Reviewer’s report

Title: Associations of food group and nutrient intake, diet quality, and meal sizes between adults and children in the same household: a cross-sectional analysis of U.S. households

Version: 2 Date: 11 September 2011

Reviewer: Sharon Kirkpatrick

Reviewer’s report:

A number of the minor points that I raised in my previous review have been noted by the authors and revisions were made to address them. I continue to find the topic of intrahousehold food intake patterns to be an interesting one. However, the major weakness has not been addressed.

Major concerns (requiring major compulsory revisions):

It is not statistically sound to average intakes over multiple recalls and to create a binary variable indicating whether or not a recommendation or requirement was met. I had previously suggested the DRI assessment report as a source of information on estimating usual intakes and comparing them to requirement distributions. The authors suggest that it would be inappropriate to apply methods discussed in that report to the data, which are over 10 years old (which is a little confusing given that they are applying requirement estimates from the DRI reports to these same data). The theory behind the statistical methods described in the assessment report for appropriately assessing intakes in relation to requirement estimates pre-date the DRI report by a number of years. In short, this paper does not use currently accepted techniques to assess adequacy of intakes (e.g., the EAR and AI are being used in ways that are not recommended by the IOM) and should not be published.

For the section on eating occasions, approaches could be taken to use both days of recall data – for example, predicting probability of consuming breakfast as part of the method of estimating usual intake at breakfast.

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

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests