Reviewer’s report

Title: Dietary patterns in relation to testosterone levels and severity of impaired kidney function among middle-aged and elderly men in Taiwan: a cross-sectional study

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Reviewer: Radhouene Doggui

Reviewer's report:

Manuscript number: NUTJ-D-19-00063

Title: Dietary patterns in relation to testosterone levels and severity of kidney function decline among middle-aged and elderly men in Taiwan: a cross-sectional study

Although the topic is well interesting, the paper needs some revisions.

In general, moderate English changes are required.

I invite the authors to revise carefully the paper taking into account the recommended corrections and comments.

Abstract

The abstract should be improved, as for example specifying the effective number of subjects (n=256) assessed for their testosterone level and the used methodology for the dietary assessment (FFQ).

Introduction section

The introduction is well written, there are few remarks at this level:

1. Line 73, 75 and 85, please add references.

2. Add some information about the association of diets and testosterone level
Methods section

1. Please indicate the rationale behind: i) the selection of subject aged above 40 y old; ii) and only men.

2. Line 100 - 107: in order to help readers to understand the selection process, it is better to sum-up this paragraph in a figure entitled 'subjects selection process'.

3. Line 112: give the details relative to the auto-anthropometers.

4. Line 113: please specify the precautions and the conditions relative to the measure of the blood pressure.

5. Please, inverse the order of the both sentences "Body mass index (BMI) was calculated as weight in kilograms divided by the square of height in meters" (Line 113-114) and the next one "hypertension was defined …. By a physician" (Line 114-117).

6. Line 118-122: please specify the apparatus used to quantify all biochemical parameters.

7. Line 118-122: indicate the used quality control samples and the assay reproducibility of all biochemical parameters.

8. Line 122: it is unclear if authors quantified free or total testosterone and the used technique (RIA, CLIA …)?


10. Line 148: authors should give more details about the assessment of the physical activity? if they used a validated questionnaire?

11. Line 165-169: please explain more the rationale behind the food groups weighing by their respective loading factors. Add a reference if necessary.

12. Statistical analysis: how did the researchers deal with missing data?

Results

This section in general is well written
Discussion

1. Discussion is somewhat long and not concise enough.

2. Please add subheadings to make this section easier to read.

3. Line 303-312: Please improve the discussion about the association of diet composition (or nutrients intake) or diet quality and testosterone level.

4. Please try to discuss in depth the physiological links between the fried-processed dietary pattern and testosterone level among subjects affected by CKD.

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:

Acceptable

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