

ABSTRACT

This study evaluated the sensory acceptability of green grouper across five treatments based on four variables: appearance, taste, texture, and general acceptability. A panel of evaluators provided rating, which were analyzed using ANOVA and the Least Significant Difference (LSD) test to determine significant difference. Results showed that Treatment A consistently outperformed the other treatment in all variables, receiving the highest rating with descriptors of “Extremely Appealing,” “Extremely Delicious,” “Extremely Fine,” and “Extremely Acceptable.” Significant differences were confirmed at the 0.01 alpha level, indicating the effects of formulation variations on sensory attributes. The LSD test revealed that Treatments B,C and E had moderate performance with overlapping acceptability, while Treatment D consistently scored the lowest. These findings suggest that Treatment A is the most favorable formulation and should be prioritized for further development and commercialization. Improvements were recommended for Treatment D to enhance its sensory properties. Future studies should explore cost optimization, consumer preferences across larger demographics, and the effects of storage conditions on sensory quality to ensure the product’s market viability.

Keywords: green grouper sausage, sensory evaluation, ANOVA, LSD test, treatment comparison, product acceptability.