Reviewer’s report

Title: Nutritional Quality of Regular and Pureed Menus in Canadian Long Term Care Homes: An Analysis of the Making the Most of Mealtimes (M3) Project

Version: 0 Date: 12 May 2017

Reviewer: Olivia Farrer

Reviewer's report:

Overall I feel that the paper would be of interest to other dietitians or people working within food service/aged care sector but I believe the paper requires clarification or modification in some areas. Please find some comments below:

- Background information - line 20 - is it dietitians that use these guidelines to plan the menus? If so why are they still lacking - is it an issue with dietitian expertise or the guidelines not being appropriate to older adults

- Lines 34 - 49 - consider reworking the paragraph as some swapping back and forth between discussing commercial and in house prepared MTF's which affects readability - also need to clarify that you are referring specifically to smooth puree diets (which are referenced later in the results)

- Why would you expect to see such variation between provinces if the same guidelines are being used - this needs clarifying? For non-Canadian readers it may be useful to highlight what differences the provinces might present - e.g. socioeconomic

- Methods - study aim and goal in lines 64-71 are different to the title and the research questions outlined at the end of the introduction - the paper title and intro suggest this is about interpretation of the guidelines and varying nutritional composition of menus/MTF

- The data collection statement suggests that a wealth of data was collected with the intention of writing several papers - I would suggest limiting discussing of data collection to those measures pertinent to this one research paper i.e. remove mealtime experience/meal access info or alter the background info and study aim?

- Lacking in detail regarding recruitment - was it a convenience sample? How were RAC approached?
- Were the menus supplied with standard recipes for each menu item?

- Lines 200-203 - repetition of 'differences' and could this be elaborated on? Regional differences in how a meal was prepared?

- Why are there references throughout the methods section? Ref 20 cited a number of times without relevancy?

- Results –

- Line 253-255 - are you saying the same thing - less than six months prior to the study vs data collection?

- I think fully discussing Table 1 and then going into correlations and Table 2 findings would present the findings in a more logical manner

- I'd be interested to know how long homes were leaving between menu reviews rather than when the last one had been performed? Are they regular? Is this mandated and are the guidelines mandated and widely used? Who reviewed the menus - a dietitian? Are they employed by the homes or contracted specifically for this role?

- Lines 271-274 - I don't understand this sentence but seems like repetition without clarity of the key finding

- I'm struggling to understand why the provinces are being examined for relationships in diet - if they are all following the same guidelines for menu development is it not more to do with the profit status of the home/dollars per head for food/cooking system and availability of food or the input of an auditor/dietitian that will mostly influence the nutritional content of the menu and there may be subsequent patterns in the provinces?

- Table 1 - I'm not sure how you can have 100% of homes using menu planning based on Canada's food guide but also percentages based on other guidelines?

- - raw food cost - is this $ per head/day?
Table 3 - is there a reason for not presenting the mean (SD) in one column for easier comparison and reduce business of the table?

Discussion - comments regarding the types of foods purchased contributing to nutrient composition of the menus not discussed in the results.

Discussion of why differences in menus across provinces not well explained, it is not clear whether 100% recipes were provided for analysis

In summary I think the paper has merit and would generate interest, but currently the paper does not convey key messages clearly or discuss the expected and observed differences across provinces of Canada in a way that would be relatable to international readers. There is no background on what is mandatory in aged care food service in Canada or sociodemographic/population differences between the provinces. Finally the paper does not relate the variances in menu content to issues such as malnutrition rates etc., which is alluded to in the introduction

Best wishes.

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.

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