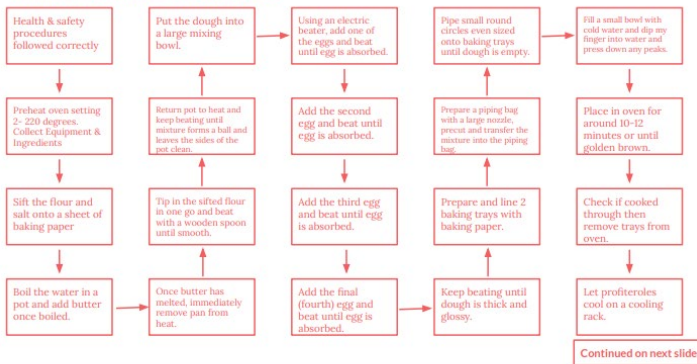
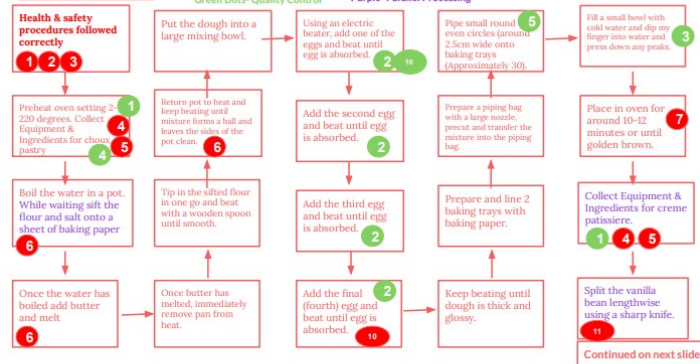


Student 4: High Achieved
Intended for teacher use only

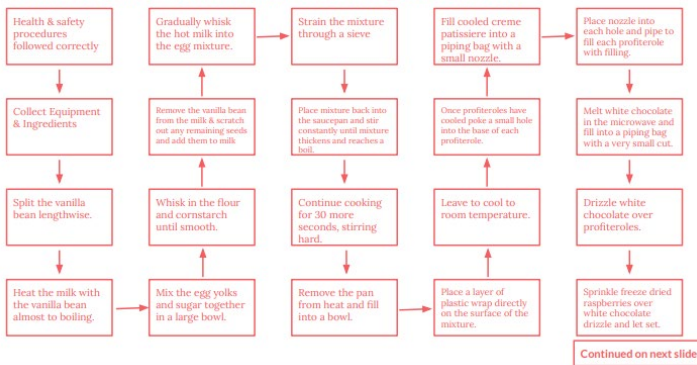
Initial Flowchart- Profiteroles



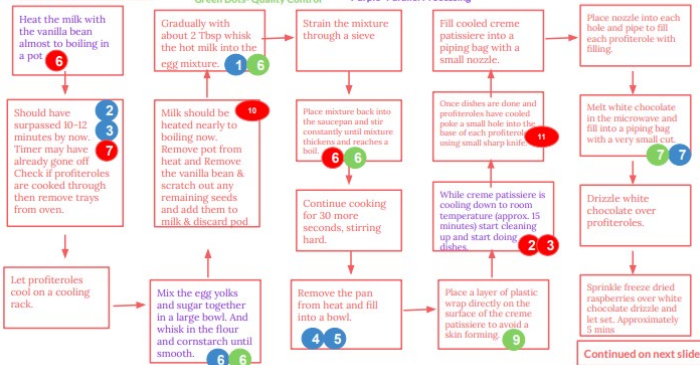
Final Flowchart



Initial Flowchart- Creme Patisserie & Filling of Profiteroles



Final Flowchart



2

Testing & Trialling- Trial 1 Choux Pastry

The specification I am trialling is making my profiteroles hollow and all the same size. The purpose of this trial was to have our first experience with making the choux pastry dough and experimenting with the different methods of different recipes in order to choose the best recipe and to become more confident in making our choux pastry.

