

Review of: "The anti-staphylococcal activity of probiotic- contain gelatin and whey coatings on processed chicken breast"

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Potential competing interests: No potential competing interests to declare.

Overall, the study is well-structured and provides relevant information. However, there are a few areas that could be further improved and clarified. The following specific comments and suggestions are provided to enhance the quality and clarity of the manuscript. The abstract provides a concise overview of the study, including the aim, methods, and results. However, it would be beneficial to include the main findings and implications of the study. Additionally, the abstract should mention the duration of the storage period (45 days) for clarity. The introduction provides a good background and rationale for the study. However, it would be helpful to include a clear statement of the research objective or hypothesis to guide the readers.

Materials and Methods:

- **Bacteria Strain:** Provide more information about the specific sources and characteristics of the probiotic strains used (*Lactobacillus plantarum* 1058 and *Bifidobacterium bifidum* 1644). This information would help readers understand the selection criteria for these strains.
- **Formulation and Coat Solution Preparation:** Clarify the specific concentrations of *Lactobacillus plantarum* and *Bifidobacterium bifidum* added to the coat solutions. Additionally, provide details regarding the viability and stability of the probiotic strains in the coating solutions.
- **Coating Chicken Breast Samples:** Describe the specific method used to deliberately contaminate the coated chicken breast samples with *Staphylococcus aureus*. This information is crucial for reproducing the study and assessing the accuracy of the contamination process.

Results:

- **Data Presentation:** Present the data on the growth of *Staphylococcus aureus* in a clear and organized manner, such as using tables or graphs. This would enhance the readability and facilitate understanding of the results.
- **Statistical Analysis:** Clearly state the outcomes of the statistical analysis, including the significant differences observed between the coated samples and control samples. It would also be helpful to provide the effect sizes or confidence intervals, if applicable.

Conclusion:

- Summarize the main findings of the study and their implications for food safety and shelf life. Highlight the novelty and significance of the results and consider discussing the practical applications of using probiotics in edible coatings for meat products.