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

Latife Betül Gül[1]

1 Giresun University

Potential competing interests: No potential competing interests to declare.

I congratulate the authors for their efforts. As far as I can examine, the shortcomings I noticed in the article are as follows:

1- The language of the article is not sufficient. There are errors in the English expression technique and there are also grammatical errors.
2- The title of the article is not understood at the first time. It should be fixed.
3- While writing the methods, especially in the "formulation..." section, the references used were not included. References must be added.
4- Why was S. aureus inoculation 5 log cfu/g used? Again a referance is needed here.
5- The count of lactic acid bacteria (LAB) was not mentioned at all. So, by what method was the lab inoculated at a certain concentration into the coating solutions? This must be explained. Additionally, LAB counts should have been performed in the samples during storage.
6- "coating" should be used instead of "coat".
7- At what temperature was the centrifuge performed for LAB harvesting? This should actually be 4 celcius. And it must be stated in the article.
8- Steril pure water should be used in the preparation of coating solutions. So everything must be sterile. It should be clearly stated in the method.
9-I think the examples are not enough. To see and evaluate the effect of each coating ingredient semi-separately, the sample should have been as follows: control (without any treatment), whey coating, whey coating+ Lb. plantarum, whey coating+B. bifidum, gelatin coating, gelatin coating+ Lb plantarum, gelatin+B. bifidum.7 samples in total.
10- Why were both ANOVA and Kruskal-wallis tests performed in the statistical analysis section? If it is decided to perform ANOVA after checking whether the samples are normally distributed, Duncan or Tukey is used for multiple comparisons.
11-The discussion part is not enough. The examples were not sufficiently compared within themselves. However, there is confusion in understanding when literature data is given in the discussion.
12- In Table 1, it is seen that there is a difference in terms of the number of S. aureus between the control sample and the other samples when the day 1 data are examined. How is this possible? In this case, it appears that the initial inoculation rate is different. How logical is it to compare data with different initial numbers during storage?

13-Counting method should have been written instead of "Surface culture". For example, pour plate method, spread plate method. And how these methods were done should have been written in detail along with their references.
14-Here, the pH of the coating solutions probably also were differed. In this case, pH measurement should have been performed in addition to microbial count in order to clearly reveal the effect of the ingredients. Even if there was no difference, it would be seen to be statistically insignificant.

In light of all these, I believe that re-examination of the article will create a scientific resource with a higher impact.

I wish success to the authors.