

CHAPTER V

CONCLUSION AND SUGGESTION

5.1 Conclusion

In conclusion, the carbonated almond milk with soursop fruit is an innovative beverage that combines the nutritious qualities of almond milk and soursop fruit to offer a unique, dairy-free carbonated drink. This product adds variety to the functional beverage market, especially for consumers seeking plant-based and tropical-flavored refreshment. The study showed that the product has an appealing aroma, sight, and taste, characterized by a smooth and creamy texture from almond milk, complemented by the fresh, slightly tart flavor of soursop and a pleasant carbonation that enhances overall sensory experience.

The production process involves several stages such as soaking and blending almonds, extracting soursop juice, mixing, and carbonation, each contributing to the final product's quality. Nutritionally, the product is low in cholesterol and saturated fat but rich in calcium, potassium, and antioxidants, making it a healthy alternative to conventional carbonated soft drinks. The formulated beverage contains approximately 120 calories per 200 ml serving, mainly derived from natural sugars in soursop and honey.

Regarding shelf life, the product maintains optimal taste and safety for about 3 to 5 days under proper refrigeration (4°C) due to the fresh nature of soursop juice and minimal preservation processes used. Packaging in airtight food-grade plastic bottles helps retain carbonation and prevent contamination but does not notably extend shelf life beyond this period. Economically, the cost analysis suggests the product can be produced affordably with an estimated production cost of Rp14,630 per serving (including ingredients and packaging), supporting its market viability.

5.2 Suggestion

It is recommended that further research and development can be conducted to improve the shelf life of the carbonated almond milk with soursop fruit. Exploring preservation techniques such as pasteurization, aseptic packaging, or natural preservatives could enhance product stability without impacting quality. Additionally, experimenting with other tropical fruit flavors or natural sweeteners may broaden market appeal and diversify product offerings.

Efforts should also focus on developing more sustainable packaging alternatives, such as recyclable or biodegradable materials, to align with environmental concerns and consumer preferences. Continued optimization of the production process can improve scalability, ensure consistent quality, and reduce costs. Marketing strategies are advised to emphasize the product's health benefits, lactose-free formulation, and refreshing characteristics to attract health-conscious consumers, including those with dietary restrictions.