

Demystifying Macarons

by Helen Dujardin

I remember a couple of years ago when I shared with my grandfather a few macarons while having a cup of tea. He held one up close to his mouth stopped in his track and split the macaron in half, scraped the fillings on his paper napking, and handed me one half and ate the other. After he was done eating it he exclaimed, "That was a macaron, not those fancy schmancy colorful ones filled with flavors you can't even say without taking a breath!" What he was referring to was the traditional macarons from Nancy.

Indeed he probably ate his share of the cracked little flat disk that most people prior to the 1930s knew as macaron. It was not until then that famous pastry shop Laduree started selling the ones created by Pierre Desfontaine: two domes sandwiched with a ganache filling in the middle. They were smoother, moister, and started to lend themselves to many interpretations.

The macarons trend of the 1990s was like most food trends, the result of proper timing combined with great talents. Names like Pierre Herme, Laduree, Gerard Mulot, Francois Payard and Sadaharu Aoiki are known worldwide for mastering the art of the macarons, and the new generations of chefs like Christophe Michalak (who opened Paulette on the West Coast) and Stephane Glacier, Christophe Felder.

Making macarons does not require one to be a rocket scientist, nor does creating flavor combinations for the shells and the filling. Our interest is peaked however with ingredients such as truffle chestnut, rose, passion fruit, salted butter caramel,...We run to the kitchen with our mind stirring ideas like mad scientists, wondering if you are going to be as successful as Herme or Laduree. We lay out our ingredients and tools, we follow the recipe, we become adventurous and bold with our ingredients. When that first tray comes out of the oven it is either a complete success or a perfect flop. We either see the endless possibilities of macarons batches to come or we curse and groan wondering how the ones we see on certain sites can end up being so perfect all the time.

The first thing I have to tell everybody is to relax because even the seasoned macaron maker experiences flops once in a while. While making the macarons for this article, I started thinking about something completely different and my mind wandered while I was folding the almonds into the meringue....I must have given it way too many turns



Bottom right to left: Matcha with White Chocolate
Chocolate Raspberry, Toffee Bittersweet Chocola



White
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and strokes because I ended up with cracked shells and volcano looking macarons. I knew what I did so that was easy to rectify but for novice macaron makers I know how frustrating it can be to think we are following the recipe correctly and end up with flat, cracked, or grainy macarons. Much of the success of making a “good” macaron does not lie in what is written in the recipe but in your reading beyond it, your touch, your instinct and the more you make them, the more you understand their finicky nature.

The method you chose won't dictate the success of your batch, it is how you master that particular way of making it; some bakers prefer the Italian meringue method while others favor the French meringue. The former one is based on a cooked meringue: a syrup of water and sugar is brought to 230 degree F and slowly poured over egg whites that have been whipped to a soft meringue. They are whipped for several minutes longer until cooled.

The resulting Italian meringue is then combined with the almond and powdered sugar. While this method produces shiny and ready to bake macarons, it does require a little bit more time and creates a bit more of a mess in your mixing bowl if you use a stand mixer. Macaron maker and retailer Veronica from Veronica's Test Kitchen likes to use hand held beaters when using this method as she can see more of the sugar syrup getting into the actual meringue than sticking to your bowl and whisk attachment. This method is also quite daunting for people making macarons for the first time. Not only are they aware of the many mishaps that could happen along the way and the hot sugar syrup does add a level of technicality and difficulty. I think that if you were to make macarons for the first time I would advise getting familiar with the French meringue method first: your hands and wrists movement as well as your eyes will be used to the “macaronage” process (the way of folding the whites with the almonds/ powdered sugar).

When I make small batches for us or a dinner party, The Italian meringue method is the one I prefer. It is more time consuming, technically a bit more involving but produces even results in all sorts of conditions (humidity, heat, cold atmosphere, etc...) However, I am often asked to make batches in greater numbers

and I have learned to master and love the French meringue one. It means that your egg whites are whipped with some granulated sugar until you get a medium stiff meringue and then combined with the almonds and powdered sugar. If you have prepared your ingredients properly (see below), they come together in 15 minutes and bake in about 10-12 minutes. One caveat is that they need to rest prior to baking for about an hour unlike the Italian meringue ones which can be baked instantly and still produce the little feet macaron makers so eagerly seek. The rest period creates a slight air dried crust on the shells that traps in the heat at the base and pushes the edges upward, creating those little feet. It's like making pie dough or sugar cookies from scratch, the rest period is essential to a good finished product.

For the sake of this article and because this is the method illustrated in these pictures I will focus on the French meringue method. To put all your chances on your side, all seasoned macaron makers will recommend that you use 1 to 2 days-old egg whites and although using 3 days-old ones is fine, there is no noticeable difference in the finished item. The reason behind it is to reduce the moisture content as much as possible while keeping the protein bonds from the egg whites the same. The batter is runny but should not be watery. In that aspect, some like to add some egg white powder to create an even more stable shell at the

ratio of one or two teaspoons per batch. Experiment a few times and repeat (almost with the outmost superstition) the moves and measurements that work for you.

