Reviewer's report

Title: National Trends in Beverage Consumption in Children from Birth to 5 Years: Analysis of NHANES Across Three Decades

Version: 1 Date: 30 January 2012

Reviewer: Tonje Holte H Stea

Reviewer's report:

Title: National Trends in Beverage Consumption in Children from Birth to 5 Years: Analysis of NHANES Across Three Decades.

Version: 1 Date: 25 January 2012

Reviewer's report: This article has investigated trends in beverage consumption among children from birth to 5 years based on data available from NHANES. Only few other studies have described trends in intake of different beverages and associated calories and nutrients among this particular age group.

Minor Essential Revisions:

• In the title, the included participants are described as children from birth to 5 years of age. In the abstract section, the included participants are described as children from 1-5 years of age. Later, the age group is described as children less than 1 year of age to 5 years of age. Although, detailed information about age of the target group is provided in the method section, make sure that correct and consistent information is provided throughout the manuscript.

INTRODUCTION:

Major Compulsory Revisions:

• This section provides a summary of relevant background information. However, this section lacks natural flow and there is also inconsistency in the use of past and present forms. Please improve.

Minor Essential Revisions:

• Please clarify the difference between fruit juice and fruit drinks throughout the manuscript, for example by using the term 100% fruit juice.

• Line 96-98 (end of 3rd paragraph): Please correct this sentence.

METHODS:

Major Compulsory Revisions:
In the introduction, the authors have described that exclusively breastfeeding is recommended for the first 6 months of a child’s life. Furthermore, breastfeeding is recommended as a nutrition source for the child’s first year of life and thereafter as long as mutually desired by mother and child.

In light of the recommendations and the target group of the present study, please justify why participants who were being breastfed were excluded from the study.

• Please provide information about participation rate (from each study period).

• Please provide more information about all statistical tests that have been used.

RESULTS:

Major Essential Revisions:

• The text is easily understood, but the large amount of information which is commented upon in the text draw attention away from the main findings. The authors might consider altering the presentation of data by reporting percentage use of beverages (table 1) graphically.

• As the actual values are important, please provide exact p-values in the text.

• The tables: the authors should consider alternative ways to present the data more clearly.

• When data are presented in tables and figures, indicate the statistical test(s) that was used to evaluate the data with a footnote.

• Figure 1; check spelling of Soy Beverage (now: sot beverage). As this paper has focused on comparing beverage intake during the three decades, I would advise the authors to remove information about intake of soy beverages from the text.

• Please report p-values correctly. In tables, p-values are reported with 4 decimals. In the abstract, only 3 decimals are used. I would advise the authors to report only 3 decimals and please do not report p=0.0000!! This does not make sense!

• Please describe whether intakes of different types of milk were significantly different between age groups (Figure 2+3).

DISCUSSION

Major Essential Revisions:

• In general, check content structure, sentence structure and spelling. In order to increase the natural flow, always present your own results before you compare them with results from other studies.

• It would be appropriate to comment the exclusion of participants who were
being breastfed. Is this a limitation of the study?

Minor Essential Revisions:
• Line 409 (8th paragraph, second sentence): correct referencing style.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.