

Reviewer #1:

**Specific Comments to Authors:** Lin and colleagues reviewed the research advances in the relationship between gut microbes and diabetes mellitus and DKD and discoursed the significance of gut microbiota and gut health for the DKD therapy. Their constructive perspective are beneficial for the development of new approaches in the treatment and prevention of DKD and related metabolic disorders. This review is of good quality and of interest to the journal's audience. It is suggested to completely drop the term 'flora' from this manuscript as this is really an outdated term and replace it entirely by 'gut microbiota' which is the accepted term nowadays reflecting the bacterial community representations in a wider sense. The name of the bacteria should be italicized in text, and after the full name is used, the next time it appears in the text the bacterial genus can be abbreviated.

Thank you very much for your constructive comments. We have changed the term 'flora' to 'gut microbiota'. Also, the name of bacteria has been italicized.

Reviewer #2:

**Specific Comments to Authors:** Reviewer Comments to Author: 1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes 2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes 3 Key words. Do the key words reflect the focus of the manuscript? Yes 4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes 5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? Yes 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? Yes This manuscript reviews the role of changes in intestinal flora and its metabolites in the occurrence and development of DKD, and provides therapeutic targets for the DKD. 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? Yes 8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends? Yes 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? Yes 10 Units. Does the manuscript meet the requirements of use of SI units? Yes 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? Yes 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? Yes 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic

study. Did the author prepare the manuscript according to the appropriate research methods and reporting? Yes 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? Yes

This manuscript reviews the role of changes in intestinal flora and its metabolites in the occurrence and development of DKD, and provides therapeutic targets for the DKD.

1. The first sentence of the “Abstract” part is exactly the same as the “INTRODUCTION” and it is recommended to modify it.

We have edited the Abstract accordingly.

2. It is recommended to add a list of abbreviations.

We have added a list of abbreviations.

3. The sixth paragraph of the "DKD: PATHOGENESIS" section is not related to the subject of this article and it is recommended to be refined.

We have edited the section accordingly.

4. There are a lot of confusing places in Figure 1, and it is recommended to accurately display it according to the description in the manuscript.

We have edited accordingly.

a. There is no mention in the manuscript that “Exercise” is a “potential factors”.

Included in the manuscript.

b. It is recommended to indicate in the legend what icon means activation and what icon means inhibition.

Included in the Figure legend.

c. The manuscript does not mention that Uremic toxins can activate NF- $\kappa$ B.

Included.

d. Tht figure 1 showed that SCFA activates GPR to become GPL1? please explain.

Explained in the manuscript and Figure caption.

d. Tht figure 1 showed that LPS activates TLR4 of macrophages and then activates NF- $\kappa$ B. please explain.

Explained in the manuscript and Figure caption.

e. The legend "NF-kb" in Figure 1 is Kappa, not.

Changed.

Reviewer #3:

**Specific Comments to Authors:** the paper focuses on the potential role of gut floras in the pathogenesis and as therapeutic targets of DKD, this is a good work.

Thank you very much for your comments. We have edited our paper according to the comments of reviewers and editor.

Science editor:

1 Scientific quality: a. The manuscript reviews the association between Gut Microbiota and Diabetic Kidney Diseases from a therapeutic and pathogenesis perspective b. The scientific quality classification of the manuscript provided within the peer-review report is grade C, B, and C. c. Some of the key issues raised by the peer reviewer raised the following queries-

1. Few terminological issues to be fixed

Fixed.

2. The abstract needs amendment

Amended.

3. Abbreviations need revision.

A list of abbreviations is added.

4. Figures and figure legends require changes. The questions raised by the reviewers should be answered;

Changed and answered.

d. The manuscript has 1 figure and no tables. e. A total of 68 references are cited, including 11 citations published within the last 3 years. f. Self-citations were not found in the manuscript. The self-referencing rate should be less than 10%. g. The authors have the right to refuse to cite improper references recommended by the peer reviewer(s), especially those published by the peer reviewer(s) him/herself (themselves). If the authors find the peer reviewer(s) request for the authors to cite improper references published by him/herself (themselves), please send the peer reviewer's ID number to [editorialoffice@wjgnet.com](mailto:editorialoffice@wjgnet.com). The Editorial Office will close and remove the peer reviewer from the F6Publishing system immediately. h. PMID and DOI numbers are missing in the reference list.

PMID and DOI numbers added.

2 Language evaluation a. Language Quality: Grades: A, B, C b. A language editing certificate not required. The corresponding author is a native English speaker " 3 Academic norms and rules a. Conflict-of-Interest Disclosure Form not included. Downloadable at <https://www.wjgnet.com/bpg/GerInfo/236>

Ok.

b. "Copyright License Agreement not provided. Copyright License Agreement can be downloaded from <https://www.wjgnet.com/bpg/gerinfo/250>"

Ok.

c. No academic misconduct was found on Google search for the title of the manuscript. 4 Supplementary comments a. This is an invited manuscript b. This study was supported by Nanyang Technological University Singapore (G1802358J). c. The topic has not previously been published in the World Journal of Diabetes. 5 Issues raised a. Please address all issues raised by the reviewer and include all amendments in the manuscript in colored text.

Addressed.

b. The language classification includes Grade C. Please visit the following website for the professional English language editing companies that we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>;" c. Please provide the funding agency document copies.

As this is an invited manuscript with APC waived, no funding is required.

d. Please prepare and arrange the figure using PowerPoint to ensure that all graphs or arrows, or text portions can be reprocessed by the editor.

Prepared.