Reviewer’s report

Title: Association of major dietary patterns and different metabolic phenotypes: A population-based study of northwestern Iran

Version: 0 Date: 23 Aug 2019

Reviewer: Daniele Marcon

Reviewer's report:

Obesity and overweight are public health problems and represent an important issue in Iran's population. These conditions are associated with dyslipidemia, hyperglycemia, insulin resistance and hypertension and we know that dietary behaviors play a crucial role in developing such complications.

The study aimed to understand the association of major dietary patterns and different cardiometabolic phenotypes. This is an important topic that could be used for planning prevention programs and improving nutritional education of population based on specific cultural and dietary habits.

The article presents some critical points:

- There are several grammatical errors and some sentences are not particularly clear
- There are lot of abbreviations not explained. It would be better to write the complete words at least the first time they appear
- Some passages are not very clear: it would be useful to describe more the dietary assessment (page 5, lines 100 - 105), how the dietary patterns were identified (page 6, lines 119 - 125) and the association between dietary patterns with MHO and MUHO (page 8, lines 162 - 166)
- Some references to the tables are not correct: in dietary assessment (page 5, line 104) and also in results (page 7, line 131)
- It would be better to add in the discussion more details of table 2, explaining the differences in terms of composition of diet across metabolic phenotypes (calories, fat and protein intake are interestingly high also in non-obese group)
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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