

Pizzas by Fero

version 2.1

František Hajnovič
ferohajnovic@gmail.com

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1 Introduction

First of all, I would like to say that I am still a complete amateur in pizza making and some (or even a many) information in this paper may turn out to be incorrect. However I like to make pizzas which is probably the sole most important ingredient of every pizza - to be enthusiastic about it. This article is a summary of my pizza knowledge and a collection of pizza related recipes I've tried (and liked) during years.

Basically, all of my pizzas consist of 3 parts:

1. **dough**
2. **sauce**
3. **toppings**

And I usually do them in two sizes:

1. **medium** - 28cm in diameter, 225g of dough ¹
2. **large** - 35cm in diameter, 340g of dough

¹This depends, of course, on how thin you want to have the pizza

The ratio large/medium surface should be about $\frac{3}{2}$ (so 3 medium pizzas = 2 large pizzas). So if somewhere I write “dough for 7 medium pizzas”, it means about 1575g of dough, which might be 4 mediums and 2 larges just as well...

Legend of shortcuts:

- l = tea spoon
- L = tablespoon

Some conversions:

- 1 cup of (hladká) flour = 128g
- 1 oz (ounce) of (hladká) flour = 28g
- 1l of salt = 5.7g
- 1L = 12.5ml

2 Topping ingredient list

Following is a referential list of toppings and their respective volumes for one medium pizza. Of course, with some pizzas it is better to decrease/increase quantity of a given ingredient, but if not stated otherwise, the quantity mentioned below might be used as referential.

| Ingredient | Volume |
|---------------|--------|
| Bryndza | 55g |
| Grated cheese | 75g |
| Chicken | 100g |
| Feta cheese | 70g |
| Ham | 70g |
| Mushrooms | 40g |
| Olives | 30g |
| Onion | 1/4 |
| Parmesan | 40g |
| Pepperoni | 70g |
| Prosciutto | 60g |
| Tomatoes | 1/2 |
| Mozzarella | 80g |

Table 1: Topping ingredients and their volume for one medium pizza

3 Dough

Note: In Slovakia, the types/names of flour offered in the stores differ from those that could be found in US or abroad in general. In the recipes in this paper, I put the type of flour I’ve tested on the first place (usually Slovak name) followed by it’s equivalent in the brackets. I do the conversions between the names according to the table found at http://en.wikipedia.org/wiki/Flour#Flour_type_numbers, though whose accuracy I honestly cannot guarantee.



Dough Standard (for 7 medium pizzas)

This is a kind of basic dough I've been doing many times, and is a good one to start with. The pizzas are quite thin, bit more crunchy and crispy.

Put the following into the bowl (respecting the order) in which you will mix the dough:

- 500ml of **water** (27 °C ^a)
- 2.5l of dry **yeast**
- 3.5l of **salt**
- 1l of **sugar**
- 2L of **olive oil**

Mix thoroughly and then add:

- 1kg of polohrubá (high gluten) **flour**

Mixing: mix for about **25 minutes** (mix 5 minutes, rest 5 minutes, mix 15 minutes). **Preferable baking:** *brick oven* - 280 °C - 6-8 minutes

Alternative baking: *electric oven (bake from bottom)* - 240 °C - 10-12 minutes

^aThis is a temperature, that feels to your hands just a little cold, but not more. A good adjective is probably lukewarm.



Figure 1: Pizzas from the Standard dough, alternative baking



Dough Americana (for 7 medium pizzas)

This should be strong enough dough for tossing and hand stretching in the air, with similar qualities like the Standard one, maybe just a bit more crunchy and crispy.

Put the following into the bowl (respecting the order) in which you will mix the dough:

- 500ml of cold **water**
- 2l of dry **yeast**
- 4l of **salt**

Mix thoroughly and then add:

- 1kg of polohrubá (high gluten) **flour**

Mixing: mix for about **25 minutes** (mix 5 minutes, rest 5 minutes, mix 15 minutes). **Prefer-**

able baking: *brick oven - 280 °C - 6-8 minutes*

Alternative baking: *electric oven (bake from bottom) - 240 °C - 10-12 minutes*



Figure 2: A pizza from Americana dough, alternative baking



Neapolitan dough (for 7 medium pizzas)

The Neapolitan dough should be thicker but softer and have a puffy but crispy crust. During the mixing process, it will be more sticky and generally, it is a weaker dough, thus pay attention when stretching it to avoid tearing/ripping of the dough.

Put the following into the bowl (respecting the order) in which you will mix the dough:

- 600ml of **water** (18 °C) ^a
- 1.5l of dry **yeast**
- 2.75l of **salt**

Mix thoroughly and then continually add/mix in:

- 1kg of hladká (all-purpose) **flour**

Mixing: mix for **4 minutes**. Let the dough rest for 5 minutes, then mix for additional 3-4 minutes. The dough should clear the sides of the bowl and stick a little to the bottom of the bowl.

Fermentation: leave ferment in a fridge for at least 10 hours.

Stretching: let the dough balls rest at room temperatures 2 hours before stretching, topping and baking them. Also, shape the disks a little bit thicker than e.g. those from Americana dough, the Neapolitan dough is weak and should not be made too thin.

