

CHAPTER IV

RESULT AND DISCUSSION

4.1 Product Result

The texture of the eggplant sale that has been tested is hard, coarse-textured and has a quite unique taste. Yes, it's salty and sweet because it uses cheddar cheese and brown sugar, so the taste of the eggplant sale has a quite unique taste. The EggplantSale is a fantastic representation of how traditional flavors can be enhanced to create a great dining experience.

I was already greeted with a tantalizing aroma that immediately piqued my interest. The combination of flavors combined with cheese and palm sugar hint at the promise of a mouth-watering adventure.

One aspect that really impressed me was the authenticity of the dishes. It tastes like a genuine representation of traditional cuisine, prepared with care and respecting its roots. The attention to detail in the cooking process is evident, as each bite contains the essence of the ingredients.

What makes the Eggplant Sale even more extraordinary is its versatility. It can be enjoyed as a dish on its own, perfect for a quick and satisfying meal. As an alternative snack.

4.2 Nutrition Facts

4.2.1 Nutrition Table

The nutritional value of eggplant is as follows:

Table 4.1 Nutrition Value of eggplant with per 100 g

Nutrient Content	Content
Calories (kcal)	24
Protein (g)	1.01
Fiber (g)	3.4
Sugar (g)	2.35
Carbohydrate (g)	5.7

sodium (mg)	2
fat (g)	0.19
potassium (mg)	230

Table 4.2 Nutrition Value of Ingredients used in The Recipe for Eggplant Sale

Ingredients	Calories (kcal)	Carbohydrate (g)	Protein (g)	Fat (g)	Sugar (g)	Fiber (g)	Sodium (mg/100g)
Eggplant (500 gr)	120	28.5	5.05	0.95	11.75	17	10
Flour (100 gr)	350	75	10	1.5			
Rice flour (200 gr)	730	160	12	2.8	0.2	4.8	
Sugar (10 gr)	39	10			10		
Cheedar cheese (35 gr)	105	1.75	7	8.75	1.75		508
Palm sugar (100 gr)	368	76	3	10	76		
Salt (5 gr)							1938
Water (170 ml)							
TOTAL /recipes	1.712	351.25	37.05	24	99.7	21.8	2.456
Total/pack	570.67	117.08	12.35	8	33.23	7.27	818.67

4.2.3 Nutrition Label

Nutrition Facts	
3 servings per container	
Serving size	3 pcs (60g)
Amount Per Serving	
Calories	570
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 0g	0%
<i>Trans</i> Fat 0g	
Sodium 820mg	36%
Total Carbohydrate 117g	43%
Dietary Fiber 7g	25%
Total Sugars 33g	
Includes 0g Added Sugars	0%
Protein 12g	24%
Not a significant source of cholesterol, vitamin D, calcium, iron, and potassium	
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Figure 4.1 Nutrition Label

4.3 Food Safety and Packaging

4.3.1 Processing and Storage Temperature

Processing Temperature:

During eggplant processing, such as washing, sorting, packaging and other preparation steps, it is important to maintain an appropriate temperature to prevent spoilage, contamination and microbial growth.

Storage Temperature:

After processing, eggplant needs to be stored at chiller to extend its shelf life and maintain its quality. Storing eggplant in chiller range helps:

1. **Minimize Ripening:** Eggplant is a climacteric fruit which means it continues to ripen after being harvested. Storing them at a lower temperature will slow the ripening process, prevent them from overcooking, and keep their texture firm.
2. **Reduces Spoilage:** Lower temperatures inhibit the growth of spoilage microorganisms, thereby extending the shelf life of eggplants and reducing the possibility of spoilage or mold development.
3. **Preserves Nutritional Value:** Cold storage helps preserve the nutritional content of eggplants, including vitamins, minerals, and antioxidants, ensuring that consumers get the maximum benefits from the vegetable. It's important to note that eggplants are sensitive to ethylene gas, which is released by certain fruits and vegetables and can accelerate eggplant ripening and spoilage. Therefore, it is advisable to store eggplants away from ethylene-producing fruits such as bananas, tomatoes, and avocados.

4.3.2 Shelf Life

This research aims to determine the differences and best conditions for using types of packaging, storage temperature, and storage age to maintain and improve the quality of eggplant. This research was conducted using a nested design with three replications, and the analyses used in it include analysis of weight loss, water content, ash content, pH, hardness, protein, fat, and weight. The findings of this study demonstrate that eggplant maintained at low temperatures (8°C) can limit metabolic processes, causing a decrease in the amount of protein and carbohydrates due to slower respiration processes than eggplant held at room temperature (27°C). This particular form of polyethylene (PE) plastic packaging can lessen the possibility for

4.3.3 Product Packaging

The two varieties of packing with the same density, high water vapour permeability, and low gas permeability are polypropylene (PP) and polyethylene (PE). Packing made of polyethylene (PE) and polypropylene (PP) can retain protein while retaining less water, have a lower pH, and suppress all bacterial colonies. Hoover and non-vacuum packaging techniques have an impact on high-quality food products. Longer shelf life are achieved by using vacuum packaging for food products. (Mulyawan et al., 2019).

Packaging is one of the most important elements in the food sector. Food products must be packed. To keep the product clean, guard against physical harm, protect it from microbial contamination, and protect it from chemical deterioration. Additionally, packaging aims to make it simpler to store, transport, and distribute a processing product or industrial product. (Pratiwi et al., 2022).

