



PEER-REVIEW REPORT

Name of journal: *World Journal of Gastroenterology*

Manuscript NO: 67834

Title: Humans have intestinal bacteria that degrade the plant cell walls in herbivores

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05452471

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor, Senior Scientist

Reviewer's Country/Territory: Russia

Author's Country/Territory: Japan

Manuscript submission date: 2021-05-03

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-05-27 02:06

Reviewer performed review: 2021-06-02 07:50

Review time: 6 Days and 5 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous



statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

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? It is review article. 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? It is review article. 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? The table may be completed by more information on microbes even from cited references. 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? It is review article. 10 Units. Does the manuscript meet the requirements of use of SI units? It is review article. 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? The references need to be corrected. See the list of remarks. 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

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? It is review article. 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? It is review article.

The main remarks relate to the correct citation of the references. The author needs to double-check the citation list and clarify some of the references. Unfortunately, there are no line markings in the text of the manuscript, which makes the review process difficult.

1. Chapter "The intestinal bacteria of horses compared to those of humans", 1 paragraph, ref [4] - there is no information on gastric acid pH in the reference, it is desirable to clarify the correctness of the citation. 2. The same chapter and paragraph, ref [6] is also not cited correctly. The reference report "The bacterial phylotypes were assigned to only two divisions, the Firmicutes (62 phylotypes, 105 sequences) and the Actinobacteria (10 phylotypes, 27 sequences). Although there were no Bacteroidetes 16S rDNA sequences identified in the random assemblies and clone libraries, amplification with species-specific 16S rDNA primers yielded sequences from *Bacteroides fragilis* and *Bacteroides uniformis*". While the author cites the information "It is estimated that this flora contains approximately 500-1000 different species of bacteria, with more than 90%



**Baishideng
Publishing
Group**

7041 Koll Center Parkway, Suite
160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

belonging to the two bacterial phyla Bacteroidetes and Firmicutes ". 3. Table 1. The name was given incorrectly: Enterobacteriaceae is a family that belongs to the class of Gammaproteobacteria, a phylum Proteobacteria. The table shows the diversity of both bacteria and fungi, for which the ability to break down fibers derived from cell walls is described. 4. Table 1, ref. [10] used incorrectly. There is no indication of specific species of the genus Bacteroides in this reference. 5. Table 1, when describing Ruminococcus flavefaciens, two references are given [8] and [19]. Both references refer to equine microbiota and need to be clarified and adjusted. 6. Table 1, when describing Ruminococcus albus in humans, apparently, reference is given [20], but in this reference this species is described in cows, while in humans - Ruminococcus bromii (S) and Ruminococcus sp. nov. (C, X) 7. Table 1, ref. For Piromyces equi [13], however, the reference does not indicate this species, only the total amount of fungal gene determined by real-time PCR is presented. 8. In general, the table can be expanded by presenting a wider list of species even from those references that are already cited by the author.