The results showed that recipe 2 had a great outcome and the profiteroles were crisp and perfectly hollow in the inside. The profiteroles were a tiny bit small so next trial I will test making bigger more even sizes.

In this trial I used an electric beater and I found it quick and efficient and created a very even dough texture therefore I will be using it again in my next trials. I conducted this trial to be fair test by using different recipes with different methods however using the hospitality kitchen ovens which are all identical and using the same temperature and setting.

As a result of this trial I will continue to trial the same recipe however improving on the making bigger even spheres as well as working on the shape as the profiteroles all had a cooked peak. I have found out that to prevent this from happening you dip your finger in water and press the peak down. I will try this in my next trial. Next trial I will also trial whether it is more visually appealing and ideal to use a nozzle to pipe the dough vs just using the piping bag. From now on I will use Recipe 2 for all of my trials.



Testing & Trialling- Trial 2 Choux Pastry

The specification I am trialling is making my profiteroles hollow and all the same size. The purpose of this trial was to figure out what would be the best size profiteroles for our croque-mouches. I decided to double the recipe so that I could see the difference in dough quantity and how many larger ones I could make. It turned out that I made the same number of around 30 as last time. I tried 3 different sizes each slightly larger than the other. I found that the smallest of the ones I made in this trial would be the best to use as it is better suited for the croque-mouches. The profiteroles were perfectly hollow again, which is perfect for my creme patissiere filling.

I conducted this trial to be fair as I followed the recipe and used the same oven at the same temperature and setting as last time- 220 degrees. I also trialled dipping my finger in water and then pressing down on the dough once piped to remove the peaks. This worked wonders as the results showed a lovely nice patterned top by using the larger size piping nozzle with no peaks. I will definitely be using the technique of pressing down my peaks in my next trials.

I also found that since I made bigger profiteroles they take about at least 5 minutes longer in the oven to properly cook through. As a result of this trial I will continue using the larger piping nozzle and double the recipe to get larger profiteroles that will look more presentable with no peaks on my croque-mouches.

As a result of this trial I have developed my initial specification into my final specification of "My profiteroles will all be piped using the same piping bag in circles of a 2.5cm diameter and a 2.5cm height. The profiteroles will all bake to be the same even size of around 4 cm in diameter.



Testing & Trialling- Trial 3 Vanilla Creme Patisserie

The specification I am trialling is that the profiterole must have a nice flavour, has a good viscosity and a smooth texture.

The purpose of this trial was to make the creme patissiere for the first time and to identify which recipe is most suited to the viscosity, texture and taste to what I would like my creme patissiere recipe to be.

The recipe I chose was recipe 5 which was from The Spruce and used whole vanilla pods that I cut in half and threw into the milk heating on the stove, this allowed the vanilla beans to infuse into the milk and give a lovely smooth, creamy, luxurious taste. The results show that the texture and viscosity would be perfect for my creme patissiere filling as it was thick enough to be piped directly over the profiteroles and not clumpy. I also found that my recipe said to place glad wrap directly over the creme patissiere once done to avoid skinning, this worked well as there was no skinning of the milk and all of the creme patissiere was smooth. Although I really enjoyed the taste of vanilla and the simplicity of the flavour I would like to further trial different flavour options of the creme patissiere such as berry, lemon, passionfruit, chocolate.

I conducted this trial to be fair as I used the same base recipe and only changed the type of vanilla in the recipe. I also used the same stovetop and the same equipment. As a result of this trial I will use the same recipe as a base for my future trials of testing flavour options for my creme patissiere as the recipe has the perfect texture and worked well for me and what I want my creme patissiere to be for my profiterole filling. I will also continue placing plastic wrap directly on my creme patissiere as it worked very well at avoiding skinning.

