Reviewer's report

Title: Planning dietary improvements without additional costs for low-income individuals in Brazil: linear programming optimization as a tool for public policy in nutrition and health

Version: 1 Date: 25 Apr 2019

Reviewer: Sian Robinson

Reviewer's report:

Thank you for making changes to the paper - the design of the study is much clearer.

However, this remains quite a challenging paper for the non-expert reader and some further amendments could help to clarify.

The key challenges are:

1. There are six combinations of cost constraints (yes/no) and food acceptability (3 levels) - but the results are reported in general in relation to these two criteria as well as for different cost/acceptability combinations. It is not obvious why some comparisons are emphasised and not others and therefore confusing. This applies particularly in the Abstract.

2. At first review I commented on the labelling of the 'food acceptability' groups. I'm afraid I still don't think that the terms 'rigorous' (for least change) and 'flexible' (for greatest change) are clear in their meaning and other labels that are more explicit in terms of what the categorisations represent would be more useful. In particular - without explanation, they aren't meaningful to the reader as reported in the Abstract.

3. The paper needs review to ensure correct use of English.
Specific points:

Lines 71 and 139: explanation of food acceptability is needed

Line 263 - are vitamin B12 and copper intakes increased in Figure 2?

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

An article of limited interest

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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