

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Chickpeas belong to the *Fabaceae* family, also known as legumes. In Indonesia, chickpeas are commonly recognized as a typical souvenir brought back after performing the Umrah or Hajj (Salim et al., 2018). The chickpea (*Cicer arietinum*) is a plant belonging to the *Fabaceae* family that produces small, yellowish pods. Chickpeas are a type of legume that contains high levels of fiber and protein, (as cited from the International Journal of Gastronomy and Food Science, Volume 18 2019).

Soybeans are leguminous plants that serve as the basic ingredient for making foods such as tofu and tempeh. There are several types of soybeans, namely yellow soybeans, black soybeans, and green soybeans (*edamame*) (Soleha et al., 2018).

Mung beans are one of the important leguminous plants in Indonesia. However, there is still very little public attention given to this plant. This lack of attention is due to the very low yield per hectare (Fitriani and Ade 2014). Mung beans are leguminous plants that can grow in subtropical climates, are drought-resistant, and are resistant to pests and diseases. Mung beans are rich in protein. The nutritional content of mung beans per 100 grams includes approximately 21.04 grams of protein, 1.64 grams of fat, 63.55 grams of carbohydrates, 11.42 grams of water, 2.36 grams of ash, and 2.46% fiber (Aminah and Wikanastri, 2012).

There are several varieties of anchovies in the ocean. In Indonesia, anchovy is one of the most economically valuable fish, and it is widely consumed. Anchovies are pelagic fish that may survive up to 200 meters deep, it is among the biggest species and may be found along the coasts of countries (Stephenson and Smedbol, 2019). Anchovy is a part of the ordo *Clupeiformes* and the family *Engraulidae*, which includes 16 general and 172

species (Eschmeyer et al., 2021). These fish are dispersed across the ocean. Anchovy are also affected by the salinity, chlorophyll-a content, and temperature of the surface water (Ariana et al., 2020). Capturing anchovies throughout the world continues to be conducted and improved. There are still regions where anchovy fishing might be increased, such as Bone Bay in Bone Regency, South Sulawesi. Bone bay is part of the waters of the East Indian Island (Safaruddin et al., 2017). Yet, other things occurred in the waters of Tegal in Indonesia, Central Java, specifically that they had surpassed the limit, this demonstrates that anchovies are essential to the community (Sutono & Susanto, 2016).

The creation of Spicy Anchovy Hummus is inspired by a desire to combine the unique flavors of the Middle East with Indonesian cuisine. Hummus is popular for its health benefits and delicious taste. It is made even more enticing with the addition of spicy anchovy sambal, a flavor that appeals to Indonesian tastes. This product is rich in protein and offers a unique and authentic flavor combination that will tantalize the taste buds.

In the production process, two main techniques are used to maintain quality and flavor: boiling and stir-frying. The main ingredients, including chickpeas, soybeans, and mung beans, are boiled until soft and smooth. Afterward, the anchovies are cooked in a pan with chosen spices to enhance their aroma and taste. These two processes are combined to create Spicy Anchovy Hummus, a rich and perfectly textured product ready to be enjoyed anytime.

1.2 Objectives of the Study

The objectives of this study are following below:

1. To create a savory spread using high-protein beans and anchovies as the primary components. This is intended to develop a nutritious and attractive alternative food product for consumers.

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2. To evaluate the sensory characteristics (taste, texture, aroma, and color) of the spread produced and measure consumer acceptance through taste tests and surveys.