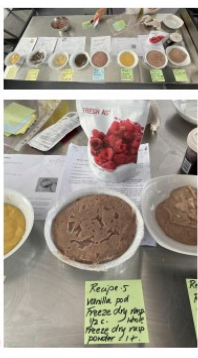


Testing & Trialling- Trial 4 Flavoured Creme Patisserie

The specification I am trialling is that the profiterole must have a nice flavour, has a good viscosity and a smooth texture. The purpose of this trial was to trial different flavours of creme patissiere to see whether I want to add any extra flavours to the base recipe.

For this trial I decided to try a raspberry vanilla flavoured creme patissiere. I used the same base recipe as the previous trial and included the whole vanilla pods as well as ½ cup of freeze dried whole raspberries for texture and 1 teaspoon freeze dried raspberry powder for colour as I found that using only the powder didn't give enough colour and texture and that the whole raspberries didn't give enough colour. I added both freeze dried raspberry powder and the whole raspberries into the milk to infuse the raspberry flavour and to colour the creme patissiere a nice pink. I found that having both the vanilla and raspberry flavour tasted much more natural however I found it to be quite sweet and quite strong. My results also showed that the vanilla flavour was quite overpowering to the raspberry flavour, so therefore if I was to further experiment with flavours I would try the base recipe excluding the vanilla. The viscosity and texture was the same as previous trials making it perfect for the profiterole filling.

I conducted this trial to be fair as I used the same base recipe using the same ingredients and only changed the flavouring for each one to see how the flavour would act. As a result of this trial I would like to further trial and experiment with different flavour options such as a lemon or passion fruit creme patissiere to see whether I want to stick with the traditional vanilla or have a different flavour. I will also trial excluding the vanilla pod for the flavours to see the difference in the finished product and the taste.

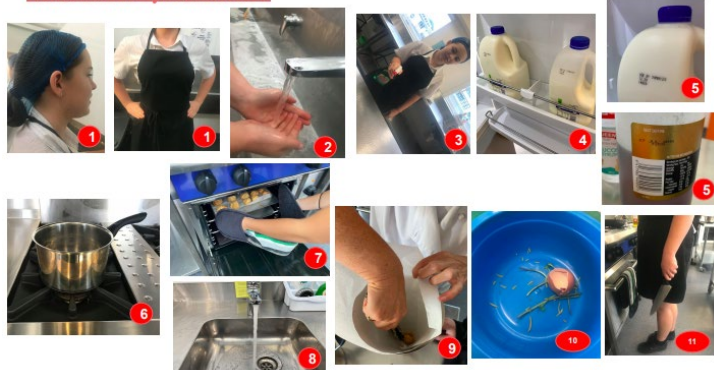


Health & Safety Plan

Having a health & safety plan is a crucial part of any hospitality business. This plan ensures that all health and hygiene measures are met so that no customers become ill off any food handled and produced. Due to the recent circumstances involving the COVID-19 pandemic, we have adapted our health and safety plan to include more regular sanitising of surfaces and equipment as well as more regularly increased longer hand washing techniques before during and after practicals. Below are some of the health & safety precautions I take when going through any practical.

- 1 Health and Safety procedures are followed in the form of: wearing closed shoes, aprons, hair tied back with hair net, no nail polish, no jewellery.
- 2 Hand washing- Washing hands for at least 20 seconds with antibacterial soap to remove bacteria and drying with a single use paper towel.
- 3 Sanitising all surfaces before, during and after practicals to remove bacteria and pathogens.
- 4 Perishables are kept in fridge until use to avoid products spoiling.
- 5 All ingredients are checked for any spoilage and best before dates are checked.
- 6 Pot Handles are facing inwards to avoid any spills and injuries.
- 7 Using oven mitts when putting trays in and out of oven to avoid any burns that could have been avoided.
- 8 Cold water on standby for burns to help cool down any burns.
- 9 Use tongs to stack profiteroles with the hot toffee to decrease any risk of burns.
- 10 Food scraps are placed in scrap bowl and discarded when appropriate decreases the risk of contamination from rubbish to food.
- 11 Correct knife practices and procedures are followed such as holding knife by side when walking to avoid any injuries.

