel or cheesecloth and leave at room temperature spot for 24 hours.

#### Day 2:

Add another 50g ( $3\frac{1}{3}$  tbsp) flour and 50g ( $3\frac{1}{3}$  tbsp) water, mix with spatula to combine. Loosely cover and leave at room temperature for another 24 hours.

#### Day 3:

Add another 100g ( $6\frac{2}{3}$  tbsp) flour and 100g ( $6\frac{2}{3}$  tbsp) water, mix with spatula to combine. Loosely cover and leave at room temperature for another 24 hours.

#### Day 4:

Remove 20 percent of the levain mixture from the container and discard. Loosely cover and leave at room temperature for another 24 hours.

#### Day 5:

Check if your levain is ready to use. It should be light, bubbly, and fluffy, and have a pronounced fermentation aroma without any acidity. If it's not quite there, "feed" the levain again each day with equal parts flour and water that's equal to the weight of the levain, until it's ready.

## THE PERFECT CROISSANT

### Croissant Dough Continued

29g (2 tbsp) high-fat “European-style” or Vermont (preferably 83 to 84 percent butter fat) unsalted butter, softened  
72g ( $\frac{1}{3}$  cup +  $1\frac{3}{4}$  tsp) granulated sugar  
29g (1 each) large egg  
15g (1 tbsp) heavy cream  
12g ( $2\frac{1}{8}$  tsp) kosher salt  
68g ( $\frac{1}{4}$  cup) prepared levain  
As needed nonstick cooking spray

*Tip: Instant yeast is often used for doughs with higher sugar content, because this yeast needs less water to react and sugar tends to pull water from dough. You can substitute the same quantity of active dry yeast, but you may get a denser final product.*

### Butter Block:

284g ( $2\frac{1}{2}$  sticks) high-fat European-style or Vermont unsalted butter, softened (83 to 84 percent butter fat)

### Egg Wash:

2 eggs, 1 pinch of salt, and a dash of milk, beaten together

### EQUIPMENT

Stand mixer with dough hook attachment  
Plastic wrap  
Parchment paper  
Ruler  
Sheet pan  
Large offset spatula or bench scraper  
Pastry brush  
Whisk  
Large rubber spatula

### Day 1:

#### MAKE DOUGH

---

In a small bowl, stir together the yeast and room temperature water until dissolved. Combine the flour, butter, sugar, egg, cream, salt, 68g levain, and yeast mixture in a stand mixer fitted with a dough hook. Start mixing on the lowest speed and mix for 1 minute, then increase the speed to medium and mix about 3 to 4 minutes more, until the dough is just combined. When finished, the dough will be rough and have very little gluten development. It will also be elastic and come out of the bowl as one piece.

Lightly grease a medium bowl with nonstick spray. Transfer the dough into the bowl and cover with plastic wrap pressed directly on the dough, to prevent a skin from forming. Proof the dough in a warm spot until doubled in size, 1 hour 30 minutes to 2 hours.

Remove the plastic wrap and punch down the dough by folding the edges into the center, releasing as much of the gas as possible. Invert the bowl of dough and allow the dough to fall onto a piece of plastic wrap, then shape the dough into a 10-inch (25cm) square. Place the dough, still on the plastic wrap, on a sheet pan and cover with another sheet of plastic wrap. Refrigerate overnight.

## THE PERFECT CROISSANT

### MAKE BUTTER BLOCK

---

Draw a 7-inch (18cm) square on a piece of parchment paper with a pencil. Flip the parchment over so the butter won't come into contact with the pencil marks. Place the softened butter in the center of the square and cover with another sheet of parchment paper. Use an offset spatula or bench scraper to spread the butter evenly to fill the square. Refrigerate overnight. *Tip: It's important that the butter is truly softened to make forming the butter block easy. Once perfectly room temperature, the butter will be spreadable and have the consistency of cream cheese.*

### Day 2:

#### MAKE THREE FOLDS

---

Remove the butter mixture from the refrigerator and let stand for 5 to 10 minutes to become pliable enough to work with. It should still be soft enough to bend slightly without cracking. If it is too firm, gently beat it with a rolling pin on a lightly floured work surface until it becomes pliable. Make sure to press the butter back to its 7-inch (18 cm) square after working it.

