







BONBON MASTERCLASS

THE SCIENCE OF CRAFTING PERFECT CHOCOLATES

PREVIEW ONLY

CALLEBAUT®
BELGIUM 1911

COURSE AGENDA

**Upon purchasing the course you will get access to the entire workbook.
In this preview, we give you a sneak peek of theory, equipment and recipes.**

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THEORY
GANACHE

Ganache (Lesson 0.7)

While there are many possible fillings for a bonbon or tablet, the classic filling is a ganache. For the best flavour, texture, and shelf life, it is vital to formulate and produce your ganache fillings properly. Within these parameters, the possibility for creativity is nearly limitless.

General Guidelines

Water	20%	maximum
Sugars	30%	minimum
Cocoa Butter	21%*	minimum
Milk Fat	15%	maximum
Cocoa Solids	15-16%	maximum
Total Fat	35%	maximum

*for slab ganache; should be slightly higher if using milk or white chocolate

Water

Sources of water include cream, milk, butter, and fruit pureés.

Sugars

The total amount of sugar in a recipe will come from both the chocolate and any sugars that we add. A ratio of two parts water to three parts sugar (as in the table above) helps ensure that we have enough sugar to control the water. Of course, depending on which sugars we use within this 30%, there will be some variations in the final outcome and water activity.

When adapting recipes for a machine, such as a one-shot machine, where we may need to increase the amount of water to make the mixture more fluid, it is appropriate to increase both the water and the sugar proportionally. Overall, for all our recipes—especially those to be piped—this ratio works very well.

Cocoa butter

Outside of any cocoa butter we may add, the type of chocolate we use determines the amount of cocoa butter in our recipe. We may need to supplement recipes that call for milk or white chocolate with additional cocoa butter to achieve the desired results.

Dairy fat

When calculating the percentage of dairy fat in our recipes, remember that ingredients such as cream and butter contain water. We have included this water in our calculation of the total water percentage for the recipe; therefore, we will exclude it here and include only the fat. For example, if our recipe calls for 100g of butter and our butter is 80% fat, our recipe calculations will reflect that the butter contributes 20g of water and 80g of fat to our recipe.

The amount of pure butter or milk fat should not exceed 15% of the total weight of our recipe. At higher percentages, we risk the filling being far too soft.

Cocoa Solids

To further refine the texture of our bonbon fillings, we can also consider adjusting the percentage of cocoa solids in our recipe. In a recipe calling for dark chocolate, we would not want the cocoa solids to exceed 15-16% otherwise our filling might be a little too thick.

Total Fat

We need to consider the fats in our recipe not only individually, but in total as well. The basis of any ganache is an emulsion. To create a beautiful and stable emulsion, we need to ensure that the total fat in the recipe does not exceed 35%.

Procedure for Making Ganache

Classic Method

In the classic method of making ganache, the cream or other liquid and the sugars for the recipe are brought to a boil and poured over the solid chocolate. The chef begins to mix these ingredients, creating an emulsion. At the very end, additional fat such as butter or cocoa butter might be incorporated. For best results, the ganache would be pre-crystallised before being cast in a frame and allowed to set.

Cold Method

For the recipes in this course, we will be using the cold method. In this method, all of our liquid ingredients (cream, infusions, fruit purées) will have been pasteurised before starting. To begin, we'll bring our liquid ingredients to just 30°C and then incorporate the sugars. The warm mixture will be incorporated into melted, not solid, chocolate. Using a hand blender, we'll ensure a good, stable emulsion, then incorporate any additional fats. We'll pre-crystallise the ganache, cast it, and allow it to set.

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EQUIPMENT LIST

Most of the tools our chefs use in the videos are standard equipment in any kitchen. However, there are a few specialty items that you may wish to seek out before beginning to recreate the recipes. It is not necessary to have each of the tools listed here, and you may adapt your technique to the tools you have, but you will find that these items make the job of perfecting the recipes much easier.

Standard Kitchen Equipment

- ✓ Parchment Paper
- ✓ Chopping boards
- ✓ Cling film
- ✓ Convection oven
- ✓ Food processor
- ✓ Freezer (-20°C) or Blast freezer
- ✓ Gloves
- ✓ Hand blender
- ✓ Hotel pans, metal, half and full size
- ✓ Induction burner
- ✓ Knives
- ✓ Micro scale
- ✓ Microwave
- ✓ Offset palette knife
- ✓ Silpats
- ✓ Spatulas
- ✓ Sieves
- ✓ Spoons
- ✓ Stand mixer
- ✓ Strainers
- ✓ Trays 60x40cm
- ✓ Whisks
- ✓ Piping bags
- ✓ Piping tips
- ✓ Probe thermometer
- ✓ Rasp-style zester
- ✓ Refrigerator
- ✓ Rolling pin
- ✓ Scale
- ✓ Scissors

