

CHAPTER IV

RESULT AND DISCUSSION

4.1 Product Result

Jelly is increasingly in demand by the public because of its texture and taste. The main ingredients of jelly drinks usually come from fruits and various ingredients that can be combined. The nutritional value contained in jelly depends on what is combined with the jelly. Kumis Kucing has a distinctive and identical compound, or what we can call it. marker compounds, these compounds are used as marker compounds for kumis kucing because very few other plants have these compounds. The marker compound that belongs to the kumis kucing leaf is the flavonoid sinensetin. The sinensetin content of the thick extract of Kumis Kucing leaves is not less than 1.10%.

Jelly powder (powder) is jelly that has a powder form, usually made from extracts of seaweed and better known as konnyaku jelly, to consume jelly powder (powder) requires a cooking process. The composition of jelly powder consists of gel-forming ingredients (carrageenan and agar), gum (konjac, LBG, gum Arabic) (Sinurat, Murdinah, Fransiska, 2010). One of the chemical compositions of jelly powder is a hydrocolloid compound. Hydrocolloid compounds are components that can form colloids in water and are usually used to prevent crystallization, as a thickener, or as a stabilizer. The use of jelly powder can be found in processed jelly candy products, jelly, pudding, ice cream, and others. Jelly powder can be used as a dessert, besides that jelly powder has high fiber content and low calories so it can help people who are on a diet (Anon (2008) in Sinurat, Murdinah, Fransiska, 2010).

4.2 Nutrition Fact

4.2.1 Nutrition Table

The nutrition value of jelly is as follows:

Table 4.1 Nutrition Value of Jelly on 20 g

Calorie (kcal)	53.2
Sodium (g)	6
Protein (g)	1.22
Fat (g)	0
Carbohydrate (g)	14
Fiber (g)	0.2
Ash	0.2

(Source: USDA et al., 2019)

Table 4.2 Nutrition Value of kumis kucing on 100 g

Calorie (kcal)	62
Moisture (g)	0.7
Protein (g)	17.1
Fat (g)	5.1
Carbohydrate (g)	62.6
Ash	7.8

(Source: Mirna et al., 2013)

Table 4.3 Nutrition Value of jelly kumis kucing

Ingredients(g)	Calories	Carbohydrate	Protein	Fat	Sugar	Fiber	Sodium
Orthosiphon aristatus(6g)	3,72	3.76	1	0.3	0.81	0	0.045
Sugar cane puree(130)	349.7	95	0	0	95	0	0.75
Honey(50) Water	152	41.2	0.15	0	41.5	0.1	0.2
Orange juice(25)	11.25	2.6	0.17	0.05	2.1	0.05	0.03
Jelly powder(10)	6	1.42	0.12	0	1.35	0	0.075
TOTAL	522.67	167.4	1.44	0,35	140.1	0.15	1.1

4. 2.3 Nutrition Label

% Daily Value*	
Total Fat 0.2g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 37mg	2%
Total Carbohydrate 45g	16%
Dietary Fiber 1.2g	4%
Total Sugars 42.4g	
Protein 1.5g	
*Vitamin D 0mcg	0%
Calcium 28mg	2%

Figure 4.1 Nutrition Facto f Jelly Kumis Kucing

4.3 Food Safety and Packaging

4.3.1 Processing and Storage Temperature

The production of Jelly Kumis Kucing consists of several unit operations namely sorted in a certain order. The unit operations are reduction, boiling, mixing, forming. Each operating unit has its own intention to prepare the jelly to proceed to the next stage. Not only the processing unit, but also the ratio and quality of the ingredients will determine the quality of the final product and its nutritional value (Mursidi et al., 2019).

Boiling in the initial sequence of the jelly-making process is to obtain extracts of Kumis Kucing extract which will be used as the main ingredients of this product. Mixing is the first step in making jelly Kumis Kucing, which is said to be mixing all the ingredients together and then cooking them in one container and waiting for them to boil or cook.

Printing in the last sequence of the process of making jelly cat whiskers, the printing that is meant is pouring the finished cooking process into the packaging container that will be used to package the product.

4.3.2 Self Life

Jelly is classified as a wet food that has a high water content. This high water content will trigger the activity of enzymes and microbes that make the Kumis Kucing jelly can only be stored in confinement for 20 hours at room temperature and 48-72 hours at

1.7-3 .3 degrees Celsius. Signs of damage to the jelly can be seen from changes in the texture, taste and color of the jelly.

