

Hardcore Croissants made easy

by t.rohner on December 26, 2011

Table of Contents

Hardcore Croissants made easy	1
Intro: Hardcore Croissants made easy	2
Step 1: Ingredients	2
Step 2: Dough and stretching butter	4
Step 3: The layering of the dough	7
Step 4: Forming the croissants	
Step 5: Final rise and backing	12
Step 6: Final thoughts	13
Related Instructables	14
Comments	14

Intro: Hardcore Croissants made easy

Croissants are not that hard to make, as you possibly have made believe.

To make it "even harder", i tried my luck with a sourdough recipe.

But i also add a version with instant dry yeast, for the less "hardcore" bakers.

Why should you make them at all?

-They taste like heaven.

-Because you can... and you are one of the 1-3% who ever did this.

But that's why you are on instructables, i guess.

The steps in the text have corresponding commented pictures. You can zoom in by clicking on the little [i] on the upper left. The pictures have been shot with my Sony HX100V. (16MP)



Step 1: Ingredients

The ingredients used, should be easily available. Except maybe unsalted butter in some places of the world.

For the dough (sourdough version)

460g of a strong gluten flour 115ml milk 50g butter 2 eggs 125ml of a mild sourdough culture (it's about 50-50% water-flour by volume) 10-15g of salt (i'm on the 15g side, otherwise i couldn't keep up my blood pressure...) 30g of sugar 3-5g of dry instant yeast (half a packet for 500g flour)

The dough should be on the dryer side, even with all the fat in it. This is hard to tell, it's experience.

For the dough (yeast only version)

500g of a strong gluten flour 175ml milk 50g butter 2 eggs 10-15g of salt (i'm on the 15g side, otherwise i couldn't keep up my blood pressure...) 30g of sugar 7g of dry instant yeast (one packet for 500g of flour)

The dough should be on the dryer side, even with all the fat in it. This is hard to tell, it's experience.

The stretching butter

This is extremely vital for a good result. Your goal has to be the same consistency of the stretching butter and the dough. Only this way, you can stretch it together, without getting mad. My pro baker friends told me so, but they buy it in 10kg units readily made.

http://www.instructables.com/id/Hardcore-Croissants-made-easy/

250g butter 25g of flour

1 egg yolk and some sweet cream or milk for glazing





Image Notes 1. milk and flour food facts, zoom in to read



Image Notes 1. Instant dry yeast

Image Notes
1. all the ingredients



Image Notes
1. unsalted butter





Image Notes 1. bio eggs

Step 2: Dough and stretching butter

Now this is nothing for the faint of heart, but that's why i tell you.

All the "drama queens", male or female, should probably run to the store and buy some puff pastry dough... but then, they'd probably not be browsing instructables anyway.

Image Notes

1. active sourdough culture

It was been done before and it's still done, because it rips your socks off.

What is really important, to have a even leavening, is a geometrically square work.

Baking is quite forgiving most of the time, but not here.

The idea behind puff pastry is a vapour barrier made of fat in many (36) layers. When you bake it, the water in the dough expands and leavens the dough. In a croissant dough, you additionally have some yeast, to leaven the dough layers some more. In a pure, yeastless puff pastry dough, you have more layers. (i think it was 144, that's a additional double fold)

First, make the stretching butter.

You need to incorporate the flour into the butter. Do it the quick and dirty way i did it, or put it into the Kitchenaid to knead it right. But then, the result is important. I never had any issue with ripping dough this time. When i took pure butter, i had problems with the dough ripping. As you can see in the pictures, i cut the butter into pieces, added the flour, used a spoon to mix and in the end, i kneaded it back to a ball. Actually it was a square, because that's what you need later on. Don't play around with it for too long, it will melt pretty soon. Put it in the fridge.

Then, mix the dough ingredients. I add all the ingredients and let it mix and knead in my breadmaker. I always use it for doughs up to 500g of flour. When it gets bigger, i use my Kenwood Major. You can do it by hand, or with the kneading hooks of your hand mixer. If you do it by hand, be prepared to knead it for 10-15 minutes or so.

Put it in a covered bowl and let it rise at room temp. for a half hour or so. You should see, that it has risen some, but not doubled in size. Then put it into the fridge for 45 minutes to cool down.

