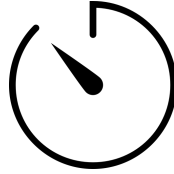


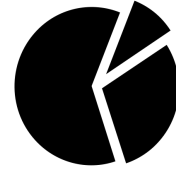
Pain Au Chocolat



LEVEL: ADVANCED



16 HOURS



SERVES: 16-20

Ingredients

Croissant Dough (Detrempe)

700g Croissant Flour (Also known as T55 Flour - you want a flour with 11-12% protein content)

300g Plain, All-Purpose Flour (Around 9-10% protein content)

***If you only have access to Bread Flour - Use 500g Plain Flour + 500g Strong White Bread Flour**

25g Salt

120g Sugar

40g Fresh Yeast

265g Whole Milk (5 Degrees Celsius)

265g Water (25 Degrees Celsius)

30g Unsalted Butter, Soft

Butter (Beurrage)

500g Professional Unsalted Butter (Isigny Ste-Mère - Beurre D'Isigny A.O.P)

Or

500g Unsalted Butter + 50g Flour (Croissant or Plain)

Filling

3 Chocolate Batons Per Croissant

Egg Wash

2 Eggs + 2 Egg Yolks

Equipment

Rolling Pin
Stand Mixer
Baking Tray
Knife
Pastry Brush
Ruler or Tape Measure
Dough Scraper

Method

Croissant Dough

1. Into the bowl of a stand mixer, add the milk, water & yeast. Use a whisk to whisk it until the yeast has dissolved.
 - **40g Fresh Yeast**
 - **265g Whole Milk (5 Degrees Celsius)**
 - **265g Water (25 Degrees Celsius)**
2. Add all of the remaining ingredients into a bowl, and attach your dough hook to the stand mixer.
 - **700g Croissant Flour**
 - **300g Plain Flour**
 - **25g Salt**
 - **120g Sugar**
 - **30g Unsalted Butter, Soft**
3. Place the mixer on low speed (Speed 1 on your mixer) and mix for 8m. After 8 minutes, increase the speed to 2, and mix for another 7-8 minutes.
4. After this time, take a small piece of dough and check to see if the gluten has fully developed. To do this, stretch the piece of dough out, and if it tears easily, then the gluten has not developed enough and you need to keep kneading the dough.
5. Keep kneading the dough until when you carefully stretch a small piece of dough, it stretches without tearing and you can see through the thinly stretched dough.



6. Depending on the strength of your mixer, the time it takes to develop the gluten may vary. It could take up to 15-18 minutes.
7. Remove the dough from the stand mixer and briefly knead it by hand into a smooth ball.
8. Use your hands to pat the dough down and form it into a rough rectangular shape.
9. Wrap the dough in cling film, ensuring the cling film is not wrapped too tightly, there needs to be a little bit of room for it to expand.
10. Place the dough on a tray and into the fridge. The dough needs to be in the fridge for 8-15 hours (I do 12 hours). This the perfect window of time for the fermentation to take place and for the flavour in the dough to develop. I prefer to mix the dough at night so that I can laminate first thing in the morning.

Butter

Depending on the type of butter you use, you may not need to follow the following steps and add flour into your butter. If you are able to purchase professional butter sheets used specifically for croissants then the butter will be pliable enough and you will not need to do this.

