Reviewer’s report

Title: Water intake and intra-meal fluid consumption in relation to general and abdominal obesity of Iranian adults

Version: 0 Date: 22 Jan 2020

Reviewer: Rachael Taylor

Reviewer's report:

Abstract

Lines 13-14: Intra-meal fluid consumption was also questioned.- I recommend using analysed rather than questioned.

Introduction

Lines 34-35: In 2015, a total of 107.7 million children and 603.7 million adults were obese worldwide (3)- Can you report more recent data?

Lines 37-38: In addition to the involvement of several factors in the etiology of obesity, the contribution of water intake to weight gain and obesity has always been a question.- This sentence is not very convincing.

Lines 38-39: Water comprises about 60 percent of body weight- Do you mean that the human body comprises of 60% water?

Line 40: Recommendations to lose weight suggested drinking a glass of water before a main meal.- Can you provide a citation?

Lines 43-44: Overall, much water intake was associated with a lower energy intake (6).- More description is needed here.

Lines 49-51: Most information on the water weight associations came from clinical trials, which are beyond the habitual intake of water in routine life.- Please provide a supporting citation.

Lines 51-52: Observational studies linking water consumption to energy intake, weight and obesity are scarce.- Please provide a supporting citation.

Lines 55-60: Supporting citations are needed. The introduction does not build a strong case for the rationale of this study. This section needs more structure and logical progression in the information presented. Why did this study specifically focus on water and not other types of fluid?

Methods

Lines 72-73: In the current study, participants whose total calorie intake was out of the range of 800-4200 kcal/day were excluded.- Why? This needs further justification.

Lines 73-74: We also excluded subjects who lacked information on required variables.- What do you mean by 'lacked information'? intra-meal fluid intake- Did this include all types of fluid as well as water?

Line 79: requested to report- How did the participants report this?

Line 84: self-reported questionnaire- Was the questionnaire developed by the study and validated? Were participants instructed how to measure their waist circumference?

Line 88: National Cholesterol Education Program (NCEP) guidelines- Can you provide a citation?

Line 93: pilot study on 200 individuals from the same population- Can you provide a supporting citation?

Results

Line 166: 'In the crud model': Typo here

Discussion

Lines 193-194: A systematic review demonstrated that water intake was associated with reduced energy intake and therefore obesity prevention (6).- How many studies were included in this review?

Lines 199-200: Therefore, to provide recommendations to general population, it seems that observational studies are needed.- I would recommend revising this sentence to- Therefore, further evidence from observational studies will be important for informing recommendations that are applicable to the general population.

Lines 200-201: Although the information on the association between water intake and obesity are not huge- This needs to be rephrased it is unclear.

Lines 201-202: 'the association of water consumption with other chronic diseases gained substantial attention in the literature.'- Can you provide supporting citations?

Lines 202-203: For instance, high total water intake was protectively linked with chronic kidney disease.- What was a high water intake in
this study? What age were the participants? Please provide a supporting citation. Lines 203-204: Cardiovascular disease was not associated with water consumption (22). Do you mean the incidence or prevalence of cardiovascular disease was not associated? What age were the participants? Lines 204-205: Higher water intake was also prospectively associated with increased risk of mortality among women, but not men (23).- How much higher was the water intake? How much was the risk raised? Lines 212-213: In Iranian culture, water ranks the first among common beverages consumed with meals.- Do you have a supporting citation for this statement? Lines 215-217: Based on prospective cohort studies, replacement of sugar sweetened beverages or fruit juices with water resulted in a lower weight gain over 4-year period (28).- You have said cohort studies but only provided one citation Lines 219-220: Given the findings of this study, it seems that large number of study participants drank caloric beverages, instead of water, between their meals.- How can you come to this conclusion? This needs greater explanation. Lines 222-223: Considering the adverse effects on digestive system, most investigators recommended that drinking beverages along with meals should be restricted.- This sentence is not phrased accurately and seems out of context in this paragraph. You need to acknowledge the limitations of using self-reported water intake data. Why do you use the term 'general' obesity rather than obesity throughout the manuscript?

Level of interest
Please indicate how interesting you found the manuscript:

An article of limited interest

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal