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.

The manuscript describes a study aiming at assessing the impact of adding probiotic strains (*L. plantarum* and *B. bifidum*) to two types of coatings (gelatin and whey) on the dynamics of *S. aureus* and this on processed chicken meat.

The manuscript cannot be accepted for publication for the following reasons:

1. English quality is poor > this makes it difficult to read and to evaluate the scientific soundness of the paper > improving English language will contribute to the overall quality of the paper.
2. To my opinion, the experimental set-up - as described - does not allow to attain the goals of the study - see also (3). Too much info is lacking on the experimental set-up.
3. I have serious doubts about the trueness of the recorded data and the scientific value of the results and how they are interpreted. First of all, the authors only look at the counts of *S. aureus.* With the data as they are now, it is impossible to say anything on a possible effect of the probiotic as we do not have any info on the probiotic itself, e.g., the inoculated concentration, how this was verified, are the authors sure that the prepared concentration is still present, what are the dynamics of the probiotic during storage, and how might this impact on the dynamics of *S. aureus*. Secondly, how did the authors verify that the inoculated concentration of *S. aureus* was indeed 10^5 on all the samples tested? Counts should also have been performed on day 0. All the counts are, to my opinion, very close to each other with very high standard deviations - so what does a given number tell you if the margin of error is so high? The authors talk about significant differences between gelatin-coated samples and the control at D1 and D15, yet, even if this would be statistically significantly different (although I have my doubts given the huge standard dev), yet there's not even a log reduction, so what is the relevance of this? (and I repeat, we do not know anything about the probiotic in the coating). To end this, one might even reconsider the use of a probiotic in the coating as - according to the data - counts of *S. aureus* tend to increase faster in the probiotic-coated samples compared to the control!
4. Large parts of the discussion are not relevant for this study.

For general comments, see supplementary data.