Reviewer's report

Title: Increased dietary alpha-linolenic acid has sex-specific effects upon eicosapentaenoic acid status in humans: re-examination of data from a randomised, placebo-controlled, parallel study

Version: 1 Date: 5 September 2014

Reviewer: Lindsay Robinson

Reviewer's report:

1. This is a very clear and concise manuscript and I have no major compulsory revisions.

Minor Essential Revisions

2. Abstract (Pg. 2) Line 4..."As far as we know there are currently no studies THAT have specifically..." (the word should be "that" and not "which" for proper grammar).

3. Same comment as #2 above applies to Pg. 3 1st line of paragraph 2.

4. Use either "sex x diet" or "sex * diet" (i.e. please be consistent in the wording of this)

Discretionary Revisions

5. Pg 4 (Methods): It would be very helpful if the authors could provide the levels of ALA in the specially formulated margarines within the text of the Methods.

6. The authors state that "increasing BMI is typically indicative of increasing body fatness...". The lack of other measures, such as waist circumference or other body composition measures should be recognized as a limitation of the current work when exploring the relationship between adiposity and sex differences in fatty acid status. This section (Pg. 6) remains quite speculative given the data available.

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.