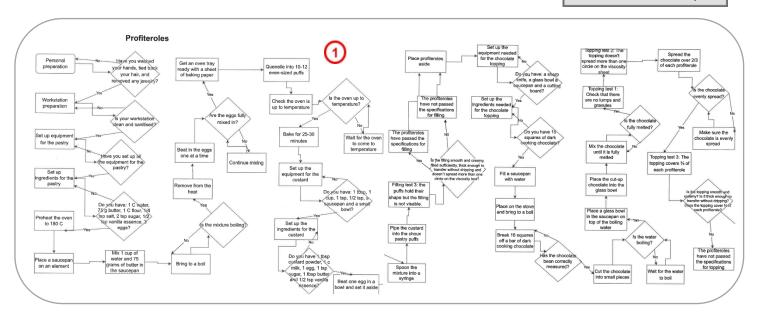
Student 6: High Not Achieved

Intended for teacher use only



## **Tests**



# **Modifications**



To test that we baked the profiteroles for the correct amount of time, we tested the crispiness by checking that the profiteroles resisted a gentle prod.

To test that we added the correct amount of each ingredient, we tested the airiness by checking that the profiteroles were moist and chewy but not doughy.

To test that all our profiteroles were an equal size, we used a ruler to measure them.

We used a viscosity sheet to measure the viscosity of the filling, to make sure that it was the correct thickness.

We used a viscosity sheet to measure the viscosity of the topping to make sure that it was the correct thickness. The profiteroles were proportionally correct, and not too much or too little of any ingredient was added. The profiteroles rose to have enough air that I could successfully pipe the filling inside. The profiteroles had a good texture, and the desired taste.

Through the trials of creating the profiteroles, we modified the measurements of several ingredients to fit our desired results. One example is that we changed the number of eggs from three to two, the reason being that in our trials we found the profiteroles to taste too much like eggs.









Profiteroles that passed the specification for quantity,

#### Production Costs

#### **Choux Pastry**

Ingredients (per component)	Cost per Item	Cost per Batch (12 Cream Puffs)	Cost per Batch (halved)	Cost per Single Unit
Butter (75 g)	\$6.00 (500g)	\$0.90	\$0.45	\$0.07
Flour (150 g)	\$6.70 (1kg)	\$1.0	\$1.0 \$0.5	
Sugar (11.4g)	\$5.60 (3kg)	\$0.02	\$0.01	\$0.002
Vanilla Extract (2.8 g)	\$6.99 (50ml)	\$0.39	\$0.20	\$0.03
Eggs (3)	\$6.00 (12 pack)	\$1.50	\$0.75	\$0.13
Salt (1.4 g)	\$1.69 (300g)	\$0.03	\$0.02	\$0.003
Total	\$32.98	\$3.84	\$1.93	\$0.32

## **Custard Filling**

Ingredients (per component)	Cost per Item	Cost per Batch (12 Cream Puffs)	Cost per Batch (halved)	Cost per Single Unit
Flour (85 g)	\$6.70 (1kg)	\$0.60	\$0.30	\$0.05
Milk (340 ml)	\$2.20 (1L)	\$0.75	\$0.38	\$0.06
Eggs (3 yolks)	\$6.00 (12 pack)	\$1.50	\$0.75	\$0.13
Sugar (170 g)	\$5.60 (3kg)	\$0.32	\$0.16	\$0.03
Butter (7.15 g)	\$6.00 (500g)	\$0.08	\$0.04	\$0.007
Vanilla Extract (7.15 g)	\$6.99 (50ml)	\$0.99	\$0.50	\$0.08
Total	\$33.49	\$4.24	\$2.13	\$0.36

#### **Chocolate Topping**

Ingredients (per component)	Cost per Item	Cost per Batch (12 Cream Puffs)	Cost per Batch (halved)	Cost per Single Unit
Chocolate (84 g)	\$5.50 (250g)	\$1.83	\$0.91	\$0.15
Total	\$5.50	\$1.83	\$0.91	\$0.15