Lightly flour your work surface. Remove the dough from the refrigerator, making sure it is very cold throughout. Place the dough on the work surface. Arrange the butter block in the center of the dough so it looks like a diamond in the center of the square (rotated 45 degrees, with the corners of the butter block facing the center of the dough sides). Pull the corners of the dough up and over to the center of the butter block. Pinch the seams of dough together

to seal the butter inside. You should have a square slightly larger than the butter block.

Lightly dust the work surface with flour to ensure that the dough won't stick. With a rolling pin, using steady, even pressure to roll out the dough from the center so that it triples in length. This will take several passes and you may need to add more flour in between rolling to keep the dough from sticking to the surface and rolling pin. When finished, you should have a rectangle about 20 by 10 inches (50 by 25 cm) and ¼ inch (6 mm) thick.

Place the dough so the shorter sides run left to right. From the top side, fold one-third of the dough onto itself, keeping the edges lined up with each other. From the bottom side, fold the remaining one-third of dough on top of the side that has already been folded. Line up all the edges so that you are left with a smaller rectangle. This technique is called a "letter fold," since the dough is folded as if it were a piece of paper going inside an envelope. Wrap the dough tightly in plastic wrap and place on a sheet pan. Refrigerate for about 1 hour to relax the gluten.

With the seam always facing to the right, repeat steps 3 and 4 for your second and third folds. After the third fold, refrigerate the dough for 1 hour.

*Tip: If you don't have enough space in the refrigerator, you can gently fold the dough in half to fit.*

Lightly flour the work surface and lay the dough flat. Trim about ½ inch of dough from each side to make a neat rectangle. Using a ruler, start from the left side

## THE PERFECT CROISSANT

and score the dough every 3 inches (8 cm) along the bottom edge until you reach the right side of the dough. Make the first score on the top edge 1½ inches (4 cm) from the left end. Continue scoring the top edge every 3 inches (8 cm). These staggered marks should give a nice guideline for cutting triangles. Use a large chef's knife to connect each score mark on the top with the two at the bottom on either side of it. The isosceles triangles should measure 3 inches (8 cm) wide and 10 inches (25 cm) long. There will be narrow triangles of dough left over at each end. Place the cut triangles on a parchment paper-lined sheet pan, wrap tightly in plastic wrap, and refrigerate for 30 minutes to 1 hour.

Remove the dough triangles from the refrigerator, and make sure there is no flour on your work surface. Working with one triangle at a time, hold the base of the triangle with one hand and use the fingertips of your other hand to lightly grasp the triangle near its base and gently stretch it an additional 2 to 3 inches (5 to 8 cm) in length, pulling your fingers toward the tip and being careful not to tear the dough.

*Tip: Stretching out the dough not only gives you more to roll, it also relaxes the dough.*

### ROLL AND SHAPE

---

Starting at the wide end, roll the croissant dough toward the tip, keeping steady and even pressure as you roll, until it comes to a rest on the tip of the triangle. When finished, make sure the tip of the dough is on the bottom of the croissant or else it will unravel in the oven.

Line a sheet pan with parchment paper. Place the

croissants on the sheet pan about 4 inches (10 cm) apart. Lightly lay a piece of plastic wrap over the croissants and refrigerate overnight.

### Day 3:

#### BAKE

---

Remove the tray of croissants from the refrigerator. Keep them lightly covered in plastic wrap. Let stand at room temperature until tripled in size, about 2 to 3 hours.

