Reviewer’s report

Title: Anthropometric and clinical correlates of fat mass in healthy term infants at 6 months of age.

Version: 0 Date: 10 Sep 2018

Reviewer: Elisabet Forsum

Reviewer's report:

This manuscript needs extensive revision.

- The description of how the subjects were recruited should be improved. How was the number of participants decided? Describe inclusion and exclusion criteria.

- What model was used by the Pea Pod to calculate body composition?

- The description of the subjects is incomplete. Weight and height/length of mothers and infants should be given. Give z score of boys and girls at birth using an appropriate reference to show to what extent these infants represents healthy and normal infants.

- The authors could use their results to predict body fat using the variables shown in table 3. Such a prediction can be evaluated using "the leave one out method" (Assah FK et al. Obesity 17: 1588-95, 2009). This is needed to demonstrate to what extent the presented correlations can be of any practical use.

- Tables 2 and 3 are not satisfactory. Apparently only 82 infants were used to assess FM. Why? Table 3 does not indicate the number of infants used. This needs clarification.

- In table 2 the authors have apparently not considered the influence of confounding variables such as sex and size of infants and possible maternal factors (obesity, socioeconomic status).
- The authors do not report any data on fat-free mass (FFM). This is needed since FM% is influenced by FM (kg) as well as by FFM (kg). Using FMI (fat mass index, i.e. FM/length2 may be an alternative. The data need more analysis to clarify to what extent variations in FFM are responsible for the observed results. It is unclear why sex is not included as a variable in Table 3.

- The last sentence of the conclusion in the abstract is unclear.

- Lines 41-42: A reference is needed here.


- Line 64: How about twins?

- Line 70: What is a "standardized nutritionist"?

- Line 78: Why is it important to place the infants head in the Frankfort plane? It is important to attach the head to the appropriate part of the infantometer but this is not stated by the authors.

- Line 122: Why were these values eliminated?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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?
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No

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