# PEER-REVIEW REPORT

**Name of journal:** *Artificial Intelligence in Gastroenterology*

**Manuscript NO:** 78338

**Title:** Dietary counseling based on artificial intelligence for patients with nonalcoholic fatty liver disease

**Provenance and peer review**: Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 03093768

**Position:** Editorial Board

**Academic degree:** MD

**Professional title:** Associate Professor, Chief Doctor, Doctor, Surgeon, Surgical Oncologist

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2022-06-22

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-06-22 13:26

**Reviewer performed review:** 2022-06-26 07:00

**Review time:** 3 Days and 17 Hours

| Scientific quality | [  ] Grade A: Excellent    [  ] Grade B: Very good    [  ] Grade C: Good  [  ] Grade D: Fair    [ Y] Grade E: Do not publish |
|---|---|
| **Language quality** | [  ] Grade A: Priority publishing   [ Y] Grade B: Minor language polishing  [  ] Grade C: A great deal of language polishing   [  ] Grade D: Rejection |
| **Conclusion** | [  ] Accept (High priority)   [  ] Accept (General priority)  [  ] Minor revision   [  ] Major revision   [ Y] Rejection |

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| Re-review | [ ] Yes  [ Y ] No |
|---|---|
| Peer-reviewer statements | Peer-Review: [ Y ] Anonymous  [ ] Onymous |
| | Conflicts-of-Interest: [ ] Yes  [ Y ] No |

## SPECIFIC COMMENTS TO AUTHORS

The authors conducted dietary counseling for NAFLD patients through an app that integrates AI technology, and achieved good improvement after 6 months. This is a useful discussion of AI technology in nutritional management of NAFLD patients, which deserves more research. The following questions need to be considered and answered by the authors. 1. "NASH" in Running title is inconsistent with "nonalcoholic fatty liver disease" in the title. The two are obviously not synonymous. 2. Nonalcoholic fatty liver disease (NAFLD) includes nonalcoholic fatty liver (NAFL) and nonalcoholic steatohepatitis (NASH). Therefore, the writing of the Introduction section is inappropriate. 3. For the diagnostic criteria of NAFLD, the authors used the criteria of alcohol comsumption and the diagnostic criteria of upper abdominal ultrasound. Standards for alcohol intake should be supported by the literature. The criteria adopted by the author is alcohol consumption equivalent to ≤30 g of ethanol per day in men and ≤20 g of ethanol per day in women. This is mainly a European standard. Is it applicable to Asian population or Japanese population? 4. The analysis of clinical data of 29 cases is obviously a very small sample size. Can statistical conclusions be drawn? Consultation with a statistician is recommended. 5. There are various daily diets, especially the cooking methods of family diets cannot be unified. These make food illegible and energy intake difficult to calculate. This can lead to significant error in the study. 6. Weight control is an important factor in the treatment of NAFLD. Why no data were shown to support weight control? 7. In Table 1, the data of Diabetes mellitus (Yes/No) is wrong.

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**Peer-review model:** Single blind

**Reviewer's code:** 00068967

**Position:** Editorial Board

**Academic degree:** MSc, PhD

**Professional title:** Academic Fellow, Deputy Director, Full Professor, Professor, Senior Editor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2022-06-22

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-06-23 08:11

**Reviewer performed review:** 2022-06-30 07:03

**Review time:** 6 Days and 22 Hours

| Scientific quality | [  ] Grade A: Excellent   [  ] Grade B: Very good   [  ] Grade C: Good<br>[  ] Grade D: Fair   [ Y] Grade E: Do not publish |
|---|---|
| **Language quality** | [  ] Grade A: Priority publishing   [  ] Grade B: Minor language polishing<br>[ Y] Grade C: A great deal of language polishing   [  ] Grade D: Rejection |
| **Conclusion** | [  ] Accept (High priority)   [  ] Accept (General priority)<br>[  ] Minor revision   [  ] Major revision   [ Y] Rejection |

| Re-review | [   ] Yes   [ Y ] No |
|---|---|
| Peer-reviewer statements | Peer-Review: [ Y ] Anonymous   [   ] Onymous |
| | Conflicts-of-Interest: [   ] Yes   [ Y ] No |