*Tip: This step is called “proofing”, a step in bread and viennoiserie baking that activates the yeast in the dough. When proofed at the proper temperature and environment, you’ll see the croissant dough triple in size and become light, fluffy, and jiggly. What’s most important in the proofing step is to make sure the dough is neither overproofed (where it’s proofed up so much that it eventually collapses, causing the layers to separate and the butter to leak) or underproofed (which will result in a tight crumb and you won’t get those fluffy, flaky layers).*

Place a rack in the center of the oven and preheat the oven to 375°F (190°C) for conventional or 350°F (175°C) for convection. In a small bowl, make the egg wash by whisking together the eggs, salt, and milk. Gently remove the plastic wrap from the croissants. Lightly brush the croissants with the egg wash, making sure not to apply too much pressure to prevent deflating the croissants. Bake on the center rack for 12 to 15 minutes until golden brown. Remove from the oven and let cool briefly.

### STORAGE

Best served fresh and hot out of the oven. Croissants should be eaten within 5 hours of baking.



## LEARN MORE

“Flour, butter, and the levain are the three critical ingredients to making a good croissant,” Chef Dominique notes. As such, take care to buy quality ingredients so the finished croissant is equally exemplary. Buy fresh, all-purpose flour and use high-quality, **European-style butter** that has the highest fat content you can find. Good butter is like clay: it’s malleable and elastic, even when cold from the refrigerator.

The **quality of the levain** depends on how long it ferment, so follow Chef Dominique’s recipe closely. To make levain, you must first let flour and water capture the natural yeasts in the air, which will give the croissants the same slightly acidic, pleasing smell you normally get from a freshly-baked loaf of sourdough bread. This process takes about 5 days to get going. Then, once it is, you must add new amounts of flour and water to feed the yeast, literally, and allow it to grow, thus producing more and more of itself and developing layers and layers of flavor. Once the levain is ready, you will take some of it to use in making Chef Dominique’s croissants, but you will be left with much more, so be prepared to either give it away to other bakers and friends or continue feeding it to make more croissants. The levain, after all, is the “DNA in the croissant,” as Chef Dominique notes.

Once you’re working with quality ingredients, make sure to follow the steps closely to make sure the dough you’re working with is the **proper temperature**. If the dough gets too cold, it can be difficult to roll and the butter layers inside can break apart and become brittle, which will impede the development of flaky layers in the finished croissant. Keep the countertop cool and work with the dough while it’s

cold from the refrigerator, trying not to handle it too much with your hands to avoid warming. Work quickly, but calmly, and keep everything as neat as possible. This both minimizes the amount of waste from the dough, but also keeps the dough in the perfect shape to give you the beautiful croissants you’re after in the end.

Once the croissants are rolled, be careful not to destroy all those beautiful layers you worked to build up. Be gentle when **rolling and shaping** the croissants and use a light hand when applying the egg wash—you don’t want the brush to drench the dough or crush it. Once baked, allow the pastries to cool to room temperature and use a sharp serrated knife so it can cut through, not crush, all those flaky layers. The layers inside should resemble a “honeycomb” in that they should not look dense, and the air pockets should be of an even size from the inside to the outside. Smell the croissant; it should smell yeasty and buttery.

If you cut into your freshly-baked croissant and find that it’s hasn’t come out as you’d imagined, examine its interior structure and look for **these common signs** that things might have gone wrong while making your croissants:

- If the croissant has air pockets that are very small and the texture is “breadly” (chewy and tough), that means the croissant dough was overhydrated. This can happen when there’s excess moisture in the air or too much water was added to the dough in the beginning. To correct this, add a little less water than the recipe calls for and see how the dough absorbs it. If it looks and feels well-hydrated

## LEARN MORE

- and supple, it's likely that you don't need the extra water. Keep in mind that a humid environment could contribute to overhydration of dough.
- If the croissant has a dry ring of crumb on the outer edge, that means the croissant was baked for too long because the oven wasn't hot enough. The faster you bake the croissant, the better because you want the outside to set and turn deep golden brown at the same time the inside is cooked through.
  - If the croissant has a slightly concave bottom and uneven air pocket size inside, that means the croissant dough was under-proofed and did not develop the strength necessary to stabilize the dough that comes from proper proofing time. If you're unsure about whether your dough is proofed long enough, it is better to give the dough a few more minutes than to pull it too early and risk working with dough that isn't ready.