

CHAPTER III

METHODS

3.1 Time and Place

Culinary innovation and product development was done from March to June 2023 at culinary kitchen and baking and pastry kitchen, Ottimmo International.

3.2 Ingredients and Utensils

3.1.1 Ingredients

The ingredients and functions of the ingredients used in this study presented :

Table 3.1 Ingredients for Banana Peel and champignon Mushroom Frozen Vegan Patties

| No. | Ingredients | Quantity | Function |
|-----|---------------------------|----------|--------------------------------|
| 1 | Banana Peel (Pisang Raja) | 200 gr | Main ingredients |
| 2 | Champignon Mushroom | 200 gr | Main ingredients |
| 3 | Onion | 60 gr | Aromatic |
| 4 | Oat | 100 gr | Mixture ingredients |
| 5 | Bread Crumb | 250 gr | Mixture ingredients |
| 6 | Mushroom Powder | 10 gr | Seasoning |
| 7 | BBQ Spice | 5 gr | Seasoning |
| 8 | Vinegar | 100 ml | Remove sap from banana peel |
| 9 | Xanthan Gum | 12 gr | Thicken or Emulsify dough base |
| 10 | Garlic | 30 gr | Aromatic |

| | | | |
|----|--------------|-------|-------------------|
| 11 | Salt | 2 gr | Seasoning |
| 12 | Blackpepper | 1 gr | Seasoning |
| 13 | Italian Herb | 2 gr | Aromatic |
| 14 | Flax Seed | 12 gr | Egg substitute |
| 15 | Water | 12 ml | Mixture flax seed |

1 Ingredients for Banana Peel Dough

- Banana peel (Pisang Raja) 200 gr
- Champignon mushroom 200 gr
- Onion 60 gr
- Oat 100 gr
- Bread crumb 250 gr
- Mushroom powder 10 gr
- BBQ spice 5 gr
- Vinegar 100 ml
- Xanthan gum 12 gr
- Garlic 30 gr
- Salt 2 gr
- Blackpepper 1 gr
- Italian herb 2 gr
- Flax Seed 12 gr
- Water 12 ml

2 Ingredients for BBQ spice

- Brown sugar 1 gr
- Smoked paprika 1 gr
- Chili powder 1 gr
- Onion powder 2 gr

3.1.2 Utensils

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

Table 3.2 Utensils and Function for Banana Peel Frozen and Champignon Mushroom Vegan Patties

| No. | Utensils | Function |
|-----|-------------------|--|
| 1. | Cutting Board | Place mate while cutting ingredients |
| 2. | Knife | Cutting ingredients |
| 3. | Large mixing bowl | Mixing banana peel patties dough |
| 4. | Spatula | Mixing or sauteing banana peel, mushroom, and aromatics |
| 5. | Blender | Blitzing banana peel and mushroom |
| 6. | Ring cutter | Shape banana peel dough |
| 7. | Spoon | Scraping the banana peels and mixing banana peel patties dough |
| 8. | Small mixing bowl | Making flax egg |
| 9. | Digital scale | Weighing ingredients |

3.3 Processing Methods

The processing method of this study are presented below :

1. Peel the bananas, scrape the peels white internal part then dice the peels
2. Soak banana peel with vinegar and water
3. Blend banana peel and champignon mushrooms
4. Add the oil to a saute pan and when the oil gets hot, add the chopped onions, the banana peels, and champignon mushrooms
5. Stir for 5 minutes. Add the chopped garlic, stir for one minute more. Reserve.
6. Make the flax-egg: add the flaxseeds to a small bowl, add the water, stir until combined, reserve.
7. When the banana peel mixture has cooled to room temperature, add the bread crumb, mushroom powder, oats, salt, pepper, Italian herbs, the flax egg, and barbecue spice blend and stir until everything is well combined. If the mixture is too dry, add a bit of water.
8. Shaping the dough, and than packing.

3.4 Flow Chart

The flowchart of processing methods is presented in Figure 3.1.

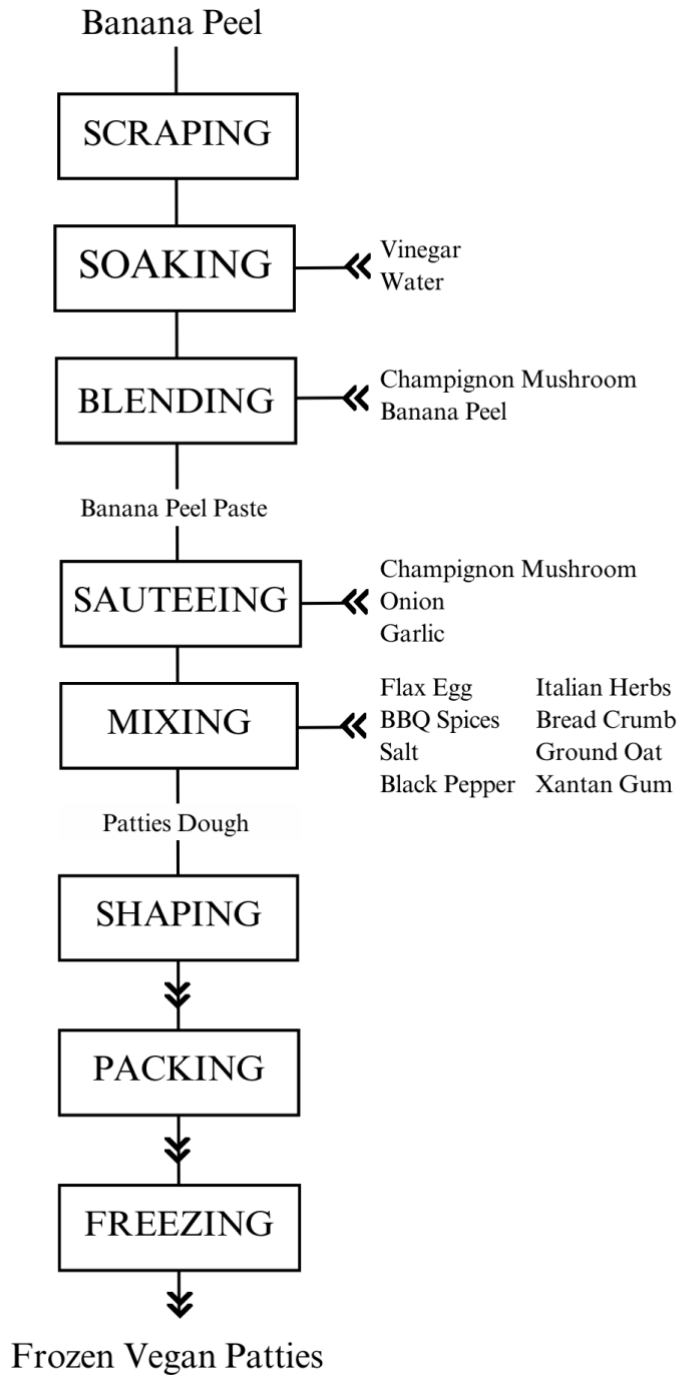


Figure 3.1 Flowchart Banana Peel Frozen Vegan Patties