Reviewer’s report

Title: Food patterns and dietary quality associated with organic food consumption during pregnancy; data from a large cohort of pregnant women in Norway

Version: 2 Date: 23 February 2012

Reviewer: Sameera Talegawkar

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Major Comments:

1) Methods section: The authors specify that beverages were not included in the PCA procedure. This is a concern since the questions on organic food consumption on the FFQ include milk. The reason stated is that there were large differences in amounts consumed. Did the authors consider performing the dietary pattern analyses using % of calories from each food groups as the data variable for entry into the patterning procedure. Also, did they explore excluding extreme outliers (e.g. > 6 SD from the mean) for food group intakes as is commonly done in patterning procedures given the sensitivity of the analyses to outliers?

2) Methods section: For tables 1 and 2, the authors appear to have compared intake of various food groups (Table 1) and nutrients (Table 2) across the reported organic food intake categories with the total organic consumption index # 6. There are several comparisons that have been made, but no indication of any correction/adjustment for multiple comparisons. This is a concern since some comparisons may have reached statistical significance by chance.

3) The results from the PCA analyses from Table 1 are difficult to interpret with respect to a public health message. For a non-scientific audience what does a difference of a unit of the score mean?

4) Results section: Tables 1 and 2- Title implies causality. Please re-write to indicate “Associations”

Minor Comments:

5) Methods section: Subjects sub-section: Please mention “gestation” after 17 weeks.

6) Results section: Figures 1 and 2-Please indicate what measure of central tendency has been presented on the Y-axis.

7) Results section: How were the nutrients for presentation selected?

8) None of the analyses adjust for potential covariates/confounders. Based on the previous publications using these data, it appears that age, pre-pregnancy BMI, etc are associated with reported organic food consumption. Why were these variables not considered in the present analyses?