

Microplastic effects on mouse colon in normal and colitis conditions. A literature review (#104546)

1. BASIC REPORTING

<ul style="list-style-type: none"> Clear, unambiguous, professional English language used throughout. 	The English language should be improved
<ul style="list-style-type: none"> Intro & background to show context. Literature well referenced & relevant. 	✓
<ul style="list-style-type: none"> Structure conforms to PeerJ standards, discipline norm, or improved for clarity. 	✓
<ul style="list-style-type: none"> Is the review of broad and cross-disciplinary interest and within the scope of the journal? 	✓
<ul style="list-style-type: none"> Has field been reviewed recently. Is there a good reason for this review (different viewpoint, audience etc.)? 	The current review has different viewpoint
<ul style="list-style-type: none"> Introduction adequately introduces the subject and makes audience and motivation clear. 	The introduction needs more detail

2. STUDY DESIGN

<ul style="list-style-type: none"> Article content is within the Aims and Scope of the journal. 	✓
<ul style="list-style-type: none"> Rigorous investigation performed to a high technical & ethical standard. 	✓
<ul style="list-style-type: none"> Methods described with sufficient detail & information to replicate. 	✓
<ul style="list-style-type: none"> Is the Survey Methodology consistent with a comprehensive, unbiased coverage of the subject? If not, what is missing? Are sources adequately cited? Quoted or paraphrased as appropriate? 	Draw PRISMA flow chart to explain how to retired final papers
<ul style="list-style-type: none"> Is the review organized logically into coherent paragraphs/subsections? 	✓

3. VALIDITY OF THE FINDINGS

<ul style="list-style-type: none"> Impact and novelty is not assessed. Meaningful replication encouraged where rationale & benefit to literature is clearly stated. 	✓
--	---

<ul style="list-style-type: none"> Conclusions are well stated, linked to original research question & limited to supporting results. 	✓
<ul style="list-style-type: none"> Is there a well-developed and supported argument that meets the goals set out in the Introduction? 	✓
<ul style="list-style-type: none"> Does the Conclusion identify unresolved questions / gaps / future directions? 	✓

4. General comments

In this paper the authors reviewed microplastic effects on mouse colon in normal and colitis conditions. The paper is important and have the novelty in the point of continuously growing awareness of the toxicity of microplastics which are now present everywhere in the environment. Overall, the study is interesting and addresses a relevant research topic that may interest PearJ readers. However, I recommend that some adjustments/improvements be made before publishing the manuscript.

Specific comments/suggestions:

1. Line 27: Diseases not desiases.
2. Line 29: Replace (animals with colitis) by mice or rephrase this sentence.
3. Line 61: remove the sentence (MP entered into the organism with water and food accumulated in organs).
4. Your introduction needs more details. I suggest that you add paragraph about toxicokinetic of microplastics.
5. Line 91-95: Repeated sentences as in abstract ... change or improve the sentence.
6. Survey Methodology: Should draw PRISMA flow chart to explain how to the authors retired the final papers.
7. Line 124-125: animal sex is in 33 papers not in 34 papers, there was missed paper.
8. Line 127: type of plastics, 76.5% is equal to how many studies? Write number of them.
9. Line 148: It is better to replace (increase distance between crypts) with loss of crypts parallelism.
10. Line 157: It is better to replace (mucous and muscular membrane thickness) with mucosa and muscularis externa layers.
11. Line 158: It is better to replace (decease in the superficial epithelial height) with decease in the superficial enterocytes height or superficial absorptive cells.
12. Line 159: Write histopathological scoring or pathological score instead of histology score

13. Line 164: Remove word barrier from (colon epithelial barrier), instead of it colon epithelium.
14. Line 174:
(Choi et al 2021b) stated that decreased number and volume fraction of goblet cells, but in line 179 the same reference said there was ultrastructure increased the number of mucin droplets in goblet cells..... Revise these sentences.
15. Line 199: Replace endocrine with enteroendocrine cells.
16. Line 374: Revise is it colon shortening or intestinal ?... to exclude small intestine
17. Line 381: Replace cilia with microvilli
18. Add any abbreviation in the footnote of both tables.
19. In Fig.1 , revise time of exposure of MP in all 7 papers.
20. Finally, the English language should be improved to ensure that an international audience can clearly understand your text. I suggest you have a colleague who is proficient in English and familiar with the subject matter review your manuscript, or contact a professional editing service.

5. Confidential notes to the editor

Dear Editorial Department,

Thank you for your invitation to review this manuscript. Overall, the study is interesting and addresses a relevant research topic that may interest PearJ readers. However, I recommend that some adjustments/improvements be made before publishing the manuscript.