## SPECIFIC COMMENTS TO AUTHORS

This article is of high interest. Article structure is complete and rational. While, as a research article, I think it is not of high enough standard to be considered for publication. The reasons may be: 1. Language is still very poor, though it was proved to have been language edited. Figures were not optimal. 2. As a core, AI should be dipicited as detail as possible. Even the secret knowledge of this App owned by commercial company, you should describ the data processing principles in the manuscript. 3. Only 29 samples were involved study will lead to a bias and untrusted result, please enlarge the amount of sample. 4. Several hepatic enzymes alteration you choosed in the study has the few capacity to express the pathology changes of NAFLD, it must combine with other clinical detections. 5. This study has interest, but the study design is not rational.

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**Provenance and peer review**: Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05327699

**Position:** Editorial Board

**Academic degree:** MBBS, MNAMS, MS

**Professional title:** Additional Professor

**Reviewer's Country/Territory:** India

**Author's Country/Territory:** Japan

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**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-06-27 04:41

**Reviewer performed review:** 2022-07-01 07:00

**Review time:** 4 Days and 2 Hours

| Scientific quality | [  ] Grade A: Excellent   [  ] Grade B: Very good   [  ] Grade C: Good [  ] Grade D: Fair   [ Y] Grade E: Do not publish |
|---|---|
| Language quality | [  ] Grade A: Priority publishing   [  ] Grade B: Minor language polishing [ Y] Grade C: A great deal of language polishing   [  ] Grade D: Rejection |
| Conclusion | [  ] Accept (High priority)   [  ] Accept (General priority) [  ] Minor revision   [  ] Major revision   [ Y] Rejection |
| Re-review | [  ] Yes   [ Y] No |

| **Peer-reviewer statements** | Peer-Review: [ Y] Anonymous    [    ] Onymous |
| --- | --- |
| | Conflicts-of-Interest: [    ] Yes    [ Y] No |

## SPECIFIC COMMENTS TO AUTHORS

1. It's a fair try but your sample size is too low to be conclusive .    2. You have divided food quantity into 66%,100%, 200% etc, so how much weight does these % is equivalent to?    3. How this app is calculating the KCal values of different types of food items ?    4. How this app can be used Worldwide ?    5. How the sensitivity and specificity could be improved ?    6. It's future implications in other systemic diseases ?

# PEER-REVIEW REPORT

| | |
|---|---|
| **Scientific quality** | [   ] Grade A: Excellent   [   ] Grade B: Very good   [ Y ] Grade C: Good<br>[   ] Grade D: Fair   [   ] Grade E: Do not publish |
| **Language quality** | [   ] Grade A: Priority publishing   [   ] Grade B: Minor language polishing<br>[ Y ] Grade C: A great deal of language polishing   [   ] Grade D: Rejection |
| **Conclusion** | [   ] Accept (High priority)   [   ] Accept (General priority)<br>[   ] Minor revision   [ Y ] Major revision   [   ] Rejection |
| **Re-review** | [ Y ] Yes   [   ] No |

| **Peer-reviewer statements** | Peer-Review: [ Y] Anonymous    [   ] Onymous |
| --- | --- |
| | Conflicts-of-Interest: [   ] Yes    [ Y] No |

**SPECIFIC COMMENTS TO AUTHORS**

In the present article, the authors tend to see the Dietary counseling based on artificial intelligence for patients with nonalcoholic fatty liver disease. It is an interesting topic. I have the following comments. 1. The title "Dietary counseling based on artificial intelligence for patients with nonalcoholic fatty liver disease" and the "Running title: AI-based dietary counseling for NASH", I don't think the "NAFLD" equal to NASH, if the article focus on NAFLD, than they can't use NASH here. And in the methods part, the criteria is mainly for NAFLD but not NASH. 2. Is the "Calomeal" software commercially available? 3. In fact, as the authors said, it is still faraway to use AI to guide diet. Even for the same food, the quantity of the food from different restaurants or cooked by different cooker in the same restaurant is different. 4. The number of the participants are relatively small. 5. In the Statistical analysis part, the author said the were shown as means ± standard deviation (SD). That means the data are in normal distribution, and the the paired test maybe use by t-test. Not The paired Wilcoxon test was used to test the difference in each parameter between baseline and 6M follow-up. 6. The results part are needed to be substantially re-edited.

# RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** *Artificial Intelligence in Gastroenterology*

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**Reviewer's code:** 00068967

**Position:** Editorial Board

**Academic degree:** MSc, PhD

**Professional title:** Academic Fellow, Deputy Director, Full Professor, Professor, Senior Editor

**Reviewer's Country/Territory:** China

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2022-06-22

**Reviewer chosen by:** Ji-Hong Liu

**Reviewer accepted review:** 2022-07-18 02:04

**Reviewer performed review:** 2022-07-18 02:56

**Review time:** 1 Hour

| Scientific quality | [  ] Grade A: Excellent    [  ] Grade B: Very good    [ Y] Grade C: Good [  ] Grade D: Fair    [  ] Grade E: Do not publish |
|---|---|
| Language quality | [  ] Grade A: Priority publishing    [  ] Grade B: Minor language polishing [ Y] Grade C: A great deal of language polishing    [  ] Grade D: Rejection |
| Conclusion | [  ] Accept (High priority)    [  ] Accept (General priority) [  ] Minor revision    [  ] Major revision    [ Y] Rejection |

| Peer-reviewer statements | Peer-Review: [ Y] Anonymous [ ] Onymous |
| | Conflicts-of-Interest: [ ] Yes [ Y] No |

**SPECIFIC COMMENTS TO AUTHORS**

Though you have revised the relevant parts according to the reviewers' suggestion, but the core has not been improved, such as, 1) what is the processing principle of AI recognition? 2) samples are too few to make a decision objectively. Based on these criteria, I can not stand you for the manuscript for further consideration.

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**Author's Country/Territory:** Japan

**Manuscript submission date:** 2022-06-22

**Reviewer chosen by:** Ji-Hong Liu

**Reviewer accepted review:** 2022-07-18 09:28

**Reviewer performed review:** 2022-07-19 02:21

**Review time:** 16 Hours

| Scientific quality | [  ] Grade A: Excellent   [  ] Grade B: Very good   [  ] Grade C: Good<br>[ Y] Grade D: Fair   [  ] Grade E: Do not publish |
|---|---|
| Language quality | [  ] Grade A: Priority publishing   [ Y] Grade B: Minor language polishing<br>[  ] Grade C: A great deal of language polishing   [  ] Grade D: Rejection |
| Conclusion | [  ] Accept (High priority)   [  ] Accept (General priority)<br>[ Y] Minor revision   [  ] Major revision   [  ] Rejection |

| **Peer-reviewer statements** | Peer-Review: [ Y] Anonymous   [   ] Onymous |
|---|---|
| | Conflicts-of-Interest: [   ] Yes   [ Y] No |

## SPECIFIC COMMENTS TO AUTHORS

Although the author has revised and replied to the previous comments, there are still some problems that have not been fully solved.   1. The authors believe that the study found that the subjects' weight decreased significantly after AI intervention for half a year, and the p value was less than 0.05. This result cannot be merely a verbal statement. There should be a diagram or table for comparison.   2. There are still errors in the data in Table 1. I hope the authors will carefully check and revise it. The values in the first and fifth lines are obviously incorrect.