

## CHAPTER V

### CONCLUSION AND SUGGESTION

#### 5.1 Conclusion

In conclusion, Nata de pinari is a unique and innovative fermented food product derived from food waste, particularly rice washing water, pineapple peels, and pineapple fruit. It undergoes a fascinating fermentation process driven by *Acetobacter xylinum* bacteria, resulting in the formation of cellulose-based structures known as nata. Nata de pinari offers several notable characteristics, including it is rich fiber content, contains a wealth of nutrients and low-calorie. The sour aroma in nata de pinari is a result of the bacteria's activity during fermentation, which transforms sugar into acetic acidic compounds.

The choice of packaging, such as PET food-grade plastic jars, ensures the product's protection and accessibility to consumers through various distribution channels, including supermarkets, convenience stores, e-commerce platforms, and social media, also it is readily available, cost-effective and has an appealing appearance.

In the context of sustainable food production and reducing food waste, nata de pinari serves as an exemplary model of turning by-products into a valuable and enjoyable food item.

#### 5.2 Suggestion

This fermented food products based on food waste can be further developed by creating different syrup flavors and packaging sizes. Additionally, innovate by producing nata de pinari with various shapes and sizes, including smaller pieces that can be used as toppings for beverages (that can fit through a drinking straw).