Specific to This Course, Required

- ✓ Flat plaque, 60 x 40 cm, Methacrylate or similar

Optional

- ✓ Air gun
- ✓ Chocolate grinder (melanger)
- ✓ Chocolate enrobing belt for tempering machines
- ✓ Chocolate fridge (16°C)
- ✓ Chocolate machines for tempering
- ✓ Guitar cutter
- ✓ Guitar sheets
- ✓ Infrared thermometer
- ✓ pH meter *
- ✓ Refractometer *
- ✓ Spray gun and compressor



Flavours of Andalucia
4 polycarbonate moulds with 3 cm diameter semi-spheres,
2.5 cm silicone semi-sphere moulds



Dominican Republic & Rare Vanilla Chocolate Ganache
1 frame measuring 36 cm x 18 cm and 1 cm deep



Honey-Rosemary-Pine Nuts
4 polycarbonate moulds, each with 48 need size cube-shaped cavities



Almond and Sobacha Praliné
4 polycarbonate moulds, each with 49 size oval-shaped cavities



Almond Marzipan-Lemon and Vanilla Jelly
1 frame measuring 36cm x 18cm and 1.5 cm deep
1 frame measuring 36cm x 18cm and 0.5 cm deep
Custom stamp

*Our chefs strongly recommend these tools

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ARCHITECTURE
HONEY-ROSEMARY-PINE NUTS



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PREVIEW

Get a taste of our "Bonbon Masterclass" with this preview featuring the "Honey-Rosemary-Pine Nuts" recipe.

HONEY-ROSEMARY-PINE NUTS



Yield: Approximately 192 bonbons
Equipment: 4 polycarbonate moulds, each with 48 cube-shaped cavities measuring 2 cm x 2 cm

Component 1: **Liquid Honey Filling**

Ingredient	Qty (g)	Qty (%)
Thousand flower honey	190 g	95.00%
Glucose syrup DE60	10 g	5.00%

Yield: 200 g

Method

1. Before you begin, warm the honey gently to make it easier to mix with the glucose syrup.
2. Mix the two ingredients and transfer to a piping bag.
3. Check the temperature of the mixture before using it. It should be no warmer than 30°C.
4. Pipe a very small amount of the filling into each shell and set aside.

Component 2: **Rosemary Infusion**

Ingredient	Qty (g)	Qty (%)
Fresh rosemary	40 g	10.26%
Water	350 g	89.74%

Yield: 340 g

Method

1. Chop the rosemary.
2. Heat the water to 90°C, then add the chopped rosemary.
3. Remove from the heat, cover, and allow to infuse for 10-15 minutes.
4. Strain the infusion and weigh out the amount needed for the ganache. Reserve the rest for another use.



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Component 3: **Honey and Rosemary Ganache**

Ingredient	Qty (g)	Qty (%)
Rosemary Infusion (above)	334 g	17.55%
Glucose syrup DE60	100 g	5.25%
Floral honey	150 g	7.88%
Salt	1 g	0.05%
Dextrose	68 g	3.57%
Callebaut Velvet Ecuador Milk Chocolate 39%	910 g	47.82%
Callebaut Cocoa Mass	65 g	3.42%
Callebaut Cocoa Butter	20 g	1.05%
Clarified butter	255 g	13.40%

Yield: 1903 g

Method

1. Before you begin, melt the milk chocolate, cocoa mass, cocoa butter, and clarified butter separately.
2. Mix a small amount of the warm infusion with the glucose syrup, then add it to the honey.
3. Pour the honey mixture into the remaining infusion.
4. Mix in the salt and dextrose.
5. Combine the milk chocolate and cocoa mass.
6. Incorporate the honey mixture into the combined chocolates a small amount at a time.
7. Whisk in the cocoa butter, then the clarified butter.
8. Use an immersion blender to finish emulsifying the ganache.
9. Pour the ganache into a shallow metal container and stir gently with a spatula until the mixture reaches 28-29°C.
10. Transfer the ganache to a piping bag and pipe some into each shell, filling the shells about ¾ of the way full.
11. Allow to crystallise for about 12 hours before proceeding to the next step.

