

# CHAPTER 1

## INTRODUCTION

### 1.1. Background of The Study

The main reason for me to make this jackfruit rags rendang is to make a vegan alternative to rendang which is one of the most famous Indonesian food that is a staple in many household or gathering. In this time and era, there are a lot of people that are becoming more health concious and wanting to have a healthier option to their comfort food which is rare and hard to find especially in Indonesia where there are not many vegan option available in restaurant or supermarket.

The second reason of making this product is to help food waste management. Based on The National Development Planning Agency(Bappenas) Indonesia produced 23-48 million tons of food waste per year in the period of 2000-2019 which is equivalent to 115-184 kilograms per capita per year and keep increasing year after year. Food waste is one of the largest waste in the world and can produce a large amount of methane which is 25 times more harmful than carbon dioxide in terms of trapping heat in the atmosphere and will contribute with the global warming problems that is already a big issue. The utilization of jackfruit rags that make up to 25% of the fruit weight can significantly reduce the food waste produced by jackfruit.(Dam and Nguyen, 2013)

Jackfruit rags, though considered a waste, has multiple health benefits and is considered a nutritious food. Just like the fruit, jackfruit rags contains similar nutrition value as the fruit, containing carbohydrate, dietary fibers, carotenoids, and vitamins, which is vital in making a healthy balance diet in a vegan lifestyle(Ranasinghe et al. 2019). By making a mock meat using a ripe jackfruit rags, we provide a nutritious alternative to a comfort food while also offering a solution to reduce food waste.

#### Nutrition and Health Benefits:

- a. Jackfruit rags are high in dietary fiber
- b. Help with blood sugar control
- c. Reduced risk of inflammation that can lead to heart disease
- d. Reduced risk of type 2 diabetes
- e. Anti-inflammatory that can help lower blood sugar
- f. Preventing skin problems
- g. Immune boosting
- h. Help with weight loss
- i. Reduce blood pressure
- j. Improve digestion system
- k. Ulcer treatment
- l. Nerve system booster
- m. Enhances vision

This jackfruit rags rendang will have a slight sweet taste from the jackfruit rags and a savoury pungent flavor from the spices and seasoning of the rendang

#### **1.2. The Objectives of The Study**

The objectives of the study is as follows

- a. The development of this product aims to reduce food waste and create a nutritious vegan friendly alternative to meat.
- b. To provide knowledge about processing and producing a new product.
- c. Assemble, determine, and test a process to produce a product.
- d. Assessing consumer acceptance of the product.
- e. Prepare costs and a definite price range for these products.
- f. Plan a market strategy for the final product.

### **1.3. The Benefits of The Study**

The following are some of the advantages of this study, such as

- a. Develop ideas and creativity
- b. Developing a new meat substitute that is vegan and also nutritious
- c. Developing and creating products that are new and innovative
- d. Reduce food waste produced by jackfruits.