Reviewer’s report

Title: The effects of changing dairy intake on trans and saturated fatty acid levels—results from a randomized controlled study

Version: 6  Date: 16 February 2014

Reviewer: Rachel Brown

Reviewer’s report:

The authors have addressed most of my comments adequately. However there remain several areas of concern:

Major Compulsory Revisions

Methods

1. Page 4, paragraph 4: Given the aim was to evaluate the effects of dietary advice to increase, decrease or not change dairy food intake, why did the authors ask those who reduced dairy to also eliminate red meat? How can the authors attribute changes to change in dairy intake rather than changes in red meat intake. What were the results from the FFQ with regards to changes in red meat consumption between groups? Could this have influenced the results?

2. Page 4: The authors’ comments in their rebuttal regarding why a food diary was not used is confusing. Why would informed consent be different than obtaining consent from collecting FFQ data? Was the FFQ used validated for assessing intake both over a 3-day period and over 1 month? Is an FFQ sensitive enough to pick up changes over only 3 days?

3. Page 5, paragraph 2: I am unclear regarding the comments on the CV for fatty acid analysis. Can the authors please add the CV values to this section?

4. Page 6, paragraph 2: The authors need to state why analysis used was not intention-to-treat. This is the usual analysis for a clinical trial where the question of whether advice to change dietary intake has an effect on outcomes.

Results

5. Page 6, paragraph 5: It is stated that participants had normal weight. Although mean weight was within the healthy weight range, the SD suggests that there were some participants who were overweight and possibly obese. This description needs to be modified.

6. Page 7, paragraph 2: Please add the overall p-value for difference in change in dairy fat between groups.

7. Page 7, paragraph 4: Given no change in total saturated fat between the groups, do you think that the low dairy food group compensated with other high saturated fat foods that were not picked up by the FFQ?
Discussion
8. Page 8, paragraph 4: The authors state “intake of dairy food significantly changed for all randomized groups”. However the results sections states that change in dairy food was not significant for the no change group, p=0.78. Please clarify.

Limitations
9. Suggest adding limitations inherent with using FFQ to assess dietary intake.

Table 3:
10. There is no comparison for reduced vs. increased. Could the authors provide an overall p-value for differences between the 3 groups and then pairwise comparisons if any of the overall p-values are statistically significant?

Minor essential Revisions
11. The referencing within the text is still inconsistent. There are sometimes spaces between the text and the reference and sometimes not. Please ensure this is consistent as per the requirements of the journal.

12. The authors have used both English and American spelling. E.g. “randomized” and “randomised” Please be consistent.

Background
13. Page 3; paragraph 1: “poly unsaturated” should read “polyunsaturated”

14. Page 4; paragraph 2: There should be a space between “…volunteers (n=180)”

Results
15. Page 7, paragraph 3: The word “acid” needs to be added to the first sentence. Also “table” should read “tables”.

Discussion
16. Page 9, paragraph 3: Suggest rewording first sentence to “did not change significantly between groups”. This paragraph also needs a full stop at the end.

References
17. Journal titles are sometimes abbreviated and sometimes not. Please be consistent as per journal guidelines.

Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
I declare that I have no competing interests' below. If your reply is yes to any, please give details below