The dough and the stretching should be at the same temperature, for the next step

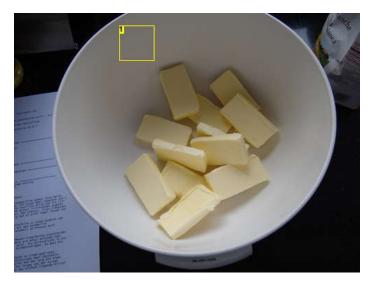


Image Notes 1. butter pieces for the stretching butter

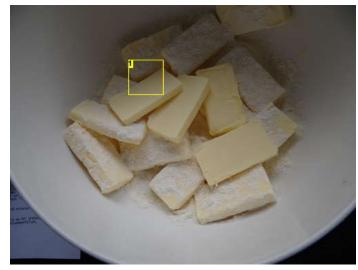


Image Notes
1. the flour added

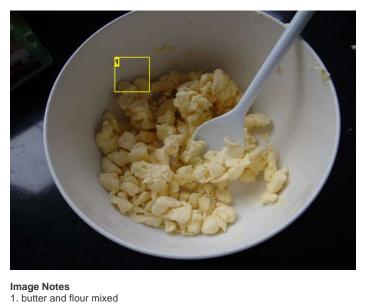


Image Notes
1. butter on the working surface

Image Notes
1. stretching butter, kneaded back into a square form



Image Notes 1. my bread maker



Image Notes 1. flour, salt, sugar and yeast mixed a little bit



Image Notes 1. milk

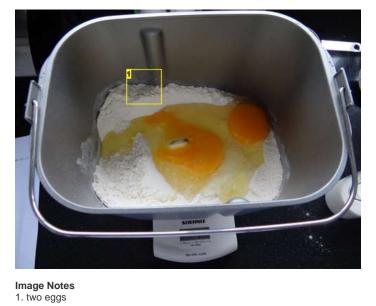




Image Notes 1. sourdough culture

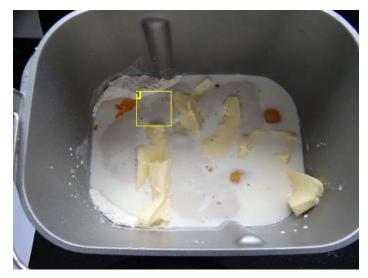


Image Notes
1. all the ingredients, includind the dough butter



Image Notes 1. some time into kneading



Image Notes

1. At the end, i always knead the dough by hand, to feel the consistency

Step 3: The layering of the dough

There are different methods to achieve layers of butter and dough.

This method works extremely well and gives nice, even layers.

Flour the working surface. Keep it floured all the time, so it never sticks. You will need a brush to remove the superfluous flour. This is important, so the dough merges when you fold it.

Take the dough out of the bowl and cut a cross about a inch (25mm) deep. Pull the edges out and take a rolling pin to form it according the fourth picture.

As you can see in the fourth picture, i roll out four flaps much thinner than the middle square. The middle square should be a little bit larger than the butter square. The middle square should actually be four times as thick as the flaps. So when the flaps are folded over the butter, the dough on top and underneath have the same thickness.

The butter square is about 5 inches (12.5cm), the dough is a bit larger. (Picture 6)

In picture 7 you can see two flaps folded onto the butter. It is important to brush off excess flour between the dough layers. It's also a good idea to stretch the flaps as square as possible, but not as much that the dough rips.

In the next picture, the package is ready. If you feel the butter gets too soft, put it in the fridge for 20 minutes or so.

In picture 9, the package has been rolled out to about 12x12 inches (30x30cm).

In picture 10 and 11 you can see a so called single fold. Put it on the workplace with the seam up. Then fold it like a letter. You can give it a couple of rolls with the pin and then put it in the fridge for 30 minutes. Cover it with cling wrap, while in the fridge. (you have 3 butter layers now)

Now you need to roll it out again. This time, the dough will be rectangular after rolling. You need to give it another single fold. Lay it in front of you, seam up and fold it over the long side. (90° turned in relation to the first fold) There are no pictures of this step, but you should get the point. Wrap it and put it in the fridge again for 30 minutes. (you have 9 layers now)

The next step on picture 14 and 15 is a so called double fold. Roll it out again to about the size on picture 13 maybe 10x12 inches (25x30cm). Seam up, fold both ends to the middle, then fold it again. Give it some rolls with the pin. Wrap it and put it in the fridge again for 30 minutes. (you have 26 butter layers now)

Most of the time, i go to bed after this step and leave the dough in the fridge overnight.