Preferable baking: *wood-fired ovens* - 600 °C - *about 3 minutes*

Alternative baking: *electric oven (bake from bottom + whirling mode)* - 240 °C - *9-11 minutes*

^aThis amount should be appropriate for *hladká* flour, in the original recipe using *all-purpose* flour there was 725ml of water used. Clearly those two types of flour are not completely equivalent



Figure 3: A pizza from Neapolitan dough, alternative baking



Dough Danube Wednesday (for 7 medium pizzas)

A pizza from this dough is very firm, crispy and crunchy. Rather than bending, the pizza will snap. On the contrary, the dough is rather weak, so stretch it on the table to prevent tearing and ripping.

In a bowl, where you'll be mixing the dough, combine:

- 1kg of hrubá **flour**
- 20g (3.5l) of **salt**

In another bowl, put:

- 575ml of **water** (23 °C)
- 7g of fresh **yeast**

Let the yeast dissolve in the water.

Mixing: continually pour in the water/yeast mixture to the bowl with the flour, mix all the time. When combined, mix for about 10 more minutes. The dough should clear the sides of the bowl and stick a little to the bottom of the bowl.

Preferable baking: *wood-fired ovens - 600 °C - about 3 minutes*

Alternative baking: *electric oven (bake from bottom + whirling mode) - 240 °C - 9-11 minutes*



Figure 4: A pizza from Danube Wednesday dough, alternative baking

3.1 Dough mixing

Some general advices during **mixing of the dough**:

- The dough might be too sticky (in which case add more flour) or too dry and tearing apart (more water), but overall no big adjustments should be necessary.
- The texture should be smooth and the dough should not rip.

3.2 Dough ball shaping

After finishing the mixing, make **balls of dough** (about 220g for a medium and 350g for a large pizza). If the dough sticks to your hands, cover them with a little bit of olive oil. The shaping of the dough balls is explained e.g. here: <http://www.youtube.com/watch?v=-8xEpX47Yc&t=3m57s>.

Each shaped ball should be then covered in a thin layer of olive oil (to prevent drying of the dough) and put in a **dough-box** (picture 5), the bottom of which should also be covered with little olive oil. The box should then be hermetically closed, again to prevent drying of the dough by the air.

Leave in a fridge to **ferment** for at least 4 hours, but preferably longer (overnight).



Figure 5: Dough-box

3.3 Stretching of the dough

As for **stretching the dough**, I recommend seeing the following videos:

1. <http://www.youtube.com/watch?v=GuOzvmQkZgs> - stretching of the dough, explained
2. <https://www.youtube.com/watch?v=35MZN4vXfz8&list=UUI-Iz-mKmsy30s4io8wkq7w&index=11> - one of the world's best pizza makers explaining how to flip the dough
3. <http://www.youtube.com/watch?v=SBdpyfeUobM&t=3m53s> - a world record in making 3 pizzas

However, the stretching technique differs with the dough used. With strong dough one can toss, spin and stretch the dough in the air without problems (video 2). With softer and weaker doughs it is better to stretch the dough on a smooth (e.g. marble, stainless steel) surface (video 1). The factors that make the dough stronger are (among others):

- **amount of gluten/protein** in the flour - high-gluten flour based dough would be more suitable for tossing than one made from all-purpose flour
- **water temperature** - the colder, the stronger the dough

- **amount of water** - too much water means stickier and weaker dough
- **amount of salt** - more salt means stronger dough
- see <https://www.youtube.com/watch?v=HilN-bajNqQ>

Once the dough is stretched, top it and put to the oven without further delays.

3.4 Baking

Finally, a few words about the **baking**. Most of you reading this probably do not have an access to an original brick ovens or wood-fired ovens that could be found in most pizzerias (neither do I). However, even with an ordinary electric or gas oven, one can achieve pretty decent results.

Most ovens are able to bake from the bottom (sometimes only from the bottom) and can achieve temperatures of about 250 °C. While this is not ideal for most of the pizzas (depends largely on the type of the dough), it should be sufficient to get a pretty good pizza in almost any case.

Some ovens have an air-whirling mode which somehow makes it possible to bake several pizzas at the same time. However, be careful to have the bottom baked sufficiently, as this is often not the case with baking at the air-whirling mode.

Usually, you just have to **experiment**. Always measure the time it took you to make the pizza and notice the following:

- Is the bottom baked properly? This is the most important criterion. The bottom is baked sufficiently if there are the first hints of black (burned) spots on it (but just *first hints*).
- Are the edges (crust) brown (caramelized) enough? Again, they should be brown with the first hints of black spots. For well baked crust, see pictures of pizza in this paper.

Depending on which part gets baked too quickly, you can try:

- Move the pizzas vertically in the oven (closer or farther away from the source of the heat)
- Turn on air-whirling mode in addition to "baking-from-bottom" if bottom is done too quickly

Also, if you bake on pizza plates, butter them and sprinkle with flour to prevent stickiness, or use pizza plates with little holes in them.

