

Peer-Review Comments and Authors' Responses

Response to Reviewers

We are pleased to submit the revised version of our manuscript titled “The Influence of Maternal Diet on Gut Microbiota Diversity During Pregnancy: A Mini-Review” for consideration in the PPCR Journal. We sincerely thank the reviewers for their insightful feedback, which has been invaluable in improving the quality and clarity of our work.

Below, we provide our detailed responses to the comments raised by the reviewers

Reviewer 1

1. Introduction:

“These subgroups could be evaluated in a more direct analysis.”

Response:

We appreciate this suggestion and have grouped our study population into pregnant women with gestational diabetes, hypertensive disorders, or varying BMI. As there are only a few studies of each subgroup, 1 to 4 studies with great heterogeneity in methods, and reported results, we try to find agreements and differences between the whole group of pregnant women considering those characteristics as covariates.

2. Methods:

“The data summarized in the text and tables were not adjusted for missing data.”

Response:

We acknowledge the need to address excluded articles. A more explicit explanation of how missing data were handled (or not reported if omitted in the original studies) is now included in the revised "Methods" and "Limitations" sections.

3. Results:

a) “Check if Figure 1 is cited within the manuscript.”

Response:

We have reviewed the manuscript and ensured that Figure 1 is appropriately cited where relevant in the text.

b) “Abbreviations are usually defined at the first use in the abstract as well as in the main text. Check for 'GDM.'”

Response:

The manuscript has been revised to ensure that "GDM" (Gestational Diabetes Mellitus) is spelled out at its first mention in both the abstract and main text. Thereafter, the abbreviation is used consistently throughout the document.

Reviewer 2

1. Introduction:

“Please change GDM for Gestational Diabetes Mellitus when first mentioned.”

Response:

We have made this correction and ensured that the full term “Gestational Diabetes Mellitus” is spelled out in its first use.

2. Methods:

“Each author should report their correct affiliation.”

Response:

We have corrected the author affiliations, limiting the T.H. Chan School of Public Health affiliation only to the Teaching Assistants (TAs), while other authors list their respective affiliations. This change is reflected on the title page.

3. Results:

a) “Please provide more details about the different outcomes used.”

Response:

We have expanded the section detailing the different outcomes, including an explanation of the Shannon diversity index and how various metrics are measured. This should improve clarity regarding the methodologies used in the included studies.

b) “The statistical analysis section doesn’t seem necessary.”

Response:

We agree that this section was redundant for the type of review conducted. It has been removed from the results section, with relevant information summarized in a supplementary table as suggested.

c) Figures/Tables:

- “I suggest you place the figures and tables at the end of the documents.

Response:

As per your recommendation, all figures and tables have been moved to the end of the document.

- “Table 1.2 should be labeled as Table 1 (continuation).”

Response:

We have corrected the label for Table 1.2, renaming it “Table 1 (continuation)” for consistency.

Format/grammar/wording:

a) “Please correct the missing wording in the sentence starting ‘For instance, Roytio et al. (2017...).’”

Response:

The sentence has been corrected to ensure clarity. The missing wording has been added, and the entire paragraph has been reviewed for coherence.

b) “Review bacterial nomenclature for consistency.”

Response:

We have thoroughly reviewed the manuscript to ensure bacterial names follow standard scientific nomenclature. Genus names are capitalized and italicized, while species names are italicized in lowercase.

- c) “Reorder tables and text to follow a logical sequence.”

Response:

The tables and text have been reordered to follow a more logical sequence, ensuring the flow of the manuscript is clear and consistent with the order of appearance in the text.

Reviewer 3:

“We appreciate the comment regarding the discussion, as a mini review on a topic that has not been addressed before, all the data we evaluated with enough quality to be included is described, having no previous information we could find about this subject. We have reviewed and addressed all your detailed comments regarding discussion and conclusion as outlined in the attached document.”

Reviewer 4:**1. Abstract:**

“The objectives should be included in the abstract.”

Response:

We have revised the abstract to include a clear Objectives section, as recommended. This makes the aim of the review more prominent and structured.

2. Introduction:

“The introduction should clearly state the knowledge gap.”

Response:

The introduction has been revised to explicitly state the knowledge gap, ensuring that readers can clearly understand the rationale behind the review.

3. Methods:

- a) “In the Study Design, you mentioned no filters, but then listed language filters in the inclusion criteria.”

Response:

This inconsistency has been corrected by specifying that language and study type filters were applied. Additionally, we explained why the review was not registered in PROSPERO, adding this to the methodology.

- b) “Please ensure the sample size is accurate.”

Response:

We reviewed and updated the description of studies, correcting errors in the total sample size and ensuring consistency between the tables and the text.

4. Discussion:

“Discuss the limitations of the review itself.”

Response:

We expanded the discussion of limitations to include additional factors, such as the absence of PROSPERO registration, language filters, and the lack of a Kappa test for inter- reviewer agreement. This has been addressed in the "Limitations" section.

Authors: “We sincerely thank the reviewers for their valuable feedback, which has greatly contributed to enhancing the quality of our manuscript. We believe the revisions have significantly strengthened the paper and we look forward to your final decision .

