Reviewer's report

Title: Acceptability and impact on anthropometry of commercial available versus locally developed Ready-to-Use Therapeutic Food in pre-school children in Vietnam.

Version: 1 Date: 11 March 2013

Reviewer: Saskia de Pee

Reviewer's report:

Major Compulsory Revisions

1. Most children who suffer from SAM are below two years of age. Why has the acceptability of the RUTFs been tested among children aged 3-5 years? Especially the hard, dry consistency of the local product is of concern when it is to be consumed by children, from the age of 6 months onwards.

2. Please provide more detail about the nutrient content of HEBI in comparison to Plumpy'Nut, including the content of n-3 and n-6 fatty acids, and state whether the nutrient content has been estimated using food composition data for the raw ingredients, or has been based on actual analyses. Especially whether HEBI has a composition in-line with the specification for RUTF for SAM treatment should be clear from the information provided. Also, please give a range for the content of the different ingredients. And, whey is shown as an ingredient in figure 1, but not mentioned in the text, please adjust where necessary.

3. What is the water content of HEBI, and what is its shelf-life?

4. What are the costs of HEBI compared to imported Plumpy’Nut?

5. What was the caloric content of the snacks that were normally given to the children at school, i.e. how much more energy did the children receive compared to what they normally received at school?

6. If inclusion criteria included WHZ >-3 and <-1 (text), why were there two children in the study with a WHZ<-3, and why does figure 2 show inclusion as WHZ-score<-1.1 (instead of <-1.0) and not show a lower limit?

7. The text of the last two paragraphs of the discussion is too speculative, in particular:
   a. The increase of HAZ-score that was observed occurred with consumption of a very nutrient-dense product (RUTF) that also includes milk powder. Saying that a lower cost, more sustainable food intervention would probably also achieve this, without specifying its characteristics (energy and nutrient density, nutrient content, type of foods) cannot be done. Please remove.
   b. Also, whereas catch-up growth in length may be possible to some extent, other damage of co-occurring nutrient deficiencies, such as impaired cognitive development due to iron deficiency may not be repairable, and it would be important to remind the reader about that – prevention is better than treatment.
c. The extent to which stunting can be reduced by supplementary feeding for the treatment of moderate malnutrition is limited, because the duration of such treatment is short, and could only occur among children that are identified and eligible for treatment.

Minor Essential Revisions

1. Introduction, 2nd paragraph, please note that the note by WHO, WFP, UNICEF, SCN on RUTF for SAM treatment specifies a very specific composition in terms of nutrient content.

2. Please clarify whether IMAM in Vietnam treats children with SAM and MAM the same way, and whether both would be eligible to receive RUTF (refer to last paragraph of introduction).

3. Plumpy’Nut could in principle also be produced locally, unless its main raw ingredients are not available. Please clarify why different ingredients were used for HEBI. Was it related to familiarity with the type of product? And if so, is the existing green been cake also consumed by children aged 6-11 months?

4. What indicator was used for ‘reluctance’ of children towards RUTF?

5. Discussion, 6th line, should this be ‘accepted BY…’ instead of ‘accepted FOR children in Vietnam.’?

6. How was the difference between the terms taste and palatability explained to the 3-5 y old children in such a way that they could understand and give their score?

7. Table 3, please state that a higher score for hardness indicates increased hardness rather than better acceptability.

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have no competing interests to report.