

CHAPTER IV

RESULT AND DISCUSION

4.1 Product Result

The product result of the cookies there are many kinds of ingredients that i use purple sweet potato flour and medium protein flour. Sweet potato flour can also be a source of carbohydrates because it is high in fiber and has many benefits and I also use sweet potato flour to make my cookies crunchier Medium protein flour usually contains as much as 11-13%protein. Medium protein flour contains about 10-12% gluten. This flour is made from a mixture of high protein and low protein flour. this offering strength and softness in balance.

4.2 Nutrition Fact

4 . 2 . 1 Nutrition Table

The nutritional value of Purple Sweet Potato flour is as follows :

Table 4. 1 Nutrition Table

Calorie (kcal)	354
Moisture (g)	9,4
Protein (g)	0,6
Carbohydrate (g)	84,4
Fiber (g)	12,9
Ash (g)	2,8

Purple sweet potato flour is to determine the nutrient content (total carbohydrates, total protein, total fat, vitamin A, vitamin C, moisture content, and ash content) carbohydrates 79.203%, protein 9.004%, fat 0.399%, vitamin A 198.322 SI/ 100g, vitamin C 1.231 mg/100g, moisture content 9.795, ash content 1.599%. Sanmas, Saiful (2018)

Table 4. 2 Nutrition Value

Nutrition	Total / 100 g
Calorie (kcal)	86
Protein (g)	1.6
Carbohydrate (g)	20.1
Fat (g)	0.1
Moisture (g)	77.3
Ash (g)	1

(IDNmedis.com)

4.2.2 Nutrition Calculation

Havard research collected this several data about the nutritional value in medium purpose flour based on many research , which is follows :

Table 4. 3 Nutrition Calculation

Nutrition	Total / 100 g
Energy (kcal / 100 g)	350
Fat (kcal / 100 g)	1.00
Protein (kcal / 100 g)	10.00
Carbohydrate (kcal / 100 g)	75.00

The flour contains high carbs but I only use 25 % so the cookies can be so very crunchier and very last longer (Fine Cooking)

Table 4. 4 Nutrition Value of ingredients used in The Recipe for Purple Sweet Potato Cookies Topped With Roasted Slice Almond

Ingredients	Calories (kcal)	Carbohydrate (g)	Protein (g)	Fat (g)	Sugar (g)	Fiber (g)	Sodium (mg/100g)
Purple sweet potato flour (75g)	63,7	15	1,2	0,025	31,5		
Unsalted butter (100g)	726			79,2			
Egg (55g)	81	0,42	6,92	5,47	0,42		77
Sugar (50g)	193,5	49,99			49,95		
Roasted slice almond (25g)	149,25	4,82	5,52	13,20	1,22	2,95	0,25
Baking Powder (2g)	1,06	0,56				0,04	0,4
Medium Protein Flour (25g)	87,5	18,75	2,5	0,375			
TOTAL	1.302,01	89,54	16,14	98,99	83,09	2,99	77,65

4.2.4 Nutrition Label

Nutrition Facts	
Servings: 1	
Amount per serving	
Calories	870
	% Daily Value*
Total Fat 61.2g	78%
Saturated Fat 37.3g	186%
Cholesterol 299mg	100%
Sodium 484mg	21%
Total Carbohydrate 73.6g	27%
Dietary Fiber 3.1g	11%
Total Sugars 21.8g	
Protein 11g	
Vitamin D 53mcg	266%
Calcium 154mg	12%
Iron 3mg	15%
Potassium 700mg	15%

Figure 4. 1 Nutrition Fact of Purple Sweet Potato Cookies Topped With Slice Almond

4.3.1 Processing and Storage Temperature

The cookies that I made went through many processes, from how to make my own flour, mixing the ingredients that I used and the last one was the process of forming the cookies myself. I formed the cookies in a round shape with plastic gloves, then flattened a little and the weight was 1 round about 4-5 grams. how to make these cookies I want to mix, starting with the sugar mixture, listen to the eggs first, until well mixed, after that I just add the butter, then the dry ingredients, if the dough is still wet, I will add moderate protein flour so the dough isn't too wet. then when it's finished I will proceed to the next step, namely in the oven I don't want these cookies to burn too

much I will oven at 180 degrees for 10 minutes then if it's still not enough I will add another 7 minutes if it is finished I will remove the cookies and wait cold first. and why did I choose this sweet potato flour as the main ingredient for cookies because it has very high carbohydrates and besides that it can extend the shelf life of these cookies and there are several benefits of purple sweet potato flour namely can reduce the risk of cancer, can be a fiber intake for our stomach, maintain the health of the liver and kidneys and so on (Reviewed by dr. Fadhli Rizal Makarim)