To age your eggs, simply separate the yolks from the whites and store your whites in a covered container for 24 to 48 hours in the coldest part of your kitchen. I live in a hot and very humid climate so after one day, I store them in the fridge and take them out a couple of hours before I am ready to use them, to bring them to room temperature.

When I get an urgent craving or an order for macarons and I do not have aged egg whites, I just microwave the fresh egg whites for 10-20 seconds on medium high speed. It mimics the ageing process close enough to save the day. Whip your egg whites to a soft foam, slowly add the small amount of granulated sugar the recipe calls for and continue to whip them until you obtain a medium stiff meringue which means that your whites should form a beak when you left your whisk but should not appear to separate in chunks and be dry.

My grandmother's trick was to start turning the bowl upside down on the kitchen counter: if the eggs were sliding out that meant they were not ready, the minute they held up defying gravity you were good to go (see, no rocket scientist there either!)

The second most important piece of the macaron puzzle is the combination of almonds and powdered sugar no matter which





method you chose. After many experiments with different brands of almond flour, I now prefer to buy whole almonds and grind them myself. The ground mass is much smoother and a lot less dried out than the ones you buy on the shelves. You can't ever be sure how long the packages of almond flour have been waiting there and you need a minimum of the natural oils developed when grinding your own in the batter. I use blanched almonds but raw ones work just as fine and add a little speckled effect to your shell. I like to measure them whole, add them to the powdered sugar and process them until very very smooth in a food processor. Do not worry about creating an oily paste, that is what the powdered sugar is here to prevent. If you choose to make hazelnuts, peanuts or pistachio flavored macarons, try to keep a 50% ratio of almonds to other nuts. Almonds are the least oily of all nuts and they will keep your batter to the right consistency.

One other thing to look for also is the kind of powdered sugar you use. Most powdered sugar in the USA contain some % of cornstarch but forget the \$.99 brands as manufacturers often saturate these to keep their costs down. Since there is no regulation on giving the customers the exact ratio they have put in the box, my best advice would be to use the "popular" brand on the shelf and not necessarily the store brand or the cheap one. A bit of cornstarch is good when you make macarons as it helps with our moisture issue and sturdy shells but too much and you end up with a blondie bite.

Once the almonds are finely ground with the powdered sugar, sift them to make sure you break all the lumps and that all the rough almond pieces are removed. If your food processor is powerful enough you can skip this step, just make sure that all the almonds are finely ground, empty the content in a separate bowl and use a whisk to break the mixture and prevent clumps.

Now comes the dreaded moment of us all...the "macaronage" or the mixing of the meringue with the almonds and sugar. No matter what method you use, it only requires one too many strokes to end up with a disaster and even experienced macaron bakers have to keep focused during that one. First time makers will be folding very gently and very slowly


the ingredients afraid to break the meringue and not incorporate the ingredients properly. When I teach people about macarons their jaws drop to the floor when they see me grabbing my spatula and starting to fold vigorously and rather fast at first, slowing down the pace after the first 30 seconds or so. "You are going to fill them, they are going to flop!" No fear! You need to break down your meringue a bit otherwise you are going to end up with cracked puffy cookies much like the Italian amaretti.

If you plan on making plain macarons, fold quickly and firmly at first, but slow down to evaluate the consistency of your batter. Hold your bowl with one hand, place your spatula in the center of the bowl, scrape the bottom and bring the bottom to the top. Rotate the bowl 45 degrees and continue to fold until everything is incorporated. It should form a thick ribbon that seems to flatten itself a bit when spooned but with a sturdy consistency. If you think you are not there yet, give it a couple more strokes and re-evaluate. Better under-fold than the contrary. From the moment you start transferring the batter from your mixing bowl to the pastry bag and then pipe the shells onto baking sheets, you continue to squeeze the air bubbles out of the meringue so the batter will continue to thin when you pipe the shells onto baking sheets. If you start piping an over-mixed batter you will end up with cracked and feetless macarons. Before you set out to

If you want to add food colorings or flavors such as matcha powder to cocoa, add right after you have started to break it up a bit; it will allow your add-ons to get thoroughly mixed without over-mixing. You can add 2-3 Tb of sifted cocoa powder or 1 Tb sifted matcha powder to an entire batch. Powdered food colorings are generally preferred to tint the macarons as they do not add any

moisture to the batter. Here in the US the brand ChefMaster is reliable and widely available. Should you have to use liquid ones, a quick trick is to add about 1-2 teaspoons of egg white powder, or 1-2 Tablespoons of slightly beaten egg white to the batter. To pipe the shells, line 2 to 3 baking sheets with parchment paper or silicone mats. If you are pastry bag challenged,





