**PEER-REVIEW REPORT**

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 92593

**Title:** Hydrogen-rich water alleviates constipation by attenuating oxidative stress through the sirtuin1/nuclear factor-erythroid-2-related factor 2/heme oxygenase-1 signaling pathway

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

**Peer-review model:** Single blind

**Reviewer’s code:** 03731983

**Position:** Editorial Board

**Academic degree:** AGAF, DSc, MD, PhD

**Professional title:** Chief Doctor, Full Professor, Senior Scientist

**Reviewer’s Country/Territory:** Russia

**Author’s Country/Territory:** China

**Manuscript submission date:** 2024-01-30

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2024-03-27 07:49

**Reviewer performed review:** 2024-03-30 07:06

**Review time:** 2 Days and 23 Hours

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<tr>
<th>Scientific quality</th>
<th>Grade A: Excellent</th>
<th>Grade B: Very good</th>
<th>Grade C: Good</th>
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<tr>
<th>Novelty of this manuscript</th>
<th>Grade A: Excellent</th>
<th>Grade B: Good</th>
<th>Grade C: Fair</th>
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[ Y] Grade A: Excellent [ Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish

[ Y] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
### SPECIFIC COMMENTS TO AUTHORS

This is a nice and complex study, which describes new opportunity to manage constipation with hydrogen rich water (HRW) using the animal model (mice with constipation induced by loperamide). Manuscript is well-organized and effects of HRW were described and discussed in details. However, authors are advised to exclude the part of the manuscript which described study of SIRT1 in humans, as the role of SIRT1 in constipation in humans is well known and discussed in numerous publications, therefore this part of the manuscript does not contain any new information, and may be excluded.