

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

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Potential competing interests: No potential competing interests to declare.

Dear Authors.

It has been a privilege to review your manuscript titled, "The anti-staphylococcal activity of probiotic-containing gelatin and whey coatings on processed chicken breast," in Qeios. In my opinion, the subject of the article is very interesting and important. However, due to the poor language, the manuscript requires an extensive overhaul in the write-up.

Please see the below suggestions provided for the "Abstract" section alone.

The names of the bacterial species should be modified to *Lactobacillus plantarum* for Lactobacillusplantarum and *Bifidobacterium bifidum* for Bifidobacteriumbifidum.

"...processed-cooked chicken breast has been covered by edible coats of whey protein"

**Revised: "...processed-cooked chicken breast has been coated with edible layers of whey protein"**

"Generally, *S. aureus* growth has increased with increasing the time on all treatments and the control."

**Revised: "Generally, *S. aureus* growth has increased over time in all treatments and the control."**

"However, coated samples with gelatin coats containing probiotics showed more anti-staphylococcal activity than control samples on days 1 and 15."

**Revised: "However, samples coated with gelatin containing probiotics exhibited greater anti-staphylococcal activity than control samples on days 1 and 15."**

"Regarding the samples coated with whey protein, of course, on days 1 and 15, and only in the samples containing *L. plantarum*, the anti-staphylococcal effect was significant compared to the control. ( $p < 0.05$ )."

**Revised: "Regarding the whey protein-coated samples on days 1 and 15, and specifically in those containing *L. plantarum*, the anti-staphylococcal effect was significantly different from the control ( $p < 0.05$ )."**

"While there was no difference in the antimicrobial activity of the types of coatings (gelatin/whey)..."

**Revised: "Although there was no variance in the antimicrobial activity between the types of coatings"**

(gelatin/whey)..."

"Accordingly, it seems that using probiotics in edible coats may be a hopeful way to cover types of meat products, especially cooked processed meats."

**Revised: "Thus, incorporating probiotics into edible coatings may offer a promising approach to cover various types of meat products, particularly processed cooked meats."**

Overall, the experimental hypothesis presented in the study seems reasonable, emphasizing the protection against the *Staphylococcus* strain that a probiotic coating provides when chicken breasts are refrigerated. However, the results are only preliminary, and the manuscript requires work. As mentioned earlier, the linguistic quality is relatively low, and hence, the write-up requires extensive modification. In my opinion, I wouldn't suggest publishing it in its present form.