Pizzas usually taste the best straight out of the oven - so try make sure to get the timing correctly to serve the pizzas freshly baked.

4 Sauce



Sauce Standard (for 4 medium pizzas)

You need:

- 2 medium size **tomatoes**
- 70g of **tomato paste**
- 4 crushed **garlics**
- 0.5l of **salt**
- 0.5l of **black pepper**
- 10g of crushed **oregano**
- 1L of crushed **basil leaves**
- 2L of **water**
- 3l of **olive oil**

Crush the tomatoes, add everything else and mix thoroughly.



White sauce (for 4 medium pizzas)

You need:

- 4L of **olive oil**
- 1 small **onion**, chopped to little pieces
- 4 crushed **garlics**
- 200g of heavy cream (40% fat whipped cream in liquid state)
- 0.5l of **salt**
- 0.5l of **black pepper**
- 5g of crushed **marjoram/thyme** (1.5L)

Sauté the onion for 5-6 minutes on the olive oil over medium heat. Add garlic and stir for 1 minute. Pour in the cream, lower the heat a bit and cook for 3 more minutes - the cream should thicken a bit.

Remove from heat and season with salt, pepper and marjoram/thyme. Let cool completely before using.



Bistro white sauce (for 4 medium pizzas)

You need:

- 6L of **olive oil**
- 5 crushed **garlics**
- 9g of crushed **oregano** (3L)

Mix everything together.

5 Toppings

✿ Mediterranean (1 medium pizza)

Top the pizza with following, respecting the order:

- Grated **Mozzarella** and **Eidam** (mixed in ratio 1/2)
- **Onions** rings
- **Ham** cut to squares 1x1 cm
- **Olives** cut to thirds of their sizes
- **Tomatoes** cut to small cubes (0.5 cm)
- **Feta cheese** cut to small cubes, like tomatoes

✿ Ham & mushroom (1 medium pizza)

Top the pizza with following, respecting the order:

- Grated **Mozzarella** and **Eidam** (mixed in ratio 1/2)
- **Ham** cut to squares 1x1 cm
- **Champignons** (sliced)
- **Tomatoes** cut to small cubes (0.5 cm)
- **Olives** cut to thirds of their sizes



Figure 6: Ham & mushroom pizza (with some added Feta cheese)

✿ Pepperoni (1 medium pizza)

Top the pizza with following, respecting the order:

- Grated **Mozzarella** and **Eidam** (mixed in ratio 1/2)
- **Pepperoni** (šćipák)
- **Olives** cut to thirds of their sizes
- Optionally **hot peppers** (feferóny, jalapenos)



Figure 7: A bit adjusted pepperoni pizza

✿ BBQ chicken (1 medium pizza)

Top the pizza with following, respecting the order:

- Grated **Mozzarella** and **Eidam** (mixed in ratio 1/2)
- **Grilled chicken** cut to small cubes
- **Onion** rings
- **BBQ** sauce
- **Sweet peppers** (baranie rohy)



Figure 8: BBQ chicken pizza

✿ Prosciutto (1 medium pizza)

Top the pizza with following, respecting the order:

- Pieces of **Mozzarella Bocconcini**
- Pieces of **tomatoes**
- **Fresh basil leaves**
- Sprinkle with **Parmesan** cheese

Right after taking out of the oven add:

- **Prosciutto**



Figure 9: Prosciutto pizza (without Parmesan cheese)

✿ Bryndza pizza (1 medium pizza)

Top the pizza with following, respecting the order:

- Little pieces of **Bryndza**
- **Pepperoni** or sausage (klobása)
- **Onion**
- Just a little of **ham** (cut to smaller pieces)

I would suggest to use Bistro white sauce for this pizza, though you may experiment with other sauces as well.



Figure 10: Bryndza pizza, with a little sprinkled cheese on top

Some **general advices**:

- If you feel the pizza would be too dry, sprinkle the top with some olive oil. However you can do that even if the pizza should not be too dry
- Some people like to see the cheese also on the top - in that case, sprinkle the top with a little more cheese

6 The pizzas

You can now make your own pizza from the three basic building blocks - the dough, sauce and the toppings.

Some good combinations I like:

- Naples - Standard - Prosciutto

- Danube Wednesday - White - Pepperoni
- Americana - White - Mediterranean

7 Outro

There are plenty of recipes or pizza-dedicated websites on the internet or even as books. My favourites are the following:

- Peter Reinhart's book - **American Pie: My Search for the Perfect Pizza** [Rei03]. Maybe the most famous publication there is to be found concerning pizza-making.
- Billy Reisinger's website - **The Amateur Guide to Making Pizza** [Rei]
 - http://billyreisinger.com/pizza_walkthrough.html
- **Pizza therapy website** [The]
 - <http://pizzatherapy.com/>

References

- [Rei] Billy Reisinger. The amateur guide to making pizza. URL http://billyreisinger.com/pizza_dough.html.
- [Rei03] Peter Reinhart. *American Pie: My Search for the Perfect Pizza*. 2003.
- [The] Pizza therapy. URL <http://pizzatherapy.com/>.