Reviewer’s report

Title: Correlates of whole-blood polyunsaturated fatty acids among young children with moderate acute malnutrition

Version: 0 Date: 14 Feb 2017

Reviewer: Philip Calder

Reviewer's report:

This manuscript reports whole blood fatty acid concentrations (as %total FA) in 1609 children (mean age around 11 months) in Burkina Faso and relates these to possible predictors (diet, infection etc.). The strength of the study is its size and the number of predictors ("correlates") assessed. It is identified that there was no severe deficiency of PUFAs, but that PUFAs, especially omega-3 were a little lower than in a comparator group of Danish children. Certain fatty acids were affected by malnutrition, and by how it was assessed, and by diet, infection and inflammation. The work is novel and of interest. The manuscript is generally well presented and data are clearly shown.

Specific comments:

1. I would advise authors to read the manuscript to improve its clarity and its use of English - in many places singular and plural are used incorrectly.

2. Line 167-168 seems to contradict line 168-169.

3. Line 174-175. I do not follow what it written here. Please clarify what exactly is meant.


5. Line 253. What is a "more pronounced higher proportion"??

6. Line 277 days there is little evidence of PUFA deficiency. Line 278 says there may be several explanations for this. Thus I would expect then to read reasons why PUFA levels are maintained. Instead there are explanations for why PUDFA levels are low. It may be better to say there is no deficiency and explain why that is and then to say PUFA levels area bit lower than one comparator group in Europe and explain why that might be.

7. Line 287. "higher" than what??
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