Reviewer's report

Title: Family structure and breakfast consumption of 11-15 year old boys and girls in Scotland, 1994-2010: a repeated cross-sectional study

Version: 2 Date: 22 February 2012

Reviewer: Bisakha Sen

Reviewer's report:

I appreciate the authors' efforts in responding to reviewer comments.

Two concerns remain. I consider both of them major. However, once the authors address those, I leave it to the editors' discretion about whether I need to see the paper again.

1) I appreciate why the authors had to choose 7 versus less as their cut-off. However, under circumstances, I think the MAIN results presented should use the less than 4/4 or more as the cut-off. It would also really help if the authors detail the distribution to the answers to those questions, so the readers can see how many of the 'less than 4' were actually 0s, and how many '4 or more' did NOT eat breakfast daily.

2) While the authors' concerns about multicollinearity with SES may be justified, I am still interested in knowing how sensitive the results are to its inclusion.

3) My biggest concern is the continued use of interaction terms in a logistic model. I realize BMC Public Health is not a leading methods journal, but it is still better to avoid methodological approaches that may be flawed. The non-linear nature of a logistic function makes it difficult to interpret interaction terms. Authors are referred to a recent article in Health Services Research (http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6773.2011.01314.x/abstract) that outlines the challenges.

Level of interest: An article of importance in its field

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