Reviewer’s report

Title: Association between interpregnancy interval and birth weight: what is the role of maternal polyunsaturated fatty acid status?

Version: 3 Date: 17 July 2012

Reviewer: Elizabeth Yakes

Reviewer’s report:

The major compulsory revisions and minor essential revisions from the reviewer’s initial review have been addressed in the revised manuscript and rebuttal letter.

Major compulsory revisions: none

Minor essential revisions:

The tables included with the paper have been substantially improved, and are now easier to understand. The statistical section of the methods is also clearer. I have one suggestion to further improve the clarity of the statistical methods section. For the part of the paragraph stating: “The middle category was used as reference. We designated the quintile with the strongest association with adverse pregnancy outcome as the least favourable quintile. We then evaluated, by means of logistic regression, whether interpregnancy interval was associated with being in the least favourable LPUFA quintile” consider the revision below (added words are included in ‘single quotes’).

“The middle category was used as reference. ‘To examine the relationship between interpregnancy interval and maternal LCPUFA concentrations,’ we designated the quintile with the strongest association with adverse pregnancy outcome as the least favourable quintile. We then evaluated, by means of logistic regression, whether interpregnancy interval was associated with being in the least favourable LPUFA quintile (‘versus any other LPUFA quintile’).”

Minor issues not for publication:

There are still some typos and awkward phrasing in the manuscript. It may be helpful to consult with a native English speaker.

Examples:

Methods, paragraph 2, line 2 - should be a “live” not “life” infant
Methods, paragraph 2, line 6 - should be “lacked” not “had lacking”
Comment, paragraph 6 – should be “result” not “recult”

Level of interest: An article of importance in its field
**Quality of written English:** Needs some language corrections before being published

**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.