

CHAPTER I

INTRODUCTION

1.1 Background of The Study

A snack is a food item that is typically eaten in between larger meals. Snacks are usually consumed 2-3 hours before the main meal is consumed (except breakfast). Snacks are typically consumed twice a day, between breakfast and lunch and between lunch and supper, as the average individual eats three main meal times: breakfast, lunch, and dinner. Snacks are highly favored by all demographics, including adults and children (Pradipta, 2012). Although they are not a necessary food, snacks are a popular choice that are frequently consumed by people of all ages, including men, women, children, teens, and adults. Spending on food, particularly snack buying, tends to increase as a percentage of household income. Tortillas or corn chips are one of the snacks that many people buy (Rohmayanti et al., 2019).

The societal acceptance and likeability of corn-based products is demonstrated by the popularity of tortillas in Indonesia (Febrianto, 2014). Corn, however, is deficient in protein, iron and calcium. One way to raise the amounts of protein, calcium and iron in processed maize products is to replace them with foods strong in protein, iron, and calcium, such soybeans and lentils. The choice of soybean and lentils as a substitute material in the manufacture of tortilla chips is intended to improve protein content, calcium content, and iron so that people have alternative snacks that are nutritious and delicious.

The manufacturing of high-protein tortilla chips in Indonesia using soybeans and lentils has several advantages for the country's economy and health. A balanced diet and general health are facilitated by the high protein content of lentils and soybeans as well as their numerous nutritional advantages, including fiber, vitamins, and minerals (Hamid et al, 2019). Regular use of these components can enhance gut health and lower the chance of developing chronic

diseases. Using baking method instead of deep drying method also helps in lowering the fat content in the end product further improve the nutritional value compared to regular tortilla chips. Utilizing locally grown raw materials like soybeans and lentils promotes food security and sustainable agriculture, lessens reliance on imports, and boosts local economies by lowering production costs and increasing market competitiveness. Thus, Indonesia's production of high-protein tortilla chips supports regional agriculture and a sustainable economy in addition to meeting consumer demands for wholesome food.

1.2 The Objectives of The Study

The objectives of the study are:

1. To develop and evaluate high-protein tortilla chips using lentil and soybean flours as primary ingredients.
2. To formulate and evaluate high-protein tortilla chips made from lentil and soybean flours that effectively meet the daily protein requirements of the general population and gym-goers.