Component 4: **Toasted Pine Nut Cream**

Ingredient	Qty (g)	Qty (%)
Pure pine nut paste	330 g	69.47%
Callebaut Cocoa Butter	64 g	13.47%
Callebaut Cocoa Butter Callets	80 g	16.84%
Flaky sea salt	1 g	0.21%

Yield: 475 g

Method

1. Before you begin, melt the cocoa butter at approximately 40°C.
2. Mix the pine nut paste and cocoa butter.
3. Add the cocoa butter callets and the salt.
4. Pour the mixture into a shallow metal container and stir gently with a spatula until the mixture reaches 20°C. Alternatively, temper the mixture by cooling the mixture to 27°C and adding 1% creamy cocoa butter.
5. Dose the pine nut filling into the shells by pouring it over the entire mould and scraping off the excess.
6. Shake or vibrate the mould slightly to settle the filling. There should be about 1mm of space left at the top so that you can close the bonbons.
7. Allow to crystallise for about 12 hours or overnight at 16-18°C.



CALLEBAUT VELVET EXPERIENCE ECUADOR MILK CHOCOLATE 39%

Sweet with velvety caramel and hazelnut notes.

View product

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TROUBLESHOOTING

PROBLEM	REASON	SOLUTION
The lemon and vanilla jelly sets too quickly, and there is no time to pour it into the frame.	You didn't check the pH level of the mixture before making the fruit jelly.	Verify that the pH level is between 3.3-3.5 by adjusting it with trisodium citrate or citric acid.
Lemon and vanilla jelly is too soft to cut with the guitar.	You didn't reduce the jelly sufficiently.	Reduce until reaching 75-77°Brix
The marzipan is oily.	Excessive mixing or kneading of the almond powder results in a rise in temperature and the release of oil from the nut.	Grind the almond powder together with the powdered sugar just enough to reduce the granulometry; do not process the marzipan excessively.
Ganache separated once crystallised.	Incorrect emulsion of the ganache or incorrect pre-crystallisation.	Check the ganache process and pre-crystallise correctly.
The ganache does not emulsify correctly.	Unbalanced recipe/ Insufficient temperature and friction, fast incorporation of liquids	Balance the recipe/ Check the ganache process carefully, checking the temperature and ensuring friction. Dose the liquids at intervals.
The chocolate shell is too thick when we mould.	We used a chocolate that was too viscous / The mould was too cold / Insufficient vibration to obtain a fine chocolate shell.	Use a chocolate with correct fluidity / Check that the temperature of the mould is 20°C / Vibrate the filled mould to remove excess chocolate and obtain a fine shell.
The final layer of chocolate that closes the base of the bonbon has not adhered correctly.	The filling and shell were cold when sealing the bonbon.	Heat the base of the bonbons a little with the help of a heat gun before sealing.
When you decorate the bonbons with a marker or with air, it is not visible on the chocolate.	You mark too early, when the bonbon has not crystallised enough.	Mark the bonbons when you observe that the surface of the bonbons begins to crystallise, allowing a good relief.
The Earl Grey tea infusion is bitter.	The tea was allowed to infuse for too long.	Infuse for just 3-4 minutes or as indicated in the recipe.
Enrobed bonbons have a very thick coating.	The filling is cold, or insufficient air flow and vibration.	Check that the bonbon is at 20°C / Increase the air flow and the vibration.
Moulded bonbons do not shine.	Incorrect pre-crystallisation of the paint / The temperature of the mould is too cold / The mould is dirty.	Pre-crystallise the paint correctly / Verify that the mould is at least 20°C before painting / Ensure that the mould is very clean.

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PREVIEW

OUR CHEF'S PRODUCT RECOMMENDATIONS



CHOCOLATE

Callebaut Selection



Callebaut Power 41 Milk Chocolate 41%

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Callebaut Velvet White Chocolate 32%

View product



Callebaut 70-30-38 Extra Bitter Dark Chocolate 70%

View product

Callebaut Signature Collection - Blend of Origins



Callebaut Rustic Experience Fleur de Cao Dark Chocolate 70%

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Callebaut Signature Collection - Single Origin



Callebaut Velvet Experience Ecuador Milk Chocolate 39%

View product



Callebaut Zestina Experience Dominican Republic Dark Chocolate 70%

View product

COCOA PRODUCTS



Callebaut Cocoa Butter

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Callebaut Cocoa Mass

View product



Callebaut Cocoa Butter Callets

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COCOA POWDERS



Callebaut Botanical Experience Extra Brute Cocoa Powder

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Callebaut Botanical Experience Noir Intense Cocoa Powder

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READY FOR THE NEXT COURSE?

THE ARCHITECTURE OF ENTREMETS

LAYERS, TECHNIQUES AND INGREDIENTS

BY RAMON MORATÓ

In this class you will learn

- The science behind each layer and the impact of different ingredients.
- Decoration techniques to creatively finish your cakes with style and precision.
- To combine flavour profiles and textures so you can personalise and create yourself.

If you want to become the master of taste, this is where you begin.

JOIN THE CLASS!

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