Reviewer’s report

Title: Effect of Prenatal EPA and DHA on Maternal and Cord Blood Insulin Sensitivity: A secondary analysis of the mothers, omega 3, and mental health study

Version: 0 Date: 25 Jul 2019

Reviewer: Raylton Chikwati

Reviewer's report:

Interesting well written article. The statistics used seem sound for the analyses carried out and the statistical methods are clearly described. I just concentrated mostly on the statistical methods and resultst section and took note of the following:

* Page 8: The authors should specify the type of regression analysis that was carried for clarity. This applies even in the results section where they mention regression analysis

* Page 9: In table 1, my suggestion would be to include the sub sample size for each category e.g EPA-rich fish oil group n=36. That would have the effect of decluttering the table by killing the row that refers to non-whites. On the same table the last column could be labelled statistical significance rather than just significance.

* On the first line below table 1, … showed no difference…. Such a statement could be taken to mean that the figures were exactly the same. If the figures were not exactly the same then it should read ‘…showed no significant difference…’

* Table 2 the adiponectin row under group column the p-value reads 0.0.83: needs revision and the units in that table should be pg/ml and not Pg/ml

* Page 10: specify the type of regression analysis used linear or logistic

* Page 11: First line ’… higher maternal serum DHA..’ I think there is need to specify that this was baseline measurement

* Page 11: Second paragraph, last line: There was no association: consider there was no significant association. No association implies a p-value of 1

* Page 12 second line: specify type of regression.

Additional comments

Page 4 should have a subheading Introduction or background.

Page 6 line 3 and 4, replace the words patients and subjects to participants, for uniformity.
Page 6 lines 57- should comment on the characteristics or performance of the method used for leptin and adiponectin assays eg: coefficient of variation etc

Page 7 line 30, page 14 line 6 rephrase the word subjects to participants

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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.

Yes

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.

I am able to assess the statistics

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

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal