

# Croissants



**Serves :**

8-10



**Prep :**

3h30



**Rest :**

Freezing : 30 min.  
Refrigeration : 12h



**Cook :**

Temperature : 356°F  
Time : 20-25 min.

## Special equipment

- 4-5 mm dough thickness guides
- 8-10 mm dough thickness guides
- 1 Freezer bag
- Cutter or scalpel
- Ruler
- Probe thermometer

## List of recipes

- ✓ Dough (détrempe)
- ✓ Butter
- ✓ Layering
- ✓ Proofing
- ✓ Baking



# Steps

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*Rest for 30 min. at room temperature*
- 🌀 **Continuation of the detrempe**  
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*Rest for at least 2h in the refrigerator*
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# The detrempe (dough)

## Ingredients

☑ 65 g ~ Whole milk (cold)

☑ 145 g ~ Water (cold)

☑ 8 g ~ Fine salt

☑ 45 g ~ Superfine sugar

☑ 500 g ~ Pastry flour

=> Possibility 250 g T45 + 250 g T65

☑ 15 g ~ Acacia honey

☑ 23 g ~ Baker's yeast

☑ 115 g ~ Softened butter

- It is important to work in an environment below 20°C/68°F.
- Put the following ingredients in the bowl of the mixer and in this order:
  - Always the liquids first:
    - Cold water/milk (taken from the refrigerator at 4°C/39°F)
    - Sugar/salt
    - Flour
    - Butter/honey
    - Yeast (must not have direct contact with salt!)
  - Knead with the dough hook for 3-4 minutes at 1st speed (speed 3/10 on a household mixer), then knead for 6 minutes at 2nd speed (speed 7/10 on a household mixer). Do not hesitate to manually remove the dough if it sticks to the hook.
  - The dough temperature should not exceed 24°C/75°F!  
It is therefore necessary to constantly check the temperature with a laser thermometer if possible.
  - Ideally, the dough should be at 23-24°C/73-75°F at the end of kneading (after 9-10 minutes), as the yeast starts to work from 25°C/77°F.
  - At this stage, the dough should be elastic (take a small piece of dough and try to test its elasticity, it should be see-through when stretched). If it cracks too quickly, you can continue kneading by hand. (=> video reference 05:15)
  - When the dough is elastic enough, it needs to be balled (=> video reference 05:54) to give it strength. It should become firm and form a beautiful ball. To speak technically: you have just developed its gluten network.
  - Cover with plastic wrap.
  - Let rest for 30 minutes at room temperature (max 18°C/64°F).
  - Punch down the dough, ball it lightly, and flatten it in food wrap (with one side at 18-20 cm).
  - Put it in the freezer for 30-45 minutes (to stop the yeast from working), and finally in the refrigerator at 4°C/39°F for at least an hour.  
Ideally, leave it overnight to develop the flavors with the yeast.



## Ingredients

- ☑ 250 g ~ Dry butter

## The butter

- Preferably use a dry butter (which contains less water, is more elastic and has a higher melting point than traditional butter). If you cannot get dry butter, use a quality butter such as PDO butter (82% fat).
- To avoid the risk of having the butter breaking through the dough ("marbling"), it is recommended to soften the butter just before use. To do this, make sure the butter is soft enough (taken out a few hours before, it should be between 15 and 18°C/59-64°F) and beat it with a rolling pin to soften and flatten it.
- Use a 20x20cm template with parchment paper to obtain a perfect square of a few millimeters thick.
- This sheet of butter should be very malleable without sticking to the paper.  
If it does stick, place it in the refrigerator for 5-10 minutes.



## Preparation of the proofing chamber

- As the following steps will take approximately 1 hour, it is recommended to prepare the proofing chamber at this stage.
- Fill a large container with 2-3 cm of boiling water (about 1/2L).
- Place it at the bottom of the oven.
- If possible, use a probe thermometer with a remote display to monitor the temperature with an external display.
- It's not a big deal if the temperature exceeds 28°C/82°F during this phase. However, if after 30 minutes the temperature does not exceed 26°C/79°F, add boiling water.
- The goal is to place the pastries in the oven at 26-27°C/79-81°F when the time comes.



# Lamination

- Place the butter on the detrempe which should measure 20x40 cm.
- Enclose it. To obtain a visually perfect flakiness, it is unnecessary to close the edges.
- Using the thickest set of rulers, roll out to 1 cm thickness, make a double fold over half the length and lengthen slightly.  
Turn the dough frequently to prevent displacement between the different layers.
- Place in the refrigerator for 15-20 minutes. It should drop to 15°C/59°F.
- Roll out again to 1 cm thickness and make a single fold.
- Place in the refrigerator again for 15-20 minutes.
- If you are not using butter made for layering (84% fat), make the double fold and single fold without resting time to minimize the risk of “marbling”.



# Shaping

- Using rulers, roll out the dough to a thickness of 4-5mm over a width of 34cm, and loosen the dough well (peel it off the work surface).
- To facilitate cutting and obtain a neat shape, you can put the rolled-out dough (covered with plastic wrap) in the refrigerator for 15-20 minutes.
- Trim the uneven edges to form a beautiful rectangle.
- Cut the croissants into triangles with a base of 11-12cm by 30cm (traditional size is 9x27cm).
- Roll the pastries gently and as straight as possible.



# The proofing

- Avoid putting more than 6 pastries on a 30x40 cm baking sheet (lined with parchment paper) so that they do not touch during proofing.
- You can very lightly and indirectly sprinkle the pastries with water (using a sprayer) to prevent cracking during proofing.
- Let proof for 2 to 2.15 hours at 26/27°C/79-81°F.
- Check the temperature by opening the oven when it reaches 28°C/82°F; the use of a thermal probe with an audible warning is very useful, if not essential!
- And add half a glass of boiling water when the temperature drops to 25°C/77°F.



# The baking

- To glaze the croissants, beat a whole egg. Gently brush the croissants with the egg wash.
- Bake in a convection oven at 180°C/356°F for about 20 to 25 minutes.
- You can always extend the baking time by 10 minutes at 160°C/320°F if your viennoiseries are too light-colored.



# Tips

## ❖ For preparing the detrempe (dough) :

1. You can use 250g of T65 all-purpose flour and 250g of T45 pastry flour to prevent the dough from having too much strength.
2. The bowl and hook of the mixer can be frozen!!! Place them in the freezer 2 hours before use. This will prevent the dough from getting too warm too quickly, especially if it is 20-22°C/68-72°F in your room.

## ❖ When using a PDO (Protected Designation of Origin) butter :

The problem with this butter is that it quickly loses its elasticity once it hardens and tends to crack ("marbling") when rolled out. To minimize this risk, I recommend working with it just before use, which means not preparing your template the day before and refrigerating it, as it will no longer be as malleable the next day.

Minimize resting times between folds. You can even skip them if your working environment is below 20°C/68°F. Also, quickly roll out the final dough if it doesn't have too much strength (tends to continually retract).

Store your rolled-out dough (covered with plastic wrap) in the refrigerator for 2 hours before cutting it.

One of my favorite butters is "Président".

## ❖ To properly roll out the dough:

1. When placing the butter in the dough, cut off any excess dough that protrudes from the butter to have a layer of dough above and below the butter.
2. During rolling, frequently flip the dough over (roll on top, bottom, etc.)
3. Use a cutter to make incisions at each fold created with double and single folds (the curved edges).
4. Always cut with a cutter or scalpel.

## ❖ How to have fresh pastries for breakfast without having to wake up 3 hours earlier?

- According to my various tests, the best result I obtained was to make my pastries entirely up to the baking stage. Either the day before or a few days earlier (avoid more than 2 weeks!)
- Then, when they have cooled, place them in a freezer bag and freeze them.
- Before breakfast, you can then bake them for 10 minutes at 160-170°C/320-338°F.  
=> They will be perfect!
- Forget about long proofing times, like overnight in the refrigerator, the result is catastrophic.
- The test of freezing before proofing was not successful either.

## ❖ If your viennoiseries crack during proofing or baking.

Either:

1. You haven't worked the gluten network of the dough enough (lack of elasticity)
2. The dough was rolled out with too much strength (overstretched and not rested enough)
3. Your viennoiseries are too dry.

## ❖ Fresh or dry yeast?

I strongly recommend using fresh yeast, but if you want to use dry yeast, you need to respect a ratio of 2.5 (less for dry yeast) and use 10g of dry yeast instead of 23g of fresh yeast.

# Tips (continued)

## ❖ To make two-colored croissants:

1. Take 220 g of dough (at the end of kneading)
2. Mix in 15 g of cocoa powder and add 5 g of water slowly (or use a water-free food coloring).
3. Knead by hand until the mixture is well combined.
4. Flatten the cocoa dough directly to a thickness of 5 mm.
5. Freeze for 30 minutes, then refrigerate.
6. For layering, use only 215 g of butter for the remaining dough (since we have 220 g less dough).
7. Soften the cocoa dough and lightly brush with water for sticking.
8. Just before the final rolling, place the natural dough on top and roll out to 4-5 mm thickness like regular dough.

## ❖ Where to find the rulers?

In a hardware store, ask for the section of profiles.

Choose flat or rectangular profiles with a thickness of 8-10 mm and 4-5 mm.

## ❖ Special Johan Martin spray egg wash recipe :

- 100 g whole eggs,
- 50 g egg yolks,
- 50 g whipping cream (30% fat)
- 25 g honey