## **CHAPTER V**

## CONCLUSION AND SUGGESTION

## 5.1 Conclusion

In conclusion, these tofu pulp brownies are an innovative way to utilize tofu pulp as a substitute for wheat flour, which is often considered food waste or only used as animal feed. However, tofu pulp can now be transformed into a delicious snack with market value. Research findings indicate that these brownies have good aroma, taste, and appearance. Although previous trials found the brownies to be too large and thick, this can be improved by reducing the size to a more practical portion that can be eaten in one sitting. Each portion of these brownies contains 290 calories. This calorie count is relatively high for a snack, resulting from the addition of tofu residue, dark chocolate compound, butter, and sugar. The brownies themselves contain 23 grams of carbohydrates and 9 grams of protein per portion. Additionally, these brownies are gluten-free, making them safe for anyone to consume, and have a shelf life of three months. From an environmental perspective, the use of tofu waste helps reduce organic waste from the tofu industry, which is often discarded and can pollute the environment. By processing this waste into a marketable product like brownies crackers, there is a tangible effort to support the concept of a circular economy and sustainable waste management. In conclusion, the use of tofu waste not only produces functional food products but also serves as an effective solution to reduce the negative environmental impact of food industry waste.

## 5.2 Suggestion

Further research and development is recommended to improve the texture, taste, appearance by adding toppings, and overall quality of tofu pulp-based brownie crackers. To optimize the production process and produce products with superior taste and maximum crispness, exploration

of various alternative processing methods such as gradual temperature baking techniques, use of natural additives, and development of gluten-free formulas is very important. Additionally, in-depth studies on the physicochemical characteristics of tofu residue, its stability during storage, and its impact on product shelf life are also necessary to ensure the safety and commercial viability of the product.

On the other hand, marketing and distribution aspects are also important considerations in the development of this product. Studies on consumer preferences, pricing strategies, environmentally friendly packaging designs, and the effectiveness of digital and conventional sales channels will greatly help in increasing competitiveness in the market. Research on market segmentation, such as consumers with specific needs (gluten-free or vegetarian), could open opportunities to position tofu pulp brownies crackers as a healthy and sustainable snack alternative. Thus, the integration of product innovation, production process efficiency, and appropriate marketing strategies will significantly contribute to improving the quality, economic value, and market acceptance of tofu pulp brownies crackers.