

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Pempek is one of the traditional foods from South Sumatra, Indonesia. Pempek is one of the national dish and highly likeable. There are many types of pempek, such as lenjer, kapal selam, pistel, tahu, adaan, kulit, dos, and keriting. Pempek is generally served with cuko, cucumber, and noodle. Cuko is a dark pempek sauce made from brown sugar, tamarind, and vinegar as main ingredient. The flavor of cuko is sweet and sour.

Pempek is made from ground fish meat, starch as a binder, salt and garlic to add flavor, and water to dilute (Sari, 2019). One of the fish that is often used in making pempek is mackerel. It is commonly use because mackerel has a savory flavor, a dense and slightly chewy texture, and the ability to produce a strong scent (Deanisa *et al.*, 2022). Mackerel is a pelagic fish and has a high protein and low fat content (Deanisa *et al.*, 2022). Fish with low fat content can form a good gel with high gel strength (Kuncoro, 2019)

In the pempek dough, starch is needed to give chewiness to pempek. One of the most prevalent and plentiful substances in nature is starch, which serves as a reserve source of carbohydrates for nourishment in plants. The majority of the starch is found in tubers (such as cassava, sweet potatoes, and potatoes), seeds (such as corn, rice, and wheat), stems (such as sago), and fruit. Banana has the possibility to become alternative source of starch since it's common in tropical countries (Marta *et al.*, 2019). Starch has been widely used in the food and non-food industries. In food preparation starch can be used as raw ingredient and as an addition (Fida *et al.*, 2019). When added to food, starch can serve as a filler, a fat substitute, a thickening, and other functions (Fida *et al.*, 2019). It can also be used

as a raw material in goods including bread, biscuits, noodles, cookies, and pasta (Fida *et al.*, 2019). One of the starches that have been used commercially is tapioca starch. Meanwhile there are many other unused starch sources such as banana starch.

Kepok Bananas are one of the food source that contains high carbohydrates. According to Suloi (2019) banana has high carbohydrates content and mostly consist of starch. Fruits that contain high carbohydrates are possible to use as starch source. Unripe banana pulp contains between 70 and 80 percent starch in dry matter (Marta *et al.*, 2022). The application of semi-finished products from kepok banana such as starch or flour are still limited (Herlina *et al.*, 2022). Therefore, it is necessary to apply banana starch to food to determine the potential of banana starch. Kepok banana starch has the potential to be used in making pempek lenjer.

1.2 The Objectives of The Study

The objectives of the study are following below

1. To give alternative use of raw kepok banana
2. To utilize fruits that are high in starch content as an alternative source of starch