Reviewer's report

Title: Exclusive breastfeeding of Swedish children and possible influence on development of obesity: a prospective cohort study.

Version: 1 Date: 8 February 2008

Reviewer: Michael Toschke

Reviewer's report:

Authors: Karina Huus, Jonas F Ludvigsson, Karin Enskar, Johnny Ludvigsson.
Title: Exclusive breastfeeding of Swedish children and possible influence on development of obesity: a prospective cohort study.
Journal: BMC Pediatrics

Huus et al report associations between breastfeeding and obesity at age 5 years from a large observational cohort study in Sweden. They could not observe a protective effect of breastfeeding after adjusting for socioeconomic confounders in a subsample of 3654 children.

Comments:

Major compulsory revisions:

METHODS:
1. Please indicate the target number of births somewhere (must be 16058/0.74=21700).
2. The participation after 5 years is with 7356/21700=34% quite small. The authors seem to have information on the non-responders or any estimates from official statistics resources to compare their sample with the general population since they conclude the dropped out mothers were younger etc. It would be very helpful for the reader to get an idea on the representativeness; I suggest that the authors add the difference in those important social characteristics between their sample and the general population.

RESULTS:
3. I would prefer the tables to be included in the MS instead of the figures. I recommend cutting out the figures and transferring the tables from the supplemental files to the MS.

FIGURES:
4. I suggest omitting all figures and replacing them by tables as indicated above.

TABLES
5. I suggest defining one study population so that there is an equal sample size in each table.
Minor essential revisions:

ABSTRACT:
6. Please indicate the birth date range of the children or time information.
7. Please indicate the prevalence of childhood obesity.
8. I would appreciate more results in the abstract. Please indicate most important findings by stating the ORs with corresponding confidence intervals.

INTRODUCTION:
9. For the association of breastfeeding and later obesity I would suggest citing the reviews published within the last 3 years rather than citing single studies.
10. REF#22: It is rather unusual to cite papers that are not published or accepted yet. I suggest including one of the several potential references from the literature on parental education/weight status and children’s BMI instead.

METHODS:
11. Do the authors know reasons for non-participation if so, I suggest they indicate them either in the methods section or in the discussion.

RESULTS:
12. Please indicate the prevalence of childhood obesity.
13. The authors write that the median of breastfeeding was 4 months from the 1-year examination and 8 months from the sweep at 2.5y. This indicates a very strong shift to breastfeeding families in the ongoing study. This has to be commented on in the discussion section.
14. I suggest to shorten and rewrite the univariate results of related factors to breastfeeding and to present the results in a table.
15. The final multivariate model is based on 3654 children. This represents only 3654/21700=17% of the initial sample of 21700 births. This has to be included in the discussion section.

DISCUSSION:
16. In a recent study we observed a beneficial effect of breastfeeding >6 months only (Am J Clin Nutr. 2007 Jun;85(6):1578-85.) It would be interesting if the authors also can observe such an effect at this specific cutpoint.
17. I would appreciate a small biological/confounding paragraph in the discussion section.

TABLES
18. Table 1 seems to have a typo in the head row baseline is indicated twice.
19. The sample sizes of table 1 are quite unconventional expressed in the head row and do not match with the sample sizes stated in the MS.
20. Table 3: It is unclear to what unit change the ORs refer to (e.g. breastfeeding
â## is this per additional month)?

Discretionary revisions:

DISCUSSION:
21. The authors could comment on the sample size, number of non-breastfed children, number of obese children and the detectable difference.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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