

## PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 63078

Title: Diabetes and gut microbiota

Reviewer's code: 05186196

**Position:** Peer Reviewer

Academic degree: MD

Professional title: Academic Research, Attending Doctor, Doctor, Research Fellow

Reviewer's Country/Territory: Romania

Author's Country/Territory: United States

Manuscript submission date: 2021-01-24

Reviewer chosen by: Jia-Ping Yan

Reviewer accepted review: 2021-02-17 13:40

Reviewer performed review: 2021-02-17 19:10

Review time: 5 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[Y] Grade A: Priority publishing [] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	<ul> <li>[ ] Accept (High priority)</li> <li>[ ] Accept (General priority)</li> <li>[ Y] Minor revision</li> <li>[ ] Major revision</li> <li>[ ] Rejection</li> </ul>
Re-review	[Y]Yes []No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No



## SPECIFIC COMMENTS TO AUTHORS

This is an interesting review regarding the relationship between the gut microbiota and diabetes. The paper is worthy of publication but would require some minor adjustments. Suggestions for revision are listed below: 1. I don't see the link between the part of the manuscript tackling the epidemiology of diabetes and the part of the manuscript that deals with the involvement of gut microbiota in diabetes. You need to make the transition less abrupt. 2. Supplementation with probiotics and also synbiotics might be beneficial to patients diagnosed with diabetes also because these products lower oxidative stress levels. Oxidative stress is a key player in the development of diabetes and diabetes-related complications. See the following papers: Gaman MA et al. World J Diabetes (2020), Pourrajab et al. Crit Rev Food Sci Nutr (2020), Sohouli MH et al. Adv Nutr (2020). 3. Berberine might be useful in the management of diabetes also because its administration is associated with a decrease of the BMI and other indices of obesity (see Xiong P et al., Complement Ther Clin Pract (2020)). 4. Are other antidiabetic drugs associated with changes in the gut microbiota? Insulin? Gliclazide? 5. Do the authors have any conflicts of interest to disclose (as the commercial name of metformin was mentioned)?



## PEER-REVIEW REPORT

Name of journal: World Journal of Diabetes

Manuscript NO: 63078

Title: Diabetes and gut microbiota

Reviewer's code: 03671072

Position: Editorial Board

Academic degree: PhD

Professional title: Honorary Research Fellow, Research Scientist

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2021-01-24

Reviewer chosen by: Jia-Ping Yan

Reviewer accepted review: 2021-02-17 10:22

Reviewer performed review: 2021-03-01 04:36

**Review time:** 11 Days and 18 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	<ul> <li>[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing</li> <li>[ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection</li> </ul>
Conclusion	<ul> <li>[ ] Accept (High priority) [Y] Accept (General priority)</li> <li>[ ] Minor revision [ ] Major revision [ ] Rejection</li> </ul>
Re-review	[]Yes [Y]No
Peer-reviewer	Peer-Review: [Y] Anonymous [] Onymous
statements	Conflicts-of-Interest: [ ] Yes [Y] No



## SPECIFIC COMMENTS TO AUTHORS

This review starts with the postulation of T2D cases upsurge in the coming 10-20 years. The authors further describe how probiotics, diet and anti-diabetic medication affect gut microbiome and the mechanisms behind as to how the changing gut microbiome affect body weight, inflammation, and glucose homeostasis in the diabetic patients. It is suggested gut microbiome is a therapeutic target for diabetes and an area worth further in-depth study. Overall, the review is comprehensive and well-organized.