

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Nowadays, the food processing industry prioritizes innovation to produce healthier types of food. This is in line with people who are starting to adopt a healthy lifestyle by choosing and consuming food products that have good nutritional content and reducing products that have low nutritional content. To create a healthy society, it is necessary to use raw materials that have high nutritional content in the process of making snack products (Yuniartini & Nugrahani, 2024).

Snow white cookies are a type of cookies that has a crescent-like shape and is covered with snow-like donut sugar on top (Sari, 2022). Generally, the characteristics of cookies are crispy, crumbly, dry, brownish-yellow or according to the color of the ingredients used, have a distinctive fragrant aroma, and taste delicious, savory and sweet (Aliyi, 2020). Snow white cookies is made from a dough of wheat flour, cornstarch, butter, milk powder, refined sugar and egg yolks that are baked in the oven until cooked and topped with donut sugar. The shelf life of snow white cookies is quite long, because the moisture content contained is small. This cookies is much loved by many people because when bitten it tastes good, savory and cold on the tongue. Snow white cookies is usually a typical dish on holidays such as Eid, Christmas and Chinese New Year. Making snow white cookies can be made on a household scale because without the need for special skills and fairly simple equipment can produce snow white cookies with good quality (Sari, 2022).

Generally, snow white cookies are made from wheat flour which contains gluten. Products containing gluten should be avoided by some individuals because over the past decade, more and more people have been diagnosed with celiac disease, wheat allergies, and gluten intolerance. Therefore, the need for glutenfree products is increasing (Frauenhoffer, 2024). Celiac disease is an autoimmune disease that differs from classic allergies. In autoimmune diseases,

the body's immune system attacks its own tissues rather than protecting the body from foreign objects. Celiac disease can occur at any age. Celiac disease is generally caused by proteins from wheat, rye, and barley. However, this disease occurs due to several factors such as genetic predisposition, reactive epitopes, and gut permeability (Casper & Atwell, 2014). The prevalence of celiac disease in the general population with differences between regions is 1% (Leonard et al., 2017). To date, the only therapy that differentiates celiac disease and other related disorders is strict adherence to a gluten-free diet (or wheat-free for wheat allergies) (Cairano et al., 2018). Therefore, gluten free snow white cookies are made from kepok banana flour as a substitute for wheat flour.

In improving the quality and diversification of bananas can be processed into flour (Chaniago et al., 2023). Kepok banana flour can substitute the role of wheat flour in cookies because it contains a lot of starch. The process of making cookies does not require development so banana flour has a high chance of substituting the role of wheat flour (Aliyi, 2020). Therefore, banana flour is expected to increase the quality of cookies and the potential of local food (Yasinta et al., 2017). The selection of banana types needs to be considered in order to produce good quality banana flour. Kepok banana is the best choice because it can produce the whitest flour (Aliyi, 2020). Kepok bananas are a type of plantain. Plantain bananas have higher starch levels and lower sugar levels than banana types (which can be consumed directly) (Putri et al., 2015). Banana flour contains calories, water, protein, fat, carbohydrates, fiber, ash, calcium, phosphorus and iron (Morton (1987) in Aliyi 2020)

## **1.2 Objectives of the Study**

1. Following the high demand for gluten free food product, this study provides cookies with gluten free ingredients
2. To determine consumer acceptance of snow white cookies using kepok banana flour.