4 . 3 . 2 Self Life

These Sweet Potato Cookies are categorized as snack cookies or can be referred to as pastries in general such as pineapple cookies , snow white, cat's tongue and so on. My cookie product has a long shelf life, maybe 1 month must be used up, but it must be stored tightly closed and not exposed to sunlight. Cookies were stored at room temperature 25°C and varying humidity, namely 53%, 71% and 87%. (NANDYASARI RAHMAWATI, Dr. Sri Rahayoe, STP., MP. ; Prof. Dr. Ir. Eni Harmayani, M.Sc.)

4 . 3 . 3 Product Packaging

Product packaging for these cookies packaging is used to protect the cookies so they don't break easily, if I don't choose the right packaging it can be damaged for the cookies because the cookies must be safe when packaged and must be tight when closed otherwise there will be a danger of not being crunchy and can be dangerous to eat. These cookies are food that can be served immediately because we always make according to the order. When someone orders, we advise that they can be eaten immediately. Apart from that, for packaging these cookies, I use a Jar or you can call it a tube-shaped jar because it's the safest for cookies even though it's made of plastic but it's very

strong and the lid is very strong so the cookies don't get soggy or crunchy easily. Apart from that, I also use plastic to make it look neat in packaging because product packaging is very important to protect our products from dangerous reach when we send them to buyers. and this cookie product has various kinds of information such as the name of the product, composition, ingredients and so on.

—————→ T = 6 cm , D = 9 cm



Figure 4. 2 Jar Cookies



Figure 4. 3 Plastic Bag 15 x 33 cm

Apart from that, I also use plastic to make it look neat in packaging because product packaging is very important to protect our products from dangerous reach when we send them to buyers. and this cookie product has various kinds of information such as the name of the product, composition, ingredients and so

Sweet Tooth

Home made baking Purple Sweet Potato Cookies Topped With Roasted Almond Slice

- ✓ High antioxidants cookies
- ✓ High source of carbohydrates

@sweet.cookie

+6520-xxxx-xxxx

Nutrition Facts	
Servings: 1	
Amount per serving	
Calories	870
% Daily Value*	
Total Fat 61.2g	78%
Saturated Fat 37.3g	186%
Cholesterol 299mg	100%
Sodium 484mg	21%
Total Carbohydrate 73.6g	27%
Dietary Fiber 3.1g	11%
Total Sugars 21.8g	
Protein 11g	
Vitamin D 53mcg	266%
Calcium 154mg	12%
Iron 3mg	15%
Potassium 700mg	15%

Ingredient :
Purple sweet potato flour ,
unsalted butter , egg ,
sugar , roasted sliced
almond , medium

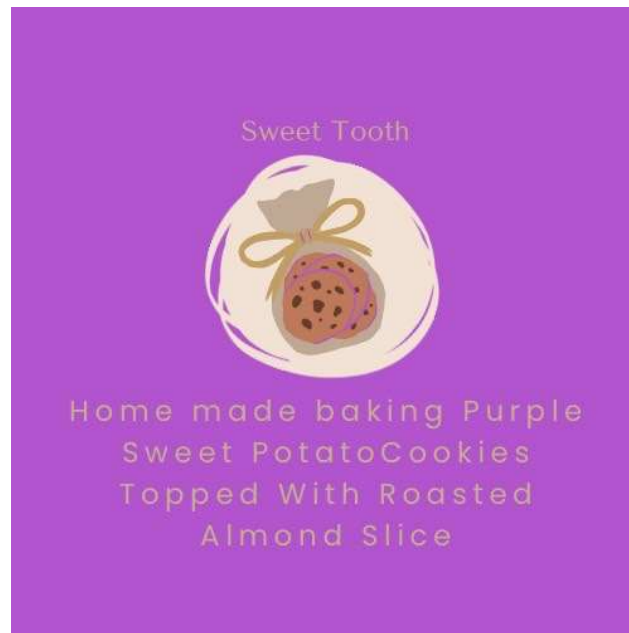


Figure 4. 4 Logo

4.4 Financial Aspects

4 . 4 . 1 . Product Cost (Variable Cost , Overhead Cost , Fixed Cost)