Option 1 - “Professional” Butter

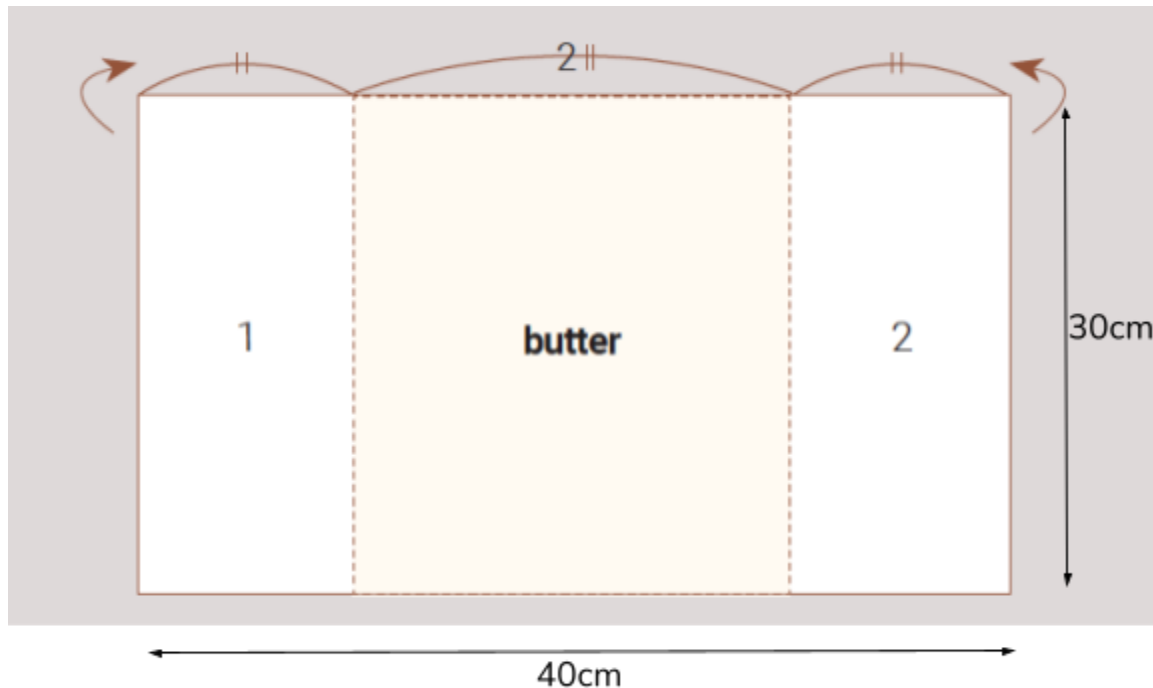
1. Remove the butter from the package - they usually come in 1KG sheets, and cut it in half to get 500g.
2. Place the butter on one long sheet of parchment paper then fold it in half. Leave the butter at room temperature for about 10-15m then it will make it much easier to roll.
3. Use a rolling pin to roll the sheet of butter into a rectangle, around 20x30cm (7.8”x11.8”).
4. You fold the parchment paper into a 20x30cm (7.8”x11.8”) rectangle and then use the rolling pin to roll the butter into the edges until you have a nice even layer of butter.
5. Place the butter block in the fridge to chill overnight.

Option 2 - “Regular” Butter

1. Place the soft butter into a stand mixer along with the flour.
2. Beat the mixture for 1-2 minutes on a low speed until the flour has completely incorporated into the butter.
3. Scrape the butter out of the stand mixer and place it into the centre of a large sheet of parchment paper.
4. Fold the parchment paper over the butter and then fold the edges in, to create a rough rectangle that is 20x30cm (7.8”x11.8”). Use a rolling pin to roll the butter into the corners until you have an even layer of butter that is in a neat rectangular shape
5. Alternatively (and slightly easier) is to find a sandwich bag that is roughly 20x30cm (7.8”x11.8”) and place the soft butter inside that. Seal the sandwich bag leaving a slight hole at the top for air to escape.
6. Roll the butter into a neat rectangular shape, trying to get the butter a relatively even thickness. Seal the top of the bag and place the butter in the fridge overnight.

Laminating

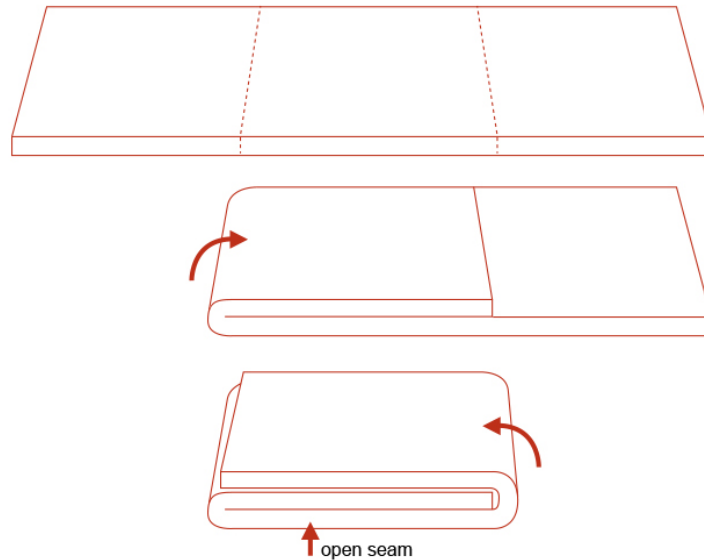
1. After the croissant dough has fermented in the fridge, you are ready to laminate.
2. Remove your butter block from the fridge to allow it to come to temperature. The temperature of the butter is **crucial** - if the butter is too cold, it will crack when you begin to roll it. If the butter is too warm, it will bleed into the dough and you won't get any layers to your pain au chocolat.
3. The temperature you need your butter to reach before you begin laminating will depend on the butter you are using and the fat percentage. But a general rule of thumb is to leave the butter at room temperature until it reaches between **11-15C (51F-59F)**
4. In my experience, if you are using "professional" croissant butter, you can laminate at around 11C, but with "regular" butter, you need to be closer to 13-14C.
5. This may take some experimenting, so if your butter melts or cracks the first time you begin laminating, don't panic! You can still make the croissants, your layers may not be quite as perfect however. It can take a few failed attempts of croissants in order to understand your butter.
6. Place a digital thermometer into the butter. Depending on your room temperature or the weather outside, it can take the butter anywhere from 10-30 minutes to reach the correct temperature.
7. Once your butter is close to temperature, work quickly to remove your croissant dough from the fridge and start rolling. We want to ensure the dough stays cold and is rolled out as soon as the butter is at the right temperature.
8. Very lightly flour the dough and roll it out into a rectangle, that is the same height as your butter (30cm/11.8") but **twice** as wide.
9. If your butter block is 20x30cm, you want to roll your dough to 40cm wide x 30cm tall.



