Reviewer's report

Title: Dietary patterns are associated with type 2 diabetes mellitus among middle-aged adults in Zhejiang Province, China

Version: 0 Date: 14 Oct 2017

Reviewer: Jacque Bay

Reviewer's report:

Thank you for the opportunity to review your paper. You have framed the need for the study around the valid requisite for contextual evidence to be compared to internationally valid evidence in order to support appropriately contextualised interventions.

The study has been conducted thoroughly and on the whole is reported in a logical manner. Appropriate statistical analyses are used to determine associations. With some attention to areas where there is a lack of clarity in the reporting of the methods this could be a valuable paper for research and practitioner communities working in the context described.

Methods:

- Your reporting of participant selection seems to be a little unclear. You report on line 98 that 2437 eligible participants were invited…..

Could you please describe what criteria were used to define 'eligible'. This would also assist readers to understand how the population may not be representative (as stated in the limitations).

- In line 101 you report that "424 participants with a history of diabetes, cardiovascular disease, or stroke were excluded because of possible disease-related changes in diet." However, you then report in line 160 that T2DM was confirmed if the participants reported having been diagnosed with T2DM….. Could you please clarify? Were all or just some participants who had diagnosed T2DM excluded? Could you please explain your criteria for selection more clearly.

- You describe the collection of relevant biomarkers, (fasting glucose, total cholesterol etc). However, in the results tables you do not report these data. Was the FG used to check on stability of subjects with reported diagnosed T2DM and/or used to assess for potential undiagnosed T2DM? If so was further follow up undertaken to confirm this diagnosis?
- The definition of T2DM section states that you have used participant reporting of diagnosis as the initial step from which you have then identified further evidence. Can you please explain how you assessed for the potential of undiagnosed T2DM in the study population if you only considered T2DM where this was previously diagnosed (and therefore the participant could report this)?

- Overall - the section on biomarkers in the methods should be revised to ensure that you explain the use of these data more clearly.

- Did you consider creating a selection flow chart?

Results:

- The description of the evidence alongside the results tables provides a succinct summary of the data.

- Line 197: A more detailed description of the models that you have presented in Table 5 could be useful to alert the reader as to what is reported.

Discussion:

- In the abstract you mention nutritional transitions as a key factor indicating why studies of this kind are important. You do not go into any depth regarding this in either the introduction or the discussion. Has the nutritional transition been uniform across the population of China? If not, could you discuss in more depth the relevance of intergenerational factors associated with nutritional transition and NCD risk and prevalence - and contextualise this for the reader.

Grammar:

- It would be valuable to have the paper reviewed by a language editor for proofing and grammatical accuracy as there are small issues throughout the manuscript that need to be addressed prior to publication.
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:

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