Reviewer’s report

Title: Gender difference on the association of dietary patterns and metabolic parameters with obesity in young and middle-aged adults with dyslipidemia and abnormal fasting plasma glucose in Taiwan

Version: 0 Date: 09 Sep 2019

Reviewer: Sylvia Crowder

Reviewer's report:

COMMENTS TO AUTHORS:

This was a prospective cohort study examining associations among gender difference and dietary patterns and metabolic parameters in adults with dyslipidemia and abnormal fasting plasma glucose in Taiwan. The primary outcomes were general obesity, central obesity, and high body fat. The authors concluded that both men and women in the higher tertile western pattern had increased odds of obesity. However, only male subjects in higher tertiles of the prudent pattern had decreased odds of obesity. However, there are some issues that must be addressed and/or clarified before this manuscript is suitable for publication. Please see my comments/suggestions below.

Introduction:

1. Line 59-60 and 92-94 are very similar. Perhaps combined them at the beginning of the introduction to prevent repeating similar content.

Methods:

1. Line 136-137. Does the FFQ have a specific name? If so recommend stating "patterns were analyzed using the XXX a standardized and ...."

2. Line 165-167. This sentence has major methodological flaws. Waste circumference should not be measured at maximum point of the buttocks, that would be hip circumference not waist circumference. The waist measurement should have been taken at the level of the belly button.

3. Line 192-194. Why tertiles vs quartiles? This is a fairly large sample and quartiles/quintiles may be more appropriate in assessing linear trend. Additionally, recommend performing a test for trend across quartiles/quintiles of exposure.

Results:
1. Line 211-212. For dietary patterns using principal component analysis, why would you only use 11 of the 22 food items to create each pattern? Wouldn't you use all 22 food items to create your dietary patterns with the understanding that the food items that that loaded the highest (> .30) on a particular pattern would be more representative of that pattern?

Tables:

Table 1: Recommend placing an * by the food groups loading above (0.30) with a footnote that explains the significance.

Table 4 and 5: Recommend a test for p-trend.

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

An article of importance in its field

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.