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: 1 Date: 28 Sep 2019

Reviewer: Stephen Contag

Reviewer's report:

1. Summarize the manuscript's content.

This manuscript is second submission of a secondary analysis of "The Mothers, Omega-3, and Mental Health Study," using the same group randomization of primarily EPA, DHA or placebo. The authors also included 25-hydroxycholecalciferol levels as an independent variable. Outcomes measured were surrogates for insulin sensitivity: 1) adiponectin levels, 2) leptin levels, and 3) adiponectin leptin ratio (ALR), levels. Increasing levels of outcomes 1 and 3 are associated with increased sensitivity and increased levels of outcome 2 with decreased sensitivity.

2. The perceived limitations were adequately addressed:

   1. The authors have structured their manuscript to fit the title emphasizing DHA and EPA acid supplementation and the conclusions are consistent with what is presented in the results.

   2. The tables are easier to understand and the overall presentation of results is appropriate.

3. The authors have chosen to include data on vitamin D in their manuscript. Although I do not think it is relevant to this manuscript, as currently presented, it does not detract from the readers ability to understand what the study is about and what was done.

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.

Yes

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

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