10. Place the butter block into the centre of the dough (as shown above) then fold each side of the dough into the centre so they meet in the middle.
11. Use your fingers to pinch the dough together to form a seam down the centre.
12. Turn the dough 90 degrees so the open seam is not facing you and give the dough a quick roll, to give it a little bit of width - extending the width of the dough by about 10cm/4".
13. Turn the dough 90 degrees again so the seam is vertical in line with your body and begin to roll the dough. Working relatively quickly. Apply even pressure and roll the dough into a long even rectangle. Lightly flour the dough as you need. You may also need to lift the dough up occasionally to loosen it from the surface and then continue rolling.
14. Don't worry too much about the length of the dough, we are looking to roll it until it reaches around 1-1.5cm thick (0.39"-0.59")
15. Once you are happy with the thickness and shape, dust off any excess flour with a brush, and if the ends of the dough have gone a bit wonky, cut them off so you have straight edges on either side.

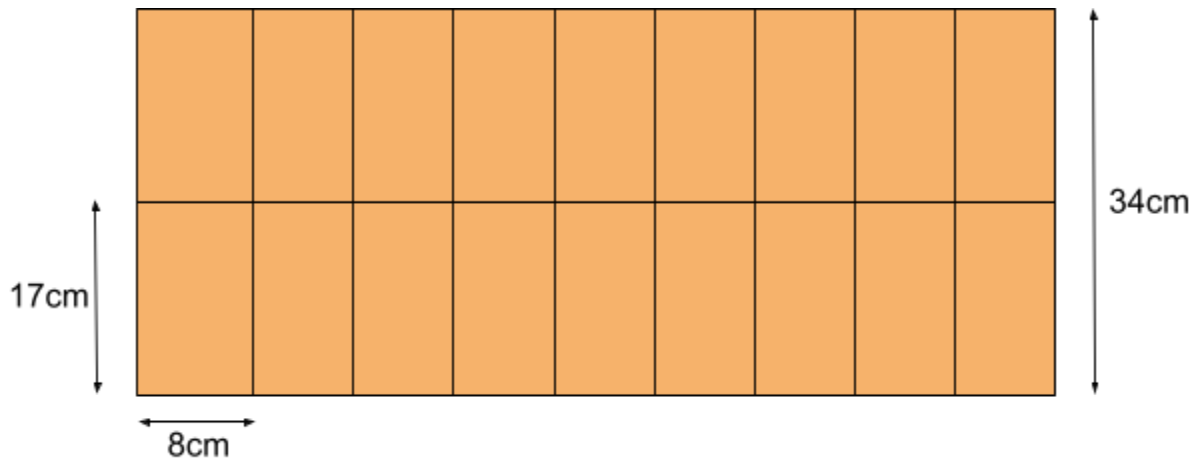
16. Perform a single fold of the dough, where you take one third of the dough and fold it up, then take the other third of dough and fold this over the top (see diagram below)

single fold no. 1



17. Wrap the dough tightly in cling film and place it onto a tray. Place the dough into the **freezer for 10 minutes**, then into the **fridge for 5 minutes**.
18. Remove the dough from the fridge and unwrap it.
19. Following the same process as before, turn the dough 90 degrees so that the “open seam” is horizontally against your body (so it is not facing you).
20. Roll the dough to give it a little bit of width, then turn the dough 90 degrees so that the open seam is now facing you.
21. Roll the dough into a long rectangle, until it is around 1-1.5cm thick (0.39”-0.59”).
22. Now, perform your second, single fold. Following the diagram again, take one third of the dough, fold it up, then take the other third of dough and fold this over the top.
23. Wrap the dough up in cling film and place it in the **freezer for 15 minutes**, then in the **fridge for 10 minutes**.

