Reviewer’s report

Title: Association of kidney function-related dietary pattern, weight status, and cardiovascular risk factors with severity of impaired kidney function in middle-aged and older adults with chronic kidney disease: a cross-sectional population study

Version: 1 Date: 21 Jan 2019

Reviewer: KA Hagan

Reviewer's report:

Abstract:
- Line 28: What is meant by "high"? Can the authors provide specific numbers?
- Line 34: Provide age range.
- Line 39: Multivariate implies many outcomes, while multivariable means many predictors. I believe the authors want to use the later here.
- How was moderately/severely impaired kidney function defined?
- Line 52: The acronym 'RRR' has not been previously defined in the abstract.
- Was the main analysis to use the dietary pattern to predict kidney function- please be more clear about the main model of interest in the method of the abstract.

Introduction:
- Line 94-95: Need reference for this sentence.

Methods:
- Line 107/108: What it meant by "periodic health check-up"? Please be more specific. How often did these visits take place?
- Line 155-158: Has the FFQ been previously validated in this population? Please provide a reference.
- Line 171: Multivariate implies many outcomes, while multivariable means many predictors- This comments applies throughout manuscript

Results:
- Line 238-244: Please indicate what the tertiles represent- more adherent to this dietary pattern or less?

Discussion:
- Line 327: Add reference to this sentence.
Table 1:
- Include in table or footnote how mildly impaired and moderately/severely impaired kidney function are defined.
- When were these characteristics measured - include in title.

Table 2:
- Include case numbers for each variable.
- I found the superscripts here confusing. These should be associated with Model 1 and Model 2 at the top of the columns not with variable categories.

Figure 2:
- Would be more interesting to combine A and B to more easily see if there is a dose response relationship with increasing tertiles of the dietary scores.
- In figure 2 caption, please define tertiles 1, 2, 3.
- Did the authors consider mediation analyses? Cardiovascular factors are likely a mediator between the dietary pattern the kidney function. Thus, adjusting for cardiovascular risk factors may dilute the effect.

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

An article whose findings are important to those with closely related research interests

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.