## Total Costs

Ingredients (per component)	Cost per Item	Cost per Batch (12 Cream Puffs)	Cost per Batch (halved)	Cost per Single Unit
	\$71.97	\$9.91	\$4.97	\$0.83

#### **Energy Costs**

Appliance	Temperature	Time	Energy	Cost
Electric oven	180 C	1 hour	2.0kw	\$0.32

#### Labour

Minimum wage: \$21.50 Labour cost per unit: \$1.79 Materials: \$0.83

Total cost per cream puff: \$2.94



# Hazard Analysis and Critical Control Points for Profiteroles



CHOUX Fastry					
Process	Hazard	Control Points	Standard	Monitoring Action	Corrective Action
Receiving Ingredients	-Butter could have gone rancid from light or heat exposure. -Eggs could be contaminated if the shell is dirty.	-The packaging of the butter, and the temperature it is storedThe source and the cleanliness of the eggs.	The ingredients are taken from a reliable source with packaging that is intact upon use. The butter is kept in a chilled area.	Check the expiry dates of the products as well as the smell and visual appeal.	If products are rancid or expired, then discard them.
Storing Ingredients	-Bacterial growth could occur in the eggs or butter if they are light or heat exposure. -Insect infestation in the flour if it isn't correctly sealed.	-The temperature of the fridge, as well as the packaging on the butterThe storage method of the flour.	-The butter and eggs are kept in a chill environmentThe ingredients are taken from a reliable source with packaging that is intact upon use.	-Check the expiry dates of the products as well as the smell and visual appealCheck the temperature of the fridgeCheck the products are correctly sealed.	-If products are rancid or expired, then discard them. -If an insect infestation is found in flour, discard the flour.
Preparing Choux Pastry	Cross contaminatio n from unclean work surfaces or	-Ensure personal and workstation hygiene is to a good	-Dishwashing and cleaning policy applied. -Personal	Follow the necessary methods for cleaning the kitchen, and	Dispose of any contaminated pastry.

# Quality Assurance Plan



A quality assurance plan is a series of steps to help companies deliver consistent quality of their product. A plan might include measuring a product like profiteroles to ensure they all have the same dimensions of height, as well as the same amount of filling and topping, and the same colour. During the production process, a quality assurance plan plays an important role, keeping the standards of hygiene, health, and safety practices high. To ensure we were correctly following our quality assurance plan, we set out specifications and tests. This included testing that all our profiteroles had a very similar proportion, appearance and dimension. that all our profiteroles had a very similar proportion, appearance, and dimension.

The proportion of our profiteroles included the amount of choux pastry mixture used to quenelle each profiterole, as well as the amount of filling and topping needed to fill and cover each profiterole to the same level. To test the proportion, we used visual tests to ensure our profiteroles passed the specifications. This included making sure there was no visible filling, and the topping covered 24 of each profiterole. the topping covered 3/3 of each profiterole.

To test the appearance of our profiteroles, we ensured that all of the profiteroles were visually the same. This included using a ruler to measure the size of each profiterole, making sure they all measured 5-6 centimetres in diameter. As well as visually checking the filling and topping of each profiterole, to guarantee they were filled and covered uniformly.

The dimension of our profiteroles included the measurement of each profiterole. To test this, we used a ruler to measure each profiterole, ensuring that they were an equal dimension of 5-7 centimetres high and 6 across.

We used visual checks to guarantee that our workstations and ourselves were to the required health and safety standard, ensuring that the equipment and surfaces were visually clean, as well as our aprons. We ensured that our hair was tied back, and that we were wearing no jewellery, as well as that our hands were thoroughly washed. We checked the expiry dates of all our ingredients, discarding any ingredients that were out of date.

Chilled ingredients such as butter, eggs, and milk were stored in the fridge, at a temperature below 5 degrees celsius to prevent them from going rancid. Other ingredients, including flour and sugar, were stored in airtight containers to prevent mould and pest contamination. Any ingredients we didn't use were given to the pigs, preventing waste. Any packaging that could be recorded was ecycled was