Reviewer's report

Title: A cluster randomised feasibility trial evaluating nutritional interventions in the treatment of malnutrition in care home-dwelling adults

Version: 2 Date: 28 July 2015

Reviewer: Christine Baldwin

Reviewer's report:

This is the second time that I have reviewed this manuscript which I hope will be published with some minor revisions as indicated below. It is interesting to see a report of a feasibility study focused on nutritional intervention and is potentially useful to other researchers who are designing similar interventions.

1. Is the question posed by the authors new and well defined?
   The question is clear and well defined but the rationale for the question could be more focused. Essentially this trial is examining the relative efficacy of food-based and supplement-based approaches in managing malnutrition in nursing homes. The distinction between these two forms of intervention should be clearer. Also more indication of why these interventions and why they are tested separately and not together. There have been some recent systematic reviews of mealtime interventions (Liu Int J Nursing Studies 2014 & Vucea J Nutr Gerontol Geriatrics 2014) and it might be appropriate to consider these in creating the rationale for this study. Indeed more appropriate strategies such as mealtime assistance, use of dining rooms etc might be better ways to improve nutritional status.

   Reference 23 is 15 years old and therefore may not reflect current priorities.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   The methods section is detailed and well described.

   There is no indication of how staff compliance was assessed (it was judged to be 100%). There needs to be a robust assessment of this outcome.

   Interesting compliance was defined as >75%. Is there a rationale or precedent for this or is it simply an arbitrary cut-off?

   The food records were completed using simple fractions to describe the amounts eaten. Is this method validated and was there any training of staff to ensure accurate and consistent completion.

   Where the VAS used to assess appetite etc. validated?

   Some aspects of this trial would be better assessed using qualitative methods eg. acceptability of different elements. In the results section there is some indication that this might have been undertaken. If this is only a partial report of the trial then this should be made clear in the methods section.
3. Are the data sound and well controlled?
The data are reported fully with a high level of attention to detail and appear sound.
The results address all of the objectives apart from the final one, to calculate the intracluster correlation coefficient. Was this done?
The description of change in outcomes uses the phrase ‘.. suggests sensitivity to...’ which I don’t understand. I would prefer clearer descriptions which indicate simply what the data show. The 95% confidence intervals for many outcomes suggest that the majority of participants did not experience positive benefits.

4. Do the figures appear to be genuine, i.e. without evidence of manipulation?
The tables and figures support the text, although there are a lot of them. I would question whether tables 1&2 are needed. The data in table 6, also appears at the end of table 5!

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?
The manuscript is reported according to the CONSORT guidelines which are appropriate.

6. Are the discussion and conclusions well balanced and adequately supported by the data?
It would be helpful to include a summary of the findings in relation to this trial at the start of the discussion.
Overall the discussion is a well-balanced consideration of the findings and limitations of this feasibility study. It might be useful to consider the value of lack of training in methods (food intake) as a limitation in collection of food intake data.

Reference 64, I think that Turic et al found an overall benefit to energy intake and weight in favour of supplements. It might be good to check this. Did the authors expect a difference in this trial?

7. Do the title and abstract accurately convey what has been found?
Yes.

8. Is the writing acceptable?
Yes

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the
Declaration of competing interests:

I declare that I have no competing interests.