place your bag in a tall glass and fill it with the batter, you won't have to worry about holding it with one hand while scooping the batter with the other. Use pastry tips that are about $\frac{1}{2}$ inch to $\frac{3}{4}$ inch in diameter. My favorite ones are Ateco #807 and #809. Imagine a circle $1\frac{1}{2}$ to 2 inches in diameter on your baking sheet and position your tip $\frac{1}{2}$ inch above and in the middle of that invisible round and start piping with a small pressure from the top of the bag. Pipe the shells leaving 1 to 2 inches in between them. Tap the sheets against each other to eliminate extra air bubbles and let them sit on the counter for 30 minutes to an hour. Some like to bake their macarons with the oven door kept slightly open (with the use of a wooden spoon) but given that where I live we do not need any extra heat as it is, I lower the temperature a bit and keep the door closed and 300 degrees F seems to be a happy medium so far.

Once your macarons are baked, let them cool for about 10-15 minutes. They should easily peel off the parchment paper at that point.

If for any reason you have trouble with this step, one trick is to either put them back in the oven for an extra five minutes or to put a couple of drops of water under the parchment paper for a couple of minutes. The moisture from the water should help them come off but don't let them sit on it too long or they will become soggy.

I hope that by providing all these tips you will achieve success quickly, but just like almost anything in life, "practice makes perfect". After that, the possibilities and combinations are endless and let yourself create and experiment!

Recipe and photographs by Helen Dujardin, at tartelette.blogspot.com

Macarons Step-by-Step...



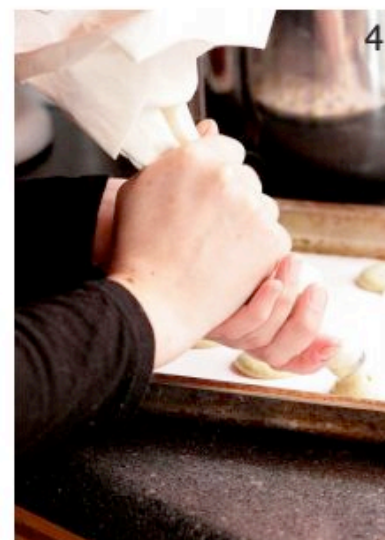
Basic French Meringue Macaron

3 egg whites or 100g weighed
50 g granulated sugar
200 g powdered sugar
110 g Blanched almonds, whole or ground

1. In a stand mixer fitted with the whisk attachment, whip the egg whites to a foam, gradually add the sugar until you obtain a glossy meringue. (Photo 1)

2. Combine the almonds and powdered sugar in a food processor and give them a quick pulse if you use already ground almonds (that you have ground yourself separately). (Photo 2) It will break the powdered sugar lumps and combine your almonds with it evenly. If you use whole almonds, pulse thoroughly for a minute or so.

3. Add them to the meringue, and start to give quick strokes at first to break the mass and slow down. (Photo 3) The whole process should not take more than 50 strokes. Test a small amount on a plate: if the tops flatten on its own, you are good to go. If there is a small



beak, give the batter a couple more folds.

4. Fill a pastry bag fitted with a plain tip with the batter and pipe small rounds (1.5 inches in diameter) onto parchment paper baking sheets. (Photo 4)

5. Preheat the oven to 300 degrees F. Let the macarons sit out for an hour to harden their shells a bit and bake for 10-12 minutes, depending on their size. (Photo 5) Let them cool completely before filling.

6. Pipe or spoon some of your filling on one shell and sandwich with another one.

For the macarons pictured on photo 7:

After the first few folding strokes necessary to start incorporating the ingredients, divide your batter into 3 equal amounts (eyeball it). Keep one third plain, add 2 teaspoons sifted matcha powder to another one, and 1 Tablespoon red powdered food coloring to the last one. (Photo 6)

Proceed with the rest of the recipe, following the folding guidelines explained above.



I sprinkled crushed toffee on the plain shells right after they were piped. For the fillings, I used a white chocolate ganache for the matcha ones, a toffee bittersweet chocolate ganache for the plain ones and a white chocolate raspberry ganache for the red ones.

Bittersweet Toffee Ganache:

3/4 cup heavy cream
1 cup bittersweet chocolate
1/4 cup crushed toffee

- 1.** In a heavy saucepan set over medium heat, bring the heavy cream to a boil.
- 2.** Remove from the stove and add the chocolate to it. Let stand 2 minutes and then stir until fully combined.

- 3.** Let cool until firm enough to put in a small piping bag.

For the White Chocolate Raspberry Ganache:

1 1/2 cup white chocolate
1/2 cup heavy cream
1/3 cup good quality raspberry jam

- 1.** Heat the cream until hot. Drop the chocolate and jam into the cream and stir until all are melted and come together.
- 2.** Let cool until firm enough to pipe or spoon onto the macaron shells.

For the White Chocolate Ganache:

Proceed as for the one above, minus the raspberry jam.



Photographs by Helen Dujardin