

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Pastries such as crackers are one of the most favorite snacks in the world processed by fermentation and has a crunchy texture. They are typically made from hard dough that went through a process called fermentation, flat shaped with a crunch texture, a low water content and has a salty taste. With its unique characteristics, they have a long shelf life ranging from several weeks to several months.

Cracker materials are divided into two components which are binder and texture softening material. The binding or dense dough-forming ingredients could be wheat flour, water, and salt. While, the ingredients that function to soften the texture could be butter or margarine and baking soda.

Mocaf (Modified cassava flour) is a product made from cassava cells that are modified by the process of fermentation. After by passing the process of fermentation, it can be used to make various products. According to its contribution towards GDP, cassava contributes the third largest food crop, In the year 2003 amounting to IDR 6.1 trillion, surpassing rice and maize. The contribution cassava production to the world is 10%, the production was 16,913,104 tons in 2002, 18,523,810 tons in 2003, and 19,249,169 tons in 2004 (Aptindo, 2010).

With the extravagant cost of wheat flour, makes flour based nourishment industry seeking out for an elective source of carbohydrate crude materials cheaper substitute for wheat. The experiments from trials on the substitution of wheat flour with mocaf, showed that in order to deliver great quality noodle, mocaf can be utilized up to 15%, though for low quality noodles, mocaf can be utilized up to 25% (Misgiyarta, 2009) With its distinctive characteristics, mocaf can be utilized into a food ingredient with

a wide variety of scale such as pasta, bakery products and biscuits to semi-moist foods, with a similar range of applications as flour, rice and other starchy ingredients. Mocaf has better aroma and flavor compared to regular cassava flour, it has a whiter color than usual cassava flour.

Chicken feet is a by-product of the *RPU*. They can be processed and used as flour and as a substitute for various foods, which are not generally known (Hadi et al., 2020). The content of chicken feet contains rich in collagen and protein. Chicken feet serve as an additional ingredient in many foods, such as kastengel (cheese cookies) and crackers (Shobikhah, 2014).

1.2 Objectives of the Study

The objectives of this study are following below :

1. To follow and expand healthy and gluten free products, the study aims to create a healthy alternative cracker for everyday snack choices which are from modified cassava flour and chicken feet flour.
2. To verify acceptability of healthy and gluten-free pizza crackers from modified cassava flour and chicken feet flour