24. Remove the dough from the fridge, and we are going to perform our final single fold, **Repeat the process in steps 20-23.**
25. You will have now performed 3 single folds.
26. Wrap the dough tightly in cling film and place it in the **fridge for 30 minutes.**
27. After 30 minutes, remove the dough from the fridge. Take the open seam and turn it 90 degrees so the seam is **not facing you.** Here we need to roll the dough to the final width that we need for the pain au chocolat.
28. Each pain au chocolate is 8x17cm, which means that we need the dough to be **at least 38-40cm tall. Keep in mind the dough may retract and shrink slightly so it is better to go to 40cm given it may retract 1-2cm.**
- We will make two rows of pain au chocolat so we need to make sure the dough is at least $2 \times 17\text{cm} = 34\text{cm}$ tall. You want to go a little bigger than this so you can trim off any rough edges.
29. Once you have rolled the dough to around 38-40cm wide, turn it 90 degrees so the **open seam is now facing you.** Roll the dough into a long rectangle until it is as close to 1-1.5cm thick (0.39"-0.59") as possible.
30. Next, take a tape measure or a large ruler and trim off any rough edges so you are left with a rectangle that is exactly 34cm tall.
31. Take a pastry wheel and cut the dough in half, so that you are left with two very long strips of dough, each 17cm tall.
32. Then take a multi pastry wheel cutter or a knife, and cut the dough every 8cm. This will form a rectangle for your pain au chocolat that is **8x17cm.**



33. Take a rectangle of the dough and place two chocolate batons at the top. Carefully fold the top edge of the dough over the batons, then seal this dough that has overlapped the batons, by adding a third chocolate baton.
34. Continue to roll the dough down, into a log like shape.
35. Once you have a log, ensure the seam of the dough is on the underside, and gently press the pain au chocolat down, sealing the seam to the bottom of the dough.
36. Take a large baking tray lined with a sheet of parchment paper and place the pain au chocolat on to it.
37. Repeat this process with all of the remaining dough.
38. Ensure the pain au chocolat have enough room to proof (I put about 6 per tray)
39. Once you have all the trays filled, boil the kettle and place the trays into your oven (not switched on!)
40. Place the trays into the oven, then place a small dish at the very bottom.
41. Pour in a small amount of boiling water into the dish, around 150ml / $\frac{1}{2}$ Cup - not too much. The steam from the water is going to help create a nice environment for the pain au chocolat to proof, but also prevent a skin from forming. Ensure you do not add too much hot water otherwise the temperature inside the oven will become too hot and the butter will leak from the pain au chocolat.

42. Change the water **EVERY 30 minutes**, and proof the pain au chocolat for around 2.5 - 3 hours.
- The proofing time can vary greatly depending on your yeast, and how hot your oven becomes and several other factors. Without a professional proofer it can be hard to predict the exact time. Sometimes it can take 2.5 hours, sometimes it can take 5!
43. Proof the pain au chocolat until they have at least doubled in volume and look puffy and jiggly.
44. If you are using the same oven you need to proof the croissants, as you need to bake it (!) once they are proofed, quickly remove them from the oven and pre-heat the oven.
45. Pre-heat the oven to **180C/375F Non Fan Assisted**.
46. Leave the pain au chocolat out at room temperature for 10 minutes - this will help to form a skin on the dough and make them easier to egg wash.
47. For the egg wash, whisk together the egg and egg yolks until evenly combined.
- **2 Whole Eggs**
 - **2 Egg Yolks**
48. Use a pastry brush to paint the egg wash onto the pain au chocolat, but avoid egg washing the outside exposed edges otherwise this could prevent them from rising correctly. Be gentle when egg washing so as not to tear the dough.
49. Once the oven is hot, place the croissants in, bake for around 25-30m or until then are a nice deep golden brown colour. Every oven is different so keep a close eye on them.
50. Remove the pain au chocolat from the oven, allow to cool, then serve.

Timings

Making pain au chocolat & croissants is an intensive process and something you really need to dedicate 16-24 hours to! Make sure you don't have any plans on the day you need to laminate!

Here is a rough guide on timings to follow:

Day 1:

9:00pm - Weigh the ingredients + mix the croissant dough. Refrigerate overnight (ideally 12 hours)

9:30pm - Beat the butter until it is soft and shape into a rectangle. Chill overnight.

Day 2:

9:00am - Remove the butter from the fridge. Allow it to come to temperature.

9:20am - Remove the dough from the fridge, roll it out, then add the butter and perform your first lamination. Chill for 10m in the freezer + 5m in the fridge.

9:45am - Remove the dough from the fridge and laminate again. Chill in the freezer for 15m + fridge for 10m.

10:15am - Remove the dough from the fridge and perform the final lamination. Chill in the fridge for 30 minutes.

10:50am - Roll the dough to its final shape and cut into pain au chocolat rectangles. Roll the pain au chocolat up and then place them in the oven to proof.

11:10am - 2:10pm - Proof - changing the hot water every 30 minutes (Roughly 3 hours proofing time - could be slightly less, could be more!)

2:10pm - Remove the proofed PAC, and preheat the oven. Leave the PAC at room temperature to form a skin.

2:20pm - Egg Wash the PAC.

2:30pm - Bake for 25-30m or until golden.