

## CHAPTER V. CLOSING

### A. Conclusion

1. Streptozotocin (STZ) administration affected SOD levels, as indicated by differences in SOD levels in pre-test measurements between groups. STZ induction caused oxidative stress, as reflected in low SOD levels in the induced group compared to the healthy control group.
2. The administration of fermented rambutan seed infusion did not show a statistically significant difference in SOD levels in post-test measurements or differences between groups. However, descriptively, there was a trend of increased SOD levels, especially in the group that received fermented rambutan seeds for 7 days, indicating potential antioxidant activity. The results of this study still need to be further investigated in relation to the research findings.
3. Vitamin C administration did not provide a statistically significant increase in SOD levels compared to other treatment groups. Nevertheless, vitamin C still showed a tendency to maintain better SOD levels compared to the group without antioxidant treatment.
4. Overall, the intervention was not able to significantly increase SOD levels between groups, although there were differences in mean values and an increasing trend in certain groups. This indicates that the effect of treatment on the antioxidant system is still influenced by various factors such as dosage, duration of treatment, and the biological conditions of the test animals.

### B. Suggestion

The results of this study are expected to provide preliminary data on the potential for developing local natural materials and should be further researched as a potential source of antioxidants. Further research is recommended using different doses and fermentation times so that the antioxidant effects can be evaluated more comprehensively.