Reviewer's report

Title: Associations between preterm birth, small-for-gestational age, and neonatal morbidity and cognitive function among school-age children in Nepal

Version: 1 Date: 17 June 2013

Reviewer: Ruurd M. van Elburg

Reviewer's report:

The authors describe the very interesting data from a developing country with regard to preterm birth, SGA and neurocognitive development and school age in Nepal. The authors are to be complimented with the huge effort to collect these data.

Major Compulsory Revisions

1. The cohorts used in the study were taken from a maternal supplementation study and a child supplementation study. However in the discussion the authors describe that the maternal intervention with iron-folic acid during pregnancy had significant positive effects on general intelligence and executive and motor function. How did the authors correct for these effects in their analysis because these were also main outcome measured of this study?

2. Although the authors describe in the discussion that the number of preterm infants was limited, especially below 34 weeks, the authors do state that prematurity had no effect on the outcome measures. The paper would improve by describing more clearly how many preterm infants were included and also in more detail how many preterm infants < 34 weeks were included. In addition, the reviewer has some doubts whether it is reasonable to state that prematurity has no effect on outcome if the number and severity is so limited. The statement should be more clearly described with more modesty taking into account these important limitations.

Furthermore, the reviewer wonders whether most preterm infants also were SGA thereby further limiting the possibility to measure the true effect of prematurity in this cohort.(as the effect of SGA may influence/exceed the effect of modest prematurity)

3. In many studies the importance of early nutrition and postnatal growth failure has been described in relation to later neurocognitive development. The authors do not describe early nutrition (breastfeeding rate, early postnatal growth and so on) although these infants were part of an intervention study. Can the authors give more detail on this topic?

4. The above mentioned topics should be clearly discussed in the discussion section of the manuscript.

Minor essential revisions

1. Table 1 is not so clear because the last part of the table has different units
(mean SD) then the first part. Maybe the table can be more clearly separated or even split into two tables?

2. The conclusion of the manuscript could be improved by summarizing the main results of the study and the potential relevance for prevention and treatment rather than more general statements with new references.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

My potential conflict of interest is that I currently also am an employee of Danone Research The Netherlands. However, to my opinion this does not hamper significantly my capabilities to objectively review the manuscript.