

CHAPTER III

METHODS

3.1 Time and Place

Culinary innovation and product development was done from 20th of March 2023 until 21st of March 2023 at the writer's kitchen and Ottimmo's baking and pastry kitchen.

3.2 Ingredients and Utensils

3.2.1 Ingredients

The table below lists the ingredients used in this study along with their functions.

Table 3.1 Ingredients for Crab Shells-Based Powdered Broth

No	Ingredients	Quantity	Function
1	Crab shell	600 gr	Main ingredient
2	Garlic	110 gr	Aromatic
3	Shallot	150 gr	Aromatic
4	Onion	85 gr	Aromatic
5	Roasted candlenut	40 gr	Aromatic
6	Salt	30 gr	Seasoning
7	Sugar	17,5 gr	Seasoning
8	Cooking oil	5-6 tbsp	Sauté aromatics, help to blend spice paste

3.2.2 Utensils

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

Table 3.2 Utensils for Making Crab Shells-Based Powdered Broth

No	Utensils	Function
1	Brush	Cleaning crab
2	Steamer	Steaming crab
3	Spice blender	Make the spice paste, crushing crab shells
4	Sauté pan	Sauté aromatics and spice paste, roast powdered broth
5	Fine sifter	Sift crab shell powder and powdered broth
6	Knife	Cutting aromatics
7	Cutting board	Mat for cutting
8	Spoon	Scrape spice paste, crab shell powder and powdered broth
9	Spatula	Sauté aromatics and spice paste, roast powdered broth

3.3 Processing Methods

The processing method used in this study is described below:

1. Clean the crab, use a brush for the shell and remove its gills and clean the guts
2. Steam crab for 5-7 minutes
3. Separate crab meat from the shells and then pat dry the shells
4. Bake crab shells in preheated oven at 100°C for 2 hours

5. While waiting, thinly slice onion, shallot, and garlic. Heat up 2 tbsp of cooking oil on a sauté pan, cook the aromatics until brown.
6. Blend the cooked aromatics and roasted candlenut using a spice blender or food processor. Add 2-3 tbsp of cooking oil if needed
7. Cook the spice paste on a medium-low heat until the water content reduces or the paste becomes dryer
8. When the crab shells are done and reach the desired dryness, take it out of the oven and blend until it becomes powder. Sift the powdered crab shells for smoother result
9. Add in the powdered crab shells and seasonings (salt and sugar) to the cooked spice paste and stir well
10. Thinly spread the broth mixture paste on a parchment paper and put it inside a dehydrator. Set it to 60°C for 5 hours. Check once in a while so it doesn't get burnt
11. When it's done, take it out of the dehydrator, blend until it becomes smoother, sift between each process.
12. Roast the powdered broth on a sauté pan until it warms up. Sift the broth powder for finer result, blend again if needed.

3.4 Flow Chart

The flow chart of processing method is presented in Figure 3.1.

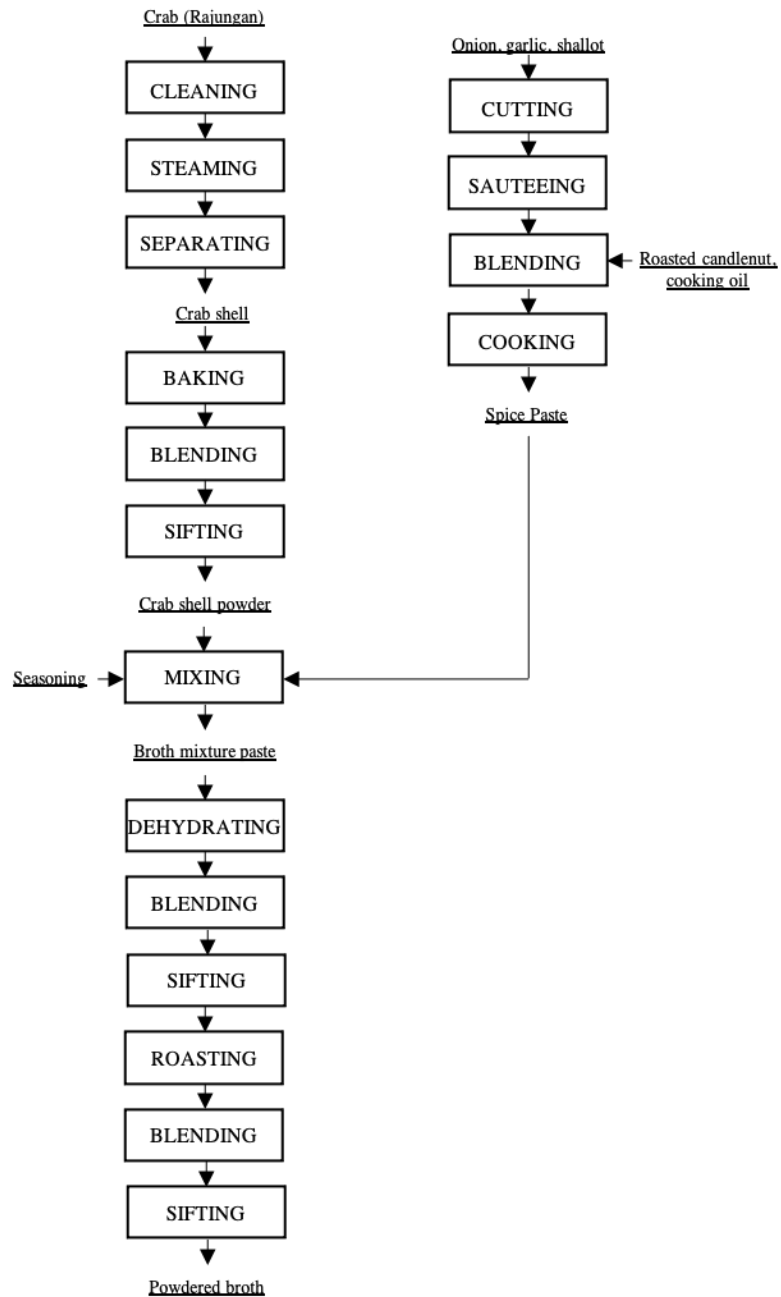


Figure 3.0-1 Flow Chart Crab Shells-Based Powdered Broth