

Dear Editor:

I am pleased to resubmit for publication our revised version of Manuscript no 88519. We appreciated the constructive criticisms of the Editor and the reviewers. We have addressed each of their concerns as outlined below.

REVIEWER COMMENTS:

We would like to thank the Reviewer for the very useful comments; we have now performed all the necessary changes.

Reviewer 1

However, when it comes to the question of “whether alcohol drinking is the cause or the consequence of changes in the gut microbiota” the assumption of “alteration in the gut microbiota could be a precursor to the development of alcohol-dependence” needs to be further addressed for a logical explanation of the bidirectional communication.

Comment: Few data were added to explain the feed-back system of alcohol and microbiome fueling further dysregulation.

Besides, fecal microbiota transplantation (FMT) is of great potential in the treatment of gut dysbiosis-related diseases including AUD. So, it would be better to add something more to FMT.

Comment: Recent study was added in the paragraph Fecal Transplantation as suggested

Reviewer 2

1. The reference to "leaky gut" in the Abstract and Keywords section is not further explained in the main text, which merely refers to "increased intestinal permeability".

Comment: The term leaky gut was replaced as it is not defined anywhere in the text.

2. The last paragraph of the Introduction refers to "a particular focus on the increased risk of liver disease, cardiovascular disease and type 2 diabetes", but in the latter part of the article, only the "increased risk of liver disease" part is stated, while the latter two are not explicitly explained in further detail.

Comment: The phrase: "a particular focus on the increased risk of liver disease, cardiovascular disease and type 2 diabetes" was removed as the certain diseases are not discussed in the main text.

3. The definition of AUD in the Introduction mentions that "AUD is characterized by excessive drinking and persistent alcohol-seeking behavior". Can the concept of "alcohol dependence(alcoholism)" appearing later in the text be equated with it, or does it require a slight explanation of both?

Comment: The definition of AUD include the terms of alcohol abuse and alcohol dependence; the terms were added in the text/definition.

4. The format of the "Alcohol Consumption and the Gut Microbiome" heading is not harmonized with that of its peer.

Comment: The subheading was changed as recommended.

Reviewer 3:

1. 35000 species of bacteria is an exaggerated number - about 1500 species are usually given - The term flora is not used

Comment: Term flora was changed. According to the comment we readjusted the number of bacterial species usually given

2. There is a lack of information about viriomyces and myxobiotics.

Comment: Viriome and mycobioome are discussed as suggested

Editor

Comment: A figure was created for the review.

We hope that we have addressed the issues and comments of the revision. Any additional changes are welcome. For any further clarification, please do not hesitate to contact me.

Sincerely

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