

CHAPTER I

INTRODUCTION

1.1 Background of the Study

In an era increasingly characterized by increased awareness of environmental issues, innovation in the field of vegetarian cuisine is becoming increasingly important. The demand for culinary options has underscored the importance of vegetarian cuisine in catering to diverse cultural and philosophical preferences. Based on a survey conducted on a sample of the millennial population, findings show a significant increase in the adoption of a vegetarian diet in recent years. Factors driving this change include concerns over the ethics and environmental impacts of animal food production. The implications for the food industry include new opportunities to develop innovative plant-based products that meet the needs of increasingly environmentally conscious consumers (Aschemann et al., 2021). Other environmental issues, such as food waste are also a great concern.

The use of food waste, such as taro stems, in the context of vegetarian food innovation shows great potential in reducing food waste and supporting environmental sustainability. Taro stems, which are often ignored and considered food waste, actually can be used as raw materials to create various innovative food products (Chen & Wang, 2021). Taro stems can be processed into the main ingredient in making *basreng*.

Basreng is a popular snack enjoyed by many Indonesians. However, traditional *basreng* is generally made from animal ingredients such as fish or beef, which poses a challenge for those following a vegetarian diet. This dietary restriction prevents vegetarians from indulging in this beloved snack, which is known for its crispy texture and savory flavor.

Utilizing taro stems not only helps reduce food waste, but also presents a sustainable and nutritious alternative for the growing vegetarian community. Thus, innovation in utilizing food waste such as taro stems not only supports the principles of sustainability in vegetarian food, but also has the potential to create more varied and nutritious food products for consumers.

Taro stem (*Colocasia esculenta*) is a part of the taro plant that is often used in various Southeast Asian dishes. Apart from providing a crunchy texture, taro stem is a good source of fiber and contains various nutrients, including vitamin, folate, and potassium. Taro stem also contain antioxidants and anti-inflammatory properties (Cahyani et al., 2023).

In the context of innovation in making vegetarian *basreng*, the use of oyster mushrooms as additional ingredients along with taro stems offers an interesting and nutritious approach in expanding the vegetarian food repertoire. Oyster mushroom (*Pleurotus ostreatus*) is a type of mushroom that is popular in the culinary world. This mushroom has a soft texture with a distinctive taste. Apart from that, oyster mushrooms are also known as a good source of dietary fiber and minerals. The inclusion of oyster mushrooms in the process of making vegetarian *basreng* not only adds a unique flavor dimension, but also increases the nutritional value of the product. This innovation reflects efforts to create more diverse and vegetarian food options.

The production process of vegetarian *basreng* involves several steps. The initial step involves boiling the taro stems and oyster mushrooms in hot salted water. It is crucial as it reduces the oxalate content in the taro stems, thereby minimizing the risk of skin and throat irritation. This principle also applies to oyster mushrooms, which contain oxalates that can cause irritation if consumed in high amounts. The next step involves shaping the dough into a tube and frying it half-baked until the surface becomes firm and hard to maintain the shape of the dough and prevent it from becoming soft and easy to slice. After that, the mixture is placed in a chiller to increase the consistency and tighten the fat,

thereby improving the texture after frying (Fitriyanti, 2022). The dough is then sliced and fried at 180°C for 10 minutes. The final step involves sautéing the *basreng* with seasoning.

1.2 Objectives of the Study

The objectives of this study are following below:

1. Introduce the possibility of utilizing neglected taro stems, originating from the food waste category, thereby unlocking their culinary potential and simultaneously reducing waste, thus expanding culinary options.
2. Determining the nutritional facts, food safety and packaging, as well as the financial aspects of the vegetarian *basreng* innovation.