The total costs are all or calculated in a month, these costs are of various types, starting from purchasing materials, expenses for paying employees or labor, costs for buying packaging materials. Meanwhile, the cost of ingredients is 6 recipes per day or 180 recipes per month.

1. Start – Up Capital

Table 4. 5 Start – Up Capital

Tools & Equipment	Quantity	Price (/Unit)	Sub Total
Blender	1	300.000	300.000
Tray	1	30.000	30.000
Spatula	1	5.000	5.000

Large Bowl	1	30.000	30.000
Scales	1	30.000	30.000
Mixer	1	290.000	290.000
Oven	1	420.000	420.000
TOTAL			1.105.000

2. Labour Cost

Table 4. 6 Labour Cost

Occupation	Personnel	Salary (/month)	Sub Total
Chef	1	1.500.000	Rp 1.500.000
Cooking Helper	1	1.000.000	Rp 1.000.000
TOTAL			Rp 2.500.000

3. Packaging Cost

Table 4. 7 Packaging Cost

Packaging	Quantity	Price (/unit)	Sub Total
Cookies Jar	6 pcs	Rp 5.000	Rp 30.000
Plastic Bag	100 pcs	Rp 100	Rp 10.000
TOTAL (/day)			Rp 40.000
TOTAL (/month)			Rp 1.200.000

4. Utility Cost

Table 4. 8 Utility Cost

Facility	Quantity	Price (/unit)	Sub Total
Gas	3KG	Rp 18.000	Rp 18.000
TOTAL (/day)			Rp 18.000
TOTAL(/month)			Rp 72.000

5. Raw Material Cost

Table 4. 9 Raw Material Cost

Raw Materials	Quantity	Price (/unit)	Sub Total
Unsalted butter	75 gr	Rp 135.000 (1/kg)	Rp 1.800
Egg	50 gr	Rp 30.000 (1/kg)	Rp 600
Sugar	50 gr	Rp 15.000 (1/kg)	Rp 300
Roasted almond	25 gr	Rp 45.000 (/250g)	Rp 1.800
Medium protein flour	25 gr	Rp 15.000 (1/kg)	Rp 600
Baking Powder	2 gr	Rp 6.000 (45/g)	Rp 3000
Sweet potato flour	75 gr	Rp 23.000 (500/g)	Rp 400
TOTAL (/day)			Rp 8.500
TOTAL (/month)			Rp 255.000

6. Rent Cost

Table 4. 10 Rent Cost

Facility	Size	Price	Sub Total
Land	5 m x 4 m	Rp 1.500.000	Rp 1.500.000
Building	5 m x 4 m	(/month)	
TOTAL (/month)			Rp 1.500.000

7. Total Cost

Fixed Cost = Labour Cost and Rent Cost

Variable Cost = Raw Material Cost , Packaging Cost , and Utility Cost

Total Cost (/month) = Labour + Raw Material + Packaging + Utility + Rent
Cost

$$\begin{aligned} &= 1.105.000 + 2.500.000 + 1.200.000 + 1.200.000 \\ &\quad + 72.000 + 255.000 + 1.500.000 \\ &= \mathbf{Rp\ 6.632.000} \end{aligned}$$

4.4.2 Selling Price

Product Price = $\frac{\text{Total Cost (/month)}}{\text{Quantity}}$

Total Product Units (/month)

= Rp 6.632.000 /180 portions

= Rp 36.844,4 / Portion

Product Selling Price = Product Price + (*Product Price x*)
(*Profit Percentage*)

= 36.844,4 + (36.844,4 x 40 %)

= 36.844,4 + 14,737,76

= Rp 51,582,16 = 52.000