

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Healthy, environmentally friendly, and functional food options are just a few examples of how the food business has evolved in recent years to suit customer demand. More and more people in the world choose plant-based products over animal-based nutrition, occasionally or permanently (Botella-Martínez et al., 2022). This has led to the development of innovative products that introduce unique ingredients and flavors into everyday meals. Among these innovations, pasta sauce has become one of the foods that can be the focus of product development, as pasta sauce is widely used as a main component due to its practicality in many everyday dishes.

One such innovative product is beetroot-based pesto, which combines the rich and earthy flavor of beetroot with the versatility of classic pesto. Red beetroot (*Beta vulgaris rubra*, BVR) is members of the Chenopodiaceae (Ninfali & Angelino, 2013). Beetroot, although not traditionally used as an ingredient in pesto, offer a fresh twist on the usual fresh basil. The natural sweetness and bright red color of beets make them an interesting alternative and add a unique element to pesto.

In Indonesia, utilizing beetroot as the major ingredient in pesto provides a healthy and nutritious alternative, as well as an innovative innovation in local cuisine. Beetroot, which are easy to find in traditional markets, provide a distinct earthy flavor and bright red color to pasta dishes, making them more visually appealing. The addition of beetroot within pesto is a fascinating new development for Indonesian consumers who are increasingly looking for innovation in taste and convenience in daily food.

The production process of this beetroot pesto itself consists of several steps, where the initial step is roasting the beetroot for 25 minutes at 200°C which is the most important step to remove the earthy smell of the beetroot itself. Furthermore, the roasted beetroot is then blended with other ingredients

such as walnuts and milk, which not only improves the balance of taste and texture, but also increases nutritional value. The final step is by sautéing the mixture that has been blended smoothly with seasoning. This beetroot pesto introduces a healthier innovation to traditional pesto which traditional pesto contains antioxidants from basil and olive oil, beetroot pesto offers a higher and more unique antioxidant content because beetroot's betalains, which are not found in regular pesto.

1.2 Objectives of the Study

The objectives of this study are following below:

1. Develop the potential of utilizing beetroot as the main ingredient of pesto to increase its fiber content.
2. Assessing the nutritional properties, packaging and financial consideration beetroot pesto innovation.