**Reviewer’s report**

**Title:** Reducing Meat Consumption by Appealing to Animal Welfare: Protocol for a Meta-Analysis and Theoretical Review

**Version:** 0  **Date:** 11 Sep 2019

**Reviewer:** Jaimon Kelly

**Reviewer's report:**

Peer review comments


Mathur and colleagues have reported their systematic review protocol which may be of interest when it is conducted. There are some considerations I have made which I would encourage to be addressed prior to possible publication.

General comments

Title: do you think meta-analysis should be systematic review? Do you know you will have enough papers and suitable data to conduct a meta-analysis?

The method needs to be reported according to PRISMA.

Specific comments

Abstract - I would strongly suggest the method section is more methodological and has important characteristics, such as PICO, study selection and planned database searches.

Registration: please include PROSPERO registration number.

Keywords

Disgust and dissociation could be changed to animal welfare
Introduction

I do not think you open on a suitable note. Firstly, meat is in all National Dietary guidelines, so I think your point needs more to reflect that excessive consumption is where the risk lies. Second, meat should be defined. Third, important for you to consider the quality of the evidence underpinning meat consumption and health outcomes, which is not always of the highest quality. Please consider and tone down this introduction if you deem appropriate.

Lines 92-93 make minimal sense as a meta-analysis and narrative synthesis are different analysis types.

Methods

What type of study designs are you including?

Line 104 - improper period prior to parenthesis

Line 122 - why would a repeated measures design be appropriate when the intervention would be aiming to change meat consumption behaviour?

Outcomes: I suggest separating out your outcomes, perhaps using bullet points with categories for meta-analysis and a category for narrative synthesis. Additionally, what is 'actual consumption'? What do you mean by unacceptable? Do you mean you will exclude them?

What are the primary outcomes and what are the secondary outcomes? Please define these as per the PRISMA checklist.

Line 146 - what is a search string?

Searches: what dates and language restrictions are in place. If any or if none, please include that here.

Snowballing: please list relevant animal welfare organisations.

Data extraction methods: this section does not contain important information regarding the types of point estimates and variances you will actually extract. Please amend

Data extraction: you still need to detail the actual information you will extract. I see some of this is in section 3. Please amend.

Line 190 - largest study - needs more detail, in terms of length or number of participants?

Line 200 - do you have any subgroup analysis planned? Do you mean subgroup instead of sensitivity analysis?
Section 3

Qualitative review: Cochrane risk of bias tool is not a qual quality assessment tool. Also, it is not clear at all what you mean by not reporting on the quality ratings. This seems to be going away from PRISMA. Please clarify.

Quantitative: lines 225-229 is not written well. Please reauthor and make it very clear what your plan is.

I am not clear on what the primary analysis is. What is it and what do you mean by meta-analysing 'all point estimates'? do you mean you are combining all data.

Lines 255-257 I am not sure what you mean by this? "we anticipate that selection models may fail to converge or may provide extremely wide, uninformative confidence intervals, in which case we may omit them and present only the sensitivity analysis approach"

Studies that were 'borderline in terms of inclusion criteria' - this is inappropriate as its outside the PRISMA checklist and design and purpose of a systematic review. Please remove.

Line 277-278: please clearly write what you are referring to here? This is not a systematic review method.

Overall I am completely confused by what you are talking about with using data from another review? This seems inappropriate. Please clarify.

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
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

Were you mentored through this peer review?

No