Reviewer’s report

Title: The Effect of Culinary Interventions (Cooking Classes) on Dietary Intake and Behavioral Change: A Systematic Review and Evidence Map

Version: 0 Date: 22 Jan 2019

Reviewer: Reviewer 2

Reviewer’s report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

No - there are minor issues

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

No - there are major issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

No - there are minor issues

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Could an appropriately REVISED version of this work represent a technically sound contribution?

Maybe - with major revisions

PEER REVIEWER COMMENTS:
GENERAL COMMENTS: The intervention of interested is relevant, therefore, there are methodological issues that are unclear if they were addressed. If not, it can impair best practice. The authors performed a broad search for studies (multiple databases), they assessed the risk of bias of included studies and performed adequate statistical analyses.

REQUESTED REVISIONS:

ABSTRACT

The abstract is missing clarification of the study eligibility criteria, participants and definition of what is culinary intervention. It could also have a more detailed description of the study appraisal and synthesis of methods. The results described in the abstract are missing the p-values for the associations and meta-analyses. It could also describe the limitations of the study, implications of key findings, and the registration number for the protocol of the systematic review.

Introduction

- the authors should provide an explicit statement of questions being addressed in the PICOS format (participant, intervention, comparisions, outcomes and study design)

Methods

- There is no indication of the existence of a review protocol, and if yes, where it can be accessed.

- Missing specific study characteristics (for example, PICO format, length of follow-up). Unclear whether authors excluded studies not published in English language.

- unclear whether there was a protocol for this systematic review available.

- unclear criteria for inclusion of study designs

- unclear criteria for inclusion regarding participants of interventions

- unclear dates of last search strategies conducted in the databases, if contact with authors was made to identify additional studies or details.

- no access to appendix where the search strategy should be available, therefore I was unable to access the quality of the search strategy.

- The inclusion of multiple populations (children, healthy adults or adults with morbidities), is concerning because they are different in many aspects, therefore should not have been assessed together.
- Unclear which types of additional intervention components were considered for inclusion. Also, the studies with multiple components should have been assessed separately.

- Unclear which are the primary and secondary outcomes of interest. Ideally, maximum of 3 primary outcomes and 7 secondary outcomes.

- No description of methods of additional analyses (sensitivity or subgroup analyses).

- In the data extraction and risk of bias assessment, there is the description of using Newcastle-Ottawa Scale, which is used for observational data. Previously, it was mentioned inclusion of "studies with cooking classes and outcomes were compared after follow-up period to a control group ou baseline (ie, pre-post). These designs does not configure observational design. Therefore, it is unclear if observational cohort studies were included or not. If yes, they should be assessed in a different SR or analyzed as a subgroup.

- The authors did not state the principal summary of measures (eg, RR, the difference in means)

Results:

- Risk of bias for each study is not presented.

- Studies were not described per subgroup (either of study designs or types of participants);

- The meta-analysis figures are not available for the reader;

- The results appear to be described all together, not considering the study design. Ideally, the authors should separate the results of RCTs from the results of non-RCTs.

Note: This reviewer report can be downloaded - see attached pdf file.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

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

No

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

No
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:

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