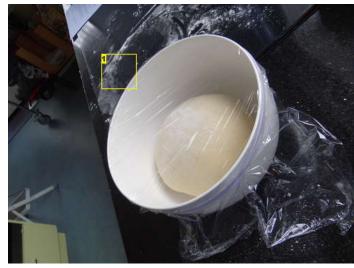


Image Notes 1. dough in the bowl, covered with cling wrap

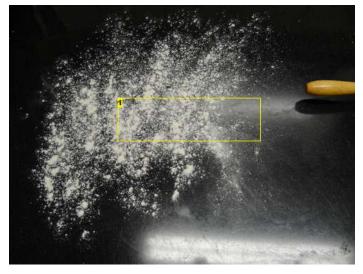


Image Notes 1. flour your working surface



Image Notes 1. the dough ball and the brush





Image Notes 1. the cross form after rolling



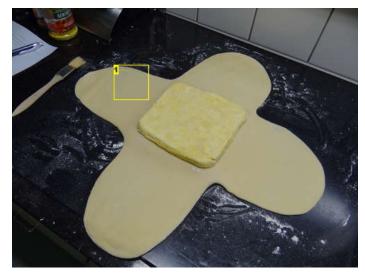


Image Notes
1. Dough with butter plate

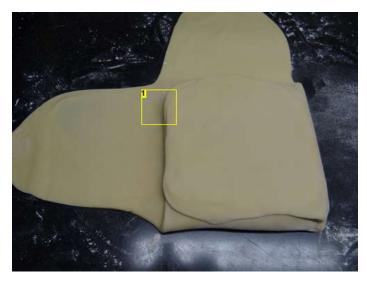


Image Notes 1. two flaps folded over

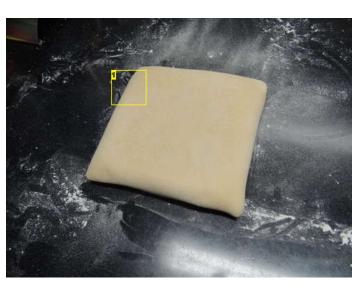


Image Notes 1. the complete package, seam down





Image Notes
1. first part of a single fold

Image Notes
1. The dough, rolled out to 12 inches(30cm)

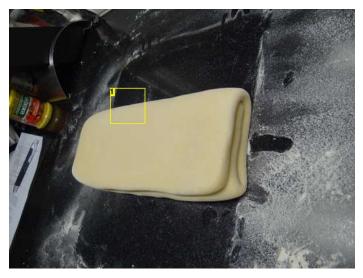


Image Notes 1. single fold completed



Image Notes 1. packed in cling wrap, to put it in the frdge





Image Notes 1. Dough before the double fold

Image Notes 1. first part of the double fold



Image Notes

1. second part of the double fold

Step 4: Forming the croissants

After the dough was in the fridge for at least 30 minutes(or overnight) after the double fold, you need to roll it out to it's final size.

If it was in the fridge overnight, it will have risen and you need to be careful not to pop the bubbles (degas) too hard.

In this stage, the dough layers get the thinnest, so the chances for ripping is the highest. Flour the surface well.

When rolling, you probably need to relax the dough for a couple of minutes after some rolling/stretching. Your goal is a size of about 20x20 inches (50x50cm).

Then you fold it by half and cut triangles of your desired size. You can also trim the outer edges straight, because the dough won't rise nicely at the edges.

Fold back the triangles, that are still together and cut them apart.

Now you stretch the triangles at the tips, remove excess flour, put a piece of scrap dough on the triangle, like you see on picture 7. Start with both hands at the points and roll the croissant. Place them them on a buttered cookie tray or on cookie sheets and cover them with cling wrap.

I salted the remaining scrap dough pieces and backed them with the croissants. This is called "Flute de Chanpagne". In fact, i made my first puff pastry dough for this, after i ate a artisanal version of them.



Image Notes
1. The dough needed to relax, after rolled to this size.

