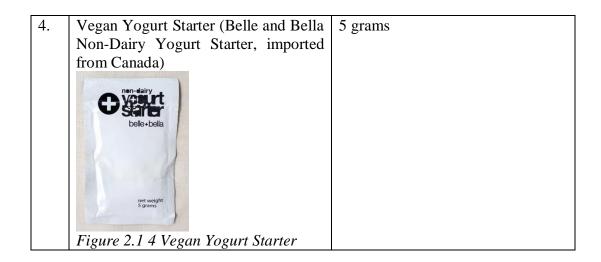
# **CHAPTER 2**

## **INGREDIENTS AND TOOLS OVERVIEW**

# 2.1 Description of The Ingredients to be Used

	Table 2.1. 1 The Ingredients			
No.	Product Name and Figure	Amount		
1.	Mung Bean (Blue Ribbon Group, imported from Australia)	200 grams		
2.	Figure 2.1 1 Mung Bean Mineral Water Figure 2.1 2 Mineral Water	400 mL (for soaking) 1000 mL (for blending)		
3.	Granulated Sugar Figure 2.1 3 Granulated Sugar	100 grams		



### 2.1.1 Mung Bean

Mung Bean or *Vigna radiata* belongs to the legume family and is one of the best sources of plant-based protein. It also contains essential amino acids which are not produced naturally by human body but are needed. In this recipe, the mung beans are soaked for 12 hours which produce sprouted mung beans. It is necessary to help reduce the amount of oligosaccharide which may cause flatulence. In a 100 g of mung bean, contained 347 kcal of energy; 62,62 g of carbohydrate; 1,15 g of fat; and 23,86 g of protein.

## 2.1.2 Mineral Water

It is known that tap water in Indonesia has not meet the standards of drinking water. Tap water tends to have sediment at the bottom of the container when left for some time. It is also not as clear as mineral water when seen under sun light. Thus, we use mineral water in the process of making Bean-Yo mung bean yogurt.

### 2.1.3 Granulated Sugar

Granulated sugar is a form of disaccharide. For 100 g of sugar, containing 387 kcal of energy; 100 g of carbohydrate; 0 g of fat; and 0 g of protein. Granulated sugar holds an important role in the ingredient

list. Bacteria or probiotics in the yogurt starter are naturally feeding on lactose or milk sugar which contained in animal milk. Since we were making vegan yogurt, it is necessary to feed the probiotics to ensure the culturing process will continue until the fermentation process is done.

### 2.1.4 Vegan Yogurt Starter

A yogurt starter package is usually containing skimmed milk powder. It is to ensure that the probiotics have enough lactose to feed them during the fermentation process of yogurt. A vegan yogurt starter, on the other hand, contain maltodextrin. It is a man-made substance from rice, wheat, potato, or corn starch to help thickens the vegan milk because vegan yogurt without any thickeners may be runny.

Table 2.2. 1 The Tools				
No.	Product Name and Figure	Function	Material	Dimension
1.	Food Scale (KrisChef EK3550-31P)	Used for weighing the materials used in this product.	mix material	-
2	Figure 2.2. 1 Food Scale	II	· · · · · ·	1:
2.	Bowl	Used for soaking mung bean in water overnight.	ceramic	diameter 17,5 cm height 6 cm
	Figure 2.2. 2 Bowl			

# 2.2 Description of The Tools Used During The Processing

3.	Blender (National MX- T2GN) Figure 2.2. 3 Blender	Used for refining the mung bean to extract its milk.	plastic and glass	500 mL capacity
4.	Cheese Cloth	Used for draining and separating ground mung bean and lumps from its milk.	cotton	$50 \times 50 \text{ cm}^2$
5.	Tin Bowl Figure 2.2. 5 Tin Bowl	Used for containing the milk while sifting the milk with cheese cloth.	aluminum	diameter 17 cm height 6,5 cm
6.	Saucepan (Tivoli Plus) Figure 2.2. 6 Saucepan	Used for sterilizing fermenting jars' lids and cooking the milk.	stainless steel	diameter 15 cm height 9,5 cm

7.	High-Pressure Pot	Used for sterilizing fermenting jars.	stainless steel	diameter 21 cm height 22,5 cm
8.	Tongs Tongs Figure 2.2. 8 Tongs	Used for grabbing jars and the lids from boiling water.	silicone and stainless steel	-
9.	Whisk Figure 2.2. 9 Whisk	Used for whisking the milk while cooking to prevent burning.	stainless steel	-

10.	Thermometer (TP101)	Used for keeping track of temperature while heating the milk.	plastic and stainless steel	-
11.	Paper Clip Figure 2.2. 11 Paper Clip	Used for keeping the thermometer from sinking in the saucepan.	metal	small
12.	Small Bowl Small Bowl Figure 2.2. 12 Small Bowl	Used for mixing the yogurt starter with a small amount of milk to prevent lumps.	ceramic	diameter 10,5 cm height 5,5 cm
13.	Jar (Ball Mason) Figure 2.2. 13 Jar	Used for fermenting storage.	glass and aluminum	4 × 473 mL