

CHAPTER III

METHODS

3.1 Time and Place

Culinary innovation and Product development was done was made from April 3th 2023 at my house kitchen, Indonesia, Surabaya.

3.2 Ingredients and Utensils

3.2.1 Ingredients

The ingredients and functions of the ingredients used in the study Presented in the table 3.1

Table 3. 1 Ingredients for Soybean Cupcakes

No	Quantity	Function
1. Soybean flour	275 g	Cupcake base
2. Mocaf flour	50 g	Binding agent
3. Baking powder	3 tsp	Leavening agent
4. Salt	2 tsp	Seasonings
5. Stevia	2 tsp	Seasonings
6. Milk	240 ml	Binding agent / Seasonings
7. Heavy whipped cream	230 ml	Whipped cream
8. Vegetable oil	120 ml	Binding agent
9. Vanilla extract	1 tbsp	Aromatic
10. Eggs	2 pcs	Binding agent
11. Water	200-240 ml	Binding agent

1. Ingredients for Cupcakes

- Soybean flour: 275 g
- Mocaf flour: 50 g
- Baking powder: 3 tsp
- Salt: 2 tsp
- Stevia: 2 tsp

- Milk: 240 ml
 - Vegetable oil: 120 ml
 - Vanilla extract: 1 tbsp
 - Eggs: 2 pcs
 - Water: 200-240 ml
2. Ingredients for Keto Whipped cream
- Heavy whipped cream: 230 ml
 - Stevia: 1-2 tbsp
 - Vanilla extract: 1 tsp

3.2.2 Utensils and equipment

The utensils and functions used in this study presented in the table 3.2

Table 3. 2 Utensils for Soybean cupcake

No	Utensils	Function
1.	Spatula	To mix and fold the batter
2.	Hand mixer	Creamed all the ingredients
3.	Large mixing bowl	To hold all the ingredients
4.	Digital scale	Measurement tools
5.	Frying pan	Used to roast the soybean
6.	Oven	To cook the cupcake
7.	Brass	To gather all the cupcake into the oven

3.3 Processing methods

The processing method of this study are presented below:

Soybean to soybean flour method:

1. Soak soybean using water for at least 12 hours.
2. Rinse about 2 times until the water turns transparent well.
3. Peel the skin off (this step requires patient)
4. Dry under the sun until it gets dried

5. Roast the soybean flour to remove the moisture (optional)
6. Grind the soybean using blender

Making soybean cupcake process:

1. Pre heat oven to 180C degree
2. Measure all the ingredients need to make all the soybean cupcake using digital scale.
3. Prepare large mixing bowl.
4. Put in the vegetable oil, milk, egg, stevia, salt and vanilla extract.
5. Mix it up using a hand mixer until the batter turns stiff and fluffy.
6. Add in the soybean flour, baking powder.
7. Then add pour in water until it reaches to the desire texture.
8. Fold the batter using spatula.
9. Fill the cupcake liners halfway just to make sure so that the batter won't go sideways.
10. Bake for around 15-20 min depend on the thickness.
11. Remove the cupcake from the oven and allow to cool for 2 minutes.
12. Soybean cupcake ready to be served.

3.4 Flowchart

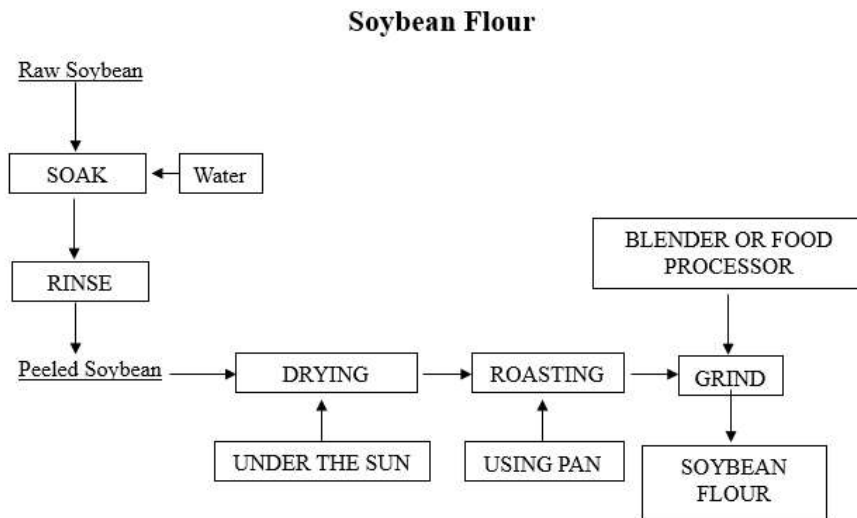


Figure 3. 1 Flowchart

Soybean Cupcakes