This is also true for the growth of bacteria, fungi, and other microorganisms, which is sometimes shown as an isothermal curve. When the water level is high, the substance will absorb air; when the amount of free water in the substance is more than that in the air, the substance will be absorbed by the air until balance is attained. (Delviani, 2021)



Figure 4.2 Packaging of Sale Terong

illustrates the importance of product packaging design and advertising attractiveness, as well as their positive and significant effects on brand awareness and interest in making a purchase. Willy and Nurjanah (2019)

Businesses compete fiercely in the current era of globalization to reach their customers. As a result, many companies are starting to think about ways to convince people to buy their products. One tactic company employ to entice clients is the use of fascinating packaging.

Nutrition Facts	
9 servings per container	
Serving size	3 pcs (60g)
Amount Per Serving	
Calories	570
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 0g	0%
Trans Fat 0g	
Sodium 820mg	36%
Total Carbohydrate 117g	43%
Dietary Fiber 7g	25%
Total Sugars 33g	
Includes 0g Added Sugars	0%
Protein 12g	24%

Not a significant source of cholesterol, vitamin D, calcium, iron, and potassium.

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Figure 4.3 Packaging label



Figure 4.4 Logo

4.4. Financial Aspect

4.4.1 Product Cost (Variable, Cost, Overhead Cost, Fixed Cost)

The total monthly cost is used to compute product costs. The price includes labour, raw material, packing, and utility costs. Based on monthly working days, which are 26 days per month, the labour cost is

taken into account. The number of raw ingredients is calculated as 6 recipes each day, or 130 recipes, or 468 portions, per month.

1. Start-Up Capital

Table 4.3 Start-Up Capital

Tools and Equipment	Quantity	Price (Unit)	Sub Total
Knife	1	Rp 118,000	Rp 118.000
Cutting board	1	Rp 90,000	Rp 90.000
Digital Scale	1	Rp 35,000	Rp 35.000
Baking Tray	2	Rp 22,500	Rp 45.000
Spoon	3	Rp 5,000	Rp 15.000
Wooden spatula	1	Rp 23,000	Rp 23.000
Large Bowl	2	Rp 18,000	Rp 36.000
Small bowl	3	Rp 12,000	Rp 36.000
Tongs	1	Rp 35.000	Rp 35.000
Pan	1	Rp 175,000	Rp 175.000
Strainer	1	Rp 18,000	Rp 18.000
TOTAL			Rp 626.000

2. Packaging Cost

Table 4.4 Packaging Cost

Packaging	Quantity	Price (Unit)	Sub Total
Serving Plastic Bag	468pcs	Rp 750	Rp 351.000
Plastic Bag	468 pcs	Rp 50	Rp 23.400
TOTAL /DAY			Rp 14.400
TOTAL /MONTH			RP 374.400

3. Utility Cost

Table 4.5 Utility Cost

Facility	Quantity	Cost (/day)	Cost (/month)
Water	450 L	Rp 5.400	Rp 140.400
Electricity	7 kWh	Rp 6.500 (/kWh)	Rp 169.000
LPG	12kg	Rp 218.000/12kg	Rp 218.000

TOTAL	Rp 527.400
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4. Raw Material Cost

Table 4.6 Raw Material Cost

Raw Material	Quantity	Price (/unit)	Sub Total
Eggplant	500 gr	Rp 11.000/kg	Rp 5.500
Flour	100 gr	Rp 14.000/kg	Rp 1.400
Rice flour	200 gr	Rp 7.500/500gr	Rp 3.000
Sugar	10 gr	Rp 16.000/kg	Rp 200
Cheddar cheese	35 gr	Rp 23.000/pack	Rp 5.200
Palm Sugar	100 gr	Rp 22.000/kg	Rp 2.200
Salt	5 gr	Rp 4.250/500gr	Rp 35
Water	170 ml	Rp 7.000/19ltr	Rp 70
Cooking oil	700 ml	Rp 14.000/ltr	Rp 9.800
TOTAL (/recipes)			Rp 27.405
TOTAL (/day)			Rp 164.430
TOTAL (/month)			Rp 4.275.180

5. Labor Cost

Table 4.7 Labor Cost

Occupation	Personel	Salary(/month)	Sub Total
Owner	1	Rp 4.000.000	Rp 4.000.000
TOTAL			Rp 4.000.000

Total Cost

Fixed Cost = Labour Cost

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

$$\begin{aligned}
 \text{Total Cost (/month)} &= \text{Packaging} + \text{Utility} + \text{Raw Material} + \\
 &\text{Labor Cost} \\
 &= \text{Rp } 374.400 + \text{Rp } 527.400 + \text{Rp } 4.275.180 \\
 &\quad + \text{Rp } 4.000.000 \\
 &= \mathbf{\text{Rp } 9.176.980}
 \end{aligned}$$

4.4.2. Selling Price
Product Price

$$\begin{aligned}
 &= \frac{\text{Total Cost (/month)}}{\text{Total Product (/month)}} \\
 &= \frac{\text{Rp } 9.176.980}{468 \text{ portions}} \\
 &= \mathbf{\text{Rp } 19.609 / \text{portion}}
 \end{aligned}$$

$$= \text{Rp } 20.000$$

$$\begin{aligned}
 \text{Product Selling Price} &= \text{Product Price} + \left(\frac{\text{Product Price} \times \text{Protif Percentage}}{\text{Protif Percentage}} \right) \\
 &= \text{Rp } 20.000 + (\text{Rp } 20.000 \times 40\%) \\
 &= \text{Rp } 20.000 + \text{Rp } 8.000 \\
 &= \mathbf{\text{Rp } 28.000}
 \end{aligned}$$