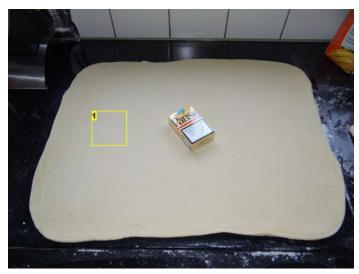


Image Notes 1. final size of the dough, compared to a cigarette pack



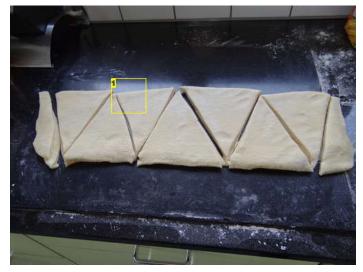


Image Notes 1. dough folded in half



Image Notes 1. folded back again and cut

Image Notes 1. triangles cut

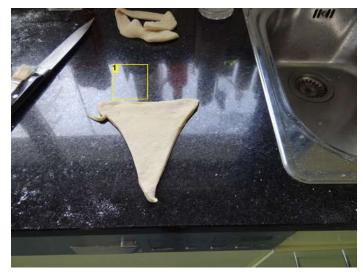


Image Notes 1. single triangle, stretched a little bit

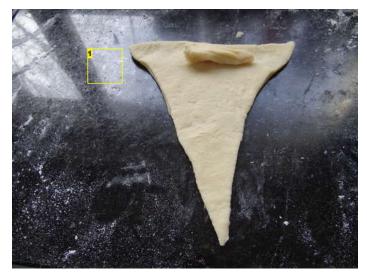


Image Notes

1. excess flour removed, scrap dough in the middle, just before it gets rolled



Image Notes

1. finished croissants, placed with the tips down, some pieces of scrap dough salted

Step 5: Final rise and backing

After you formed the croissants, you need to let them rise for a fluffy consistency.

Unlike other doughs, you can't speed up the rise by raising the temperature, otherwise the butter will melt. So keep it at room temperature.

Depending on the amount of yeast used and temperature, the rise will take somwhere from 90-150 minutes. The dough should almost double its thickness, like you see on the first picture.

During the rising, you also need to preheat the oven to around 200° C or 390° Fahrenheit.

After the croissants have decently risen, you need to eggwash them. Mix a egg yolk with some cream or milk and paint them. Picture 2

I baked my croissants for about 20 minutes.

I started baking them at 200° for around 5 minutes, or until you see the first browning.

I then reduce the temperature to around 160° C or 320° F for the remaining time.

I used the convection function of my oven. Without that, you probably need to increase the temperature by around 10° C or 20° F.

You can see the croissants rising again in the oven.

This happens because of CO2 bubbles created by the yeast, and by moisture trapped between butter layers (the puff pastry effect).



Image Notes 1. thickness doubled after rising



Image Notes 1. eggwashed croissants 2. salted scrap pieces

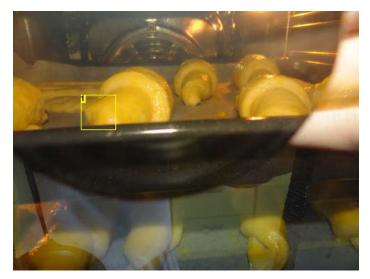


Image Notes 1. the croissants at the start of baking



Image Notes 1. the baked croissants

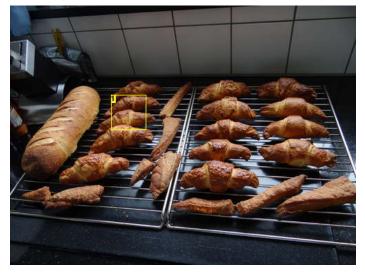




Image Notes 1. one of the salted scrap pieces

Image Notes 1. my new year morning yield, on the left my favourite bread see my other instructable for it

Step 6: Final thoughts

Here we are now.

It wasn't that hard, or was it?

Hopefully you were able to enjoy some selfmade, delicious croissants with butter and strawberry jam.

Variant in step 3-4: Instead of putting the dough in the fridge overnight, you can also form the croissants in the evening. Then you put the covered trays with the croissants into the fridge overnight. Of course, before you roll out the dough, you need to keep it in the fridge for 30-45 minutes after the double fold.

If they stayed in the fridge overnight, the will have risen quite nice. Leave them warm up to room temp. and maybe some time to rise, if necessary.

Happy baking

If you are interested in baking, you may check out my other instructables as well.

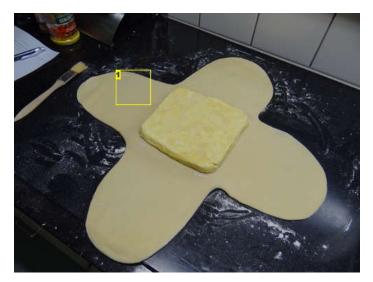


Image Notes 1. Dough with butter plate

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2 comments

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Penolopy Bulnick says: That is one amazing looking croissant!

Add Comment



scoochmaroo says:

Project

Gorgeous! One day I may try my hand at puff pastry dough.

Jan 13, 2012. 10:31 AM REPLY

Jan 13, 2012. 9:53 AM REPLY