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Journal Name:	European Journal of Nutrition & Food Safety
Manuscript Number:	Ms_EJNFS_36022
Title of the Manuscript:	Effect of Gum Arabic as Prebiotics and lactobacillus casei shirota (LcS) as probiotic on Oxidative Stress and Renal function in Adenine-Induced Chronic Renal Failure in Rats
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/journal/30/editorial-policy>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	- How the authors have taken the dose of GA as 15%. A study has used the GA in adenine –induced CRF at 6 and 12% and got better results. Why authors have taken higher dose? - As Ali BH group has already few reports on the anti-oxidant potential of GA in the same model it should be discussed thoroughly in comparison to this study. - The results of the present study showed that, GA and LcS treatment significantly diminished the inflammatory and oxidative stress induced by adenine administration. This sentence is vague as authors have not investigated any inflammatory parameters in this study. - Discussion is very poor. Authors have only corroborated their findings with other studies. They have not made any attempt to explain their findings that how the treatments are decreasing the oxidative stress. - Our results are in agreement with those of Ghonemy et al., 2014 who confirmed apoptosis scavenger properties of GA. Again this sentence is vague. Authors have not investigated the apoptosis in this study and they are claiming the apoptosis scavenging potential for their compound in this study. - Result depiction is very poor. Authors have not mentioned the units for biochemical parameters in many place viz. Serum Ca²⁺, Serum SOD, Renal SOD, Blood Reduced glutathione, Serum Malondialdehyde. - Statistical differences were shown by superscript. However many values do not possess superscript. It should be depicted with different superscript if it is significant. Leaving without superscript may lead to confusion for the readers - Serum MDA and renal MDA levels are quiet similar between group 5,6,7 in table 5. Authors should check for statistical analysis. Even if it is significant statistically, it seems biological significance is not apparent as there is only 0.2-0.5 units difference between the said groups. - Drugs and chemicals section is missing - Conclusion: The results suggest that that oral administration of gum Arabic and lactobacillus casei shirota could conceivably alleviate adverse effects of adenine induced renal toxicity. - As the work is basically focused on pre and probiotics which aim to antagonize the adverse products of intestinal microbiota thereby contributing towards ameliorated kidney damage, some work relevant to the mentioned part may be carried out. - Discussion: Authors have not made any attempt to explain the combined effect of GA and Lcs in comparison to the individual effects in respective group. Please discuss. - The reduced Proteinuria may be attributed to a decrease of blood pressure. How do authors claim this when they have not measured BP or any reference? Do BP increases in CKD? - Methods: Urine specimens were centrifuged at 900 rpm for 15 min, filtered to remove sediment and then urine volumes were measured. What authors have used for filtering urine. It should be mentioned. - Authors have determined FER, but they have not discussed its results and significance. - Authors have quoted the reference for increased intestinal and renal excretion of	- The study of 6 and 12% was in 2010. The dose used in the current study depending on more recent references used a dose of 15% as example that study of Ali, BH et al., 2012. - I discussed in comparison to this study (Highlighted in yellow) - The inflammatory part has been deleted from the paper. - The mechanism of the renaoprotective effect has been disused - The apoptosis scavenger properties of GA has been deleted from the paper. - The units of all the studied parameters have been mentioned. - Means with similar superscript (a, b c, d) letters in columns indicate non-significant difference ($P < 0.05$). however Means with no superscript (a, b c, d) letters in columns indicate a significant difference ($P < 0.05$). this was indicated at the following link http://www.jerrydallal.com/lhsp/similar.htm - There was statistical significant at $p < 0.05$ - Drugs and chemicals section has been added. - This part has been added to conclusion. - I will add this part in a future study. - Some parts including mechanism of the nephroprotective effect of GA has been added to discussion. - This part has been deleted from the paper. (The supernatant remains after centrifugation was transferred by careful decanting or pipetting. It is important that the sediment is not disturbed whilst the supernatant is being transferred) - Feed efficiency has been added to the results and discussion. - Only serum Ca²⁺ has been estimated, so, I indicated only serum Ca²⁺. - Approval of ethical clearance has been added to the paper. - The Manuscript has been reviewed in English grammar by native English speaker.



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	Ca²⁺, Mg²⁺ by GA. However, in this study they found that GA treatment significantly increased serum Ca²⁺. How do authors explain this? 17. Approval of ethical clearance for use of animals in the experiment is not mentioned. Please mention the number of approval. 18. Manuscript greatly needs revision in English grammar Are there ethical issues in this manuscript? Yes. Animals are sacrificed at the end of experiment and the authors have not mentioned the approval for the same from the competent authority.	
Minor REVISION comments	1. Values were expressed as the Mean $\pm$ SEM. This is repeated in statistical analysis section. The sentence may be removed. 2. Animal grouping and drug administration may be given in table or illustration format for quick understanding 3. Mention the name and place of software used for statistical analysis 4. What was the physical nature of lactobacillus casei shirota formulation? Have authors used any vehicle for administering the same. 5. Fluid Intake (ml) and Urine Output (ml). ml/hr or day? It should be mentioned	1- It is just indicated under each table as key to illustrate the significance difference between different treatment groups. 2- Animal grouping and drug administration has been illustrated in table . 3- Liquid formulation. Group3 and 4 only administered GA and LcS respectively without adenine treatment. 4- Fluid Intake (ml/day) and Urine Output (ml/day).
Optional/General comments	1. Few of the tables may be represented as bar graphs to avoid monotonicity.	Table 2 has been represented as bar graphs.