Health & Safety Plan Photos



Quality Control Plan

Below are some of the Quality Control points that I have noted to ensure my croquebouche turns out exactly how I want it to and so that it meets all of my specifications.

- 1 All ingredients have been weighed correctly using precise scales and all equipment eg. measuring cups and spoons have been leveled off for accuracy.
- 2 Eggs are added one at a time when making the choux pastry to allow each egg to first be absorbed and to be absorbed easier.
- 3 Finger is dipped in cold water and any choux pastry peaks are pressed down to make even round profiteroles.
- 4 Oven must be preheated and racks must be in the centre to allow for the best distribution of heat to bake profiteroles perfectly.
- 5 Profiterole shapes are piped the same round dots of 2.5cm wide.
- 6 Whisk is used for the creme patissiere for the texture to be completely smooth and free of any lumps.
- 7 Stirring white chocolate every 20 second when melting in microwave to avoid chocolate from burning or seizing.
- 8 Wiping down sides of toffee pot with cold water and a pastry brush to avoid sugar crystallizing.
- 9 Placing plastic wrap directly on creme patissiere surface to ensure no skin forms.
- 10 Electric beater is used for the choux pastry for accuracy and to ensure the mixture is perfectly mixed and smooth.

Quality Control Plan Photos



Yields and Costs

Product	Amount Used	Unit Price
Plain Flour	1 Cup & 3 Tablespoons	\$1.40
Butter	110 grams	\$0.24
White Sugar	1 cup & 7 Tablespoons	\$0.54
Vanilla Bean Pod	1 Pod	\$6.00
Glucose Syrup	1 Tablespoon	\$0.15
Eggs	10	\$3.80
Milk	2 Cups (480 ml)	\$0.80
Cornstarch	3 Tablespoons	\$0.25
Caster Sugar	¼ of a cup	\$0.12
White Chocolate	100 grams	\$0.12
Freeze Dried Raspberries	1 Teaspoon	\$1.25
Total Price:		\$14.67

The total price for me to make my croquebouche including the choux pastry, creme patissiere, toffee and decorations is \$14.67. I will divide this price by 30 to get the unit price for each of my profiteroles as I am producing 30 profiteroles. The unit price for one of my profiteroles is 48 cents. This is slightly more expensive compared to the existing profiterole products on the market however as I am using high end natural products which taste better and are more visually appealing the price increase is justifiable for a higher quality product. This is also on the higher side of my predicted cost that each profiterole would cost between 25-50 cents to make, however my final unit price is still within this price range. This cost also excludes any other expenses including power, water and labour which should also be considered as they add to the cost of production. The most expensive ingredient is the vanilla bean pod which can easily be replaced with much cheaper alternatives of vanilla essence or vanilla bean paste.

Due to my croquebouche ingredients costing a total of \$14.67 I can say that my croquebouche meets the specification of costing less than \$15 to produce.

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Final Product- How I met the specifications

My croquebouche has met its specification of holding its shape without any support and using a croquebouche cone and toffee to assemble.

My profiterole has met its specification of having a pleasant sweet, vanilla, berry and white chocolate scent.

My profiteroles met the specification of being hollow and having a perfect pastry to filling ratio.

My creme patissiere met its specification of having a nice flavour by being infused by vanilla bean.

My croquebouche has met its specification of profiteroles being used to form the base of the entire structure by using 30 stacked profiteroles.

My croquebouche has met its specification of having some type of decorative element which include crystallized pansies, white chocolate drizzle with raspberries and spun sugar shapes.

My croquebouche has met its specification of being aesthetically pleasing by using a range of decorative elements seen in the photos below.

My profiteroles met their specification of being all the same size of 4cm in diameter.

My croquebouche meets the specification of being at least 18 cm tall as it is 29 cm in height.

My profiteroles have met its specification of having a filling that is a creme patissiere that is vanilla flavoured.

My Creme patissiere met its specification of being smooth, creamy and having a viscosity of 1.

My croquebouche has met its specification of not costing more than \$15 to produce. See Slide 35 for reference.