## **CHAPTER I**

## **INTRODUCTION**

## 1.1 Background of Study

Kabocha or Japanese yellow pumpkin is one of the most popular vegetables in Indonesia due to its health benefits, but sadly it is still not frequently used by the society. Typically, the use of kabocha is only found in certain foods, for example tempura, weaning foods, or else. It is regrettable if yellow pumpkin is not effectively used for its benefits. Dietary fiber, especially pectin, biologically active compounds, beta-carotene, vitamin A, and tocopherols are all abundant in yellow pumpkin. It also contains other vitamins, for example vitamin B6, K, C, thiamine, riboflavin, and any other minerals (potassium, phosphor, magnesium, iron, and selenium).

Not only the fruit itself, yellow pumpkin seeds are also contains phytoestrogen chemicals to prevent hyperlipidemia and osteoporosis. They also have anticancer benefits. Vitamin E is also found in yellow pumpkin seeds. Even better, the seeds themselves can be eaten as a snack, salad, or cereal, or you can just mix them into the batter for bread or a cake. Furthermore, pumpkin seeds can be used to produce vegetable oil which has many advantages for the body (Lestari & Meiyanto, 2018). Seeing the many benefits that exist in pumpkin seeds, I also use pumpkin seeds in pumpkin as a substitute for almond topping which is usually used as a crispy almond topping.

These days, many different types of cookies are offered around the world. In Indonesia, Almond Crispy is one of the best and most well-liked cookies which originated in Surabaya (Kusuma et al., 2017). In its homeland, Almond Crispy is known as Tuile. Tuile is a type of cookie that developed in France and has been very popular since the 1800s (Soechan; Kusuma, 2017). Many people like this type of cookie because the texture is crispy and tastes sweet. Almond Crispy is a type of cookies based on flour,egg whites, sugar, butter, also almond slices. Almond crispy is made using creaming method that is start with mixing the butter and sugar until they are lightened in color and fluffy. And then when the butter and sugar fluffy eggs are beaten in one at a time. Then adds the dry and liquid ingredients alternately to the butter mixture. According to the cookies cookie technique, Almond Crispy is included in the type of drop cookies, which is printing soft dough on a baking sheet using a spoon. The tool used to make this product is a special mold in the form of a mica sheet that is given a hole with the same diameters

The use of Japanese Yellow Pumpkin and Pumpkin seeds aims to add almond crispy innovations, and also reduce the utilization of wheat four. With the utilization of Japanese pumpkin, it is hoped that variations of cookies can be made and increase the use of food ingredients, which as Japanese pumpkin.

## 1.2 Objective of The Study

The objective of the study:

- 1. Inventing Gluten free snacks
- 2. The modification of almond crispy