4.3.3 Product Packaging

Food packaging is used to protect food along the supply chain. Otherwise, the handling of food products can be costly and inefficient. In addition, food packaging is to preserve food from possible harm; such as physical, chemical, or even microbiological; which can have an impact on

the quality and safety of the food itself. Selection of food packaging materials must consider cost, product quality, and its



ability to protect food (Alamri et al., 2021).

Figure 4.2 PET Can Packaging

Ingredients :
Orthosiphon aristatus, Orthosiphon aristatus,
Sugar cane puree, Water,
honey, Orange juice, Jelly powder
a12213245335435
exp:30-8-27
PT. AJOJING RAYA



Figure 4.4 Logo

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

1. Start-Up Capital

Table 4.5 Start-Up Capital

Tools and Equipment	Quantity	Price(/unit)	Sub Total
Sauce Pan	1	Rp. 200.000	Rp. 200.000
Spatula	1	Rp. 30.000	Rp. 30.000
Kitchen Strainer	2	Rp. 60.000	Rp. 120.000
Stove	1	Rp. 250.000	Rp. 250.000
Bowl	3	Rp. 4000	Rp. 12.000
Digital Scales	1	Rp. 70.000	Rp. 70.000
Measuring Cup	1	Rp. 25.000	Rp. 25.000
Chiller	1	Rp. 2.100.000	Rp. 2.100.000
TOTAL			Rp. 2.699.000,00-

2. Labour cost

Table 4.6 Labour cost

Occupation	Personnel	Salary(/mount)	Sub Total
Cheff	1	Rp. 2.000.000	Rp. 2.000.000
Cook Helper	1	Rp. 1.000.000	Rp. 1.000.000
Administration	1	Rp. 1.000.000	Rp. 1.000.000
Cleaning Service	1	Rp. 1.000.000	Rp. 1.000.000
TOTAL		Rp. 5.000.000,00- /month	

3. Packaging Cost

Table 4.7 Labour cost

Packaging	Quantity	Price(/unit)	Sub Total
Plastic Pet Can	50	Rp. 2.750	Rp. 137.000
Sticker	50	Rp. 1000	Rp. 50.000
Straw	50	Rp. 1.250	Rp. 62.000
TOTAL(/day)		Rp. 249.000,00-	
TOTAL(month)		Rp. 7.470.000,00-	

4. Utility Cost

Table 4.8 Utility cost

Facility	Quantity	Price(/unit)	Sub Total
Water	1.500 L	Rp. 2000(/m ³)	Rp. 3000
Electricity	20 kWh	Rp. 500(/kWh)	Rp. 10.000
TOTAL(/day)		Rp. 13.000,00-	
TOTAL(month)		Rp. 390.000,00-	

5. Raw Material Cost

Table 4.9 Raw Material Cost

Raw Material	Quantity	Price(/unit)	Sub Total
Kumis Kucing	150 gr	Rp. 2.250	Rp. 2.250
Jelly Powder	50 gr	Rp. 62.000	Rp. 62.000
Sugar Cane	3.750 ml	Rp. 50.000	Rp. 50.000
Orange Juice	100 ml	Rp. 4000	Rp. 4000
Honey	150 gr	Rp. 15. 000	Rp. 15. 000
LPG	1	Rp. 20.000	Rp. 20.000
Water	21. 250 L	Rp. 21.250	Rp. 21.250
TOTAL(/day)		Rp. 175.000,00-	
TOTAL(month)		Rp. 5.250.000,00-	

7) Total Cost

Fixed Cost = Labour Cost

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

TOTAL COST(/month) = Labour Cost + Raw Material Cost + Packaging Cost + Utility Cost

$$\begin{aligned}
 &= \text{Rp. 2.699.000} + \text{Rp. 5.000.000} + \text{Rp. 7.470.000} \\
 &+ \text{Rp. 390.000} + \text{Rp. 5.250.000} \\
 &= \text{Rp. 20.809.000,00-}
 \end{aligned}$$

4.4.2 Selling Price

$$\begin{aligned}
 \text{Product Price} &= \text{Rp. 20.809.000,00-}/1.500 \text{ pcs} \\
 &= \text{Rp. 13.872.66-}/\text{pcs}
 \end{aligned}$$

$$\begin{aligned}\text{Product selling Price} &= \text{Product Price} + (\text{Product Price} \times \text{Profit} \\ &\quad \text{Percentage}) \\ &= \text{Rp. } 13.872.66 + (\text{Rp. } 13.872.66 \times 40\%) \\ &= \text{Rp. } 13.872.66 + \text{Rp. } 5.549.06 \\ &= \text{Rp. } 19.421.72 \approx \text{Rp. } 20.000,00,-\end{aligned}$$