

Review of: "Effect of Yogurt on Fluoride Induced Toxicity in Rabbits"

Konstantin Johannes Scholz¹

¹ University Hospital Regensburg

Potential competing interests: No potential competing interests to declare.

Dear authors, dear editor,

thank you for the opportunity to review the interesting manuscript. Although dealing with a generally relevant topic, the manuscript has massive deficiencies and would need a comprehensive adjustment in all parts as listed below:

Abstract:

The first sentence in your abstract is too general and without any mechanism explanation. Please rephrase. Maybe take a look at https://journals.sagepub.com/doi/10.1177/0960327118814161?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed, where the problem of renal toxicity is described shortly but in great detail, e.g. in the abstract.

In general, your abstract does not contain a proper M&M section, so it is completely unclear to the reader what the group abbreviations mean and which measurements were conducted. Please adapt.

Introduction:

Is 260 million people the global value? Please adapt and provide a definition for dental fluorosis here.

What does "and then inhibits metabolic pathway" mean?

How much did the creatinine levels increase in the Al Salhen and Mahmoud study? Please provide concise information (for example significant differences), eventually including some numbers, whenever other studies are cited.

Please give examples for the "health advantages" of yogurt, as it may also have disadvantages which should be named.

The paragraph describing the renal cell mechanisms and bacterial interactions is, again, very generally written and not concise. Please adapt.

Objective:

Please form a proper null-hypothesis in the "objectives" paragraph.

M&M:

Please provide a ethic approval number and an animal experiment application number in accordance with the r³ principles.

The treatment groups are unclear. Please add a flowchart of the experimental setup outlining the differences between the groups.

You wrote that drinking was given ad libidum. Have you monitred the drinking amount per animal, as it might influence renal ion concentration massively.

How was the fluoride and yogurt applied? If it was (maybe even simultaneous) oral application, fluoride and calcium from yogurt may inactivate each other directly and change the whole metabolism, so information about proper application is absolutely crucial.

Have you taken a baseline blood sample?

In the statistcial analysis part, you should name the exact tests that were used with the corresponding alpha, not only the software.

Results/Discussion:

In general, I would highly suggest a separation of result and discussion parts, as the mixture of results, graphs and literature references makes the paper almost unreadable.

The figures do not contain sufficient legends, as letters are not explained. Furthermore, I am quite unsure about the parametrical statistics and would suggest non-parametrical analysis. Again, the cryptic abbreviations and group names do not allow a reader-friendly understanding of the study results. You must extensively adapt the results part and after that discuss the influence of yogurt in detail in a separate discussion part.