Reviewer's report

Title: Nutritional and behavioral determinants of adolescent obesity: a case-control study in Sri Lanka

Version: 3 Date: 3 September 2014

Reviewer: Kelly Skinner

Reviewer's report:

Major Compulsory Revisions

1. In our studies (and in other literature) we have found that anthropometry was very sensitive, especially for adolescent girls. Were the girls measured separately from each other, or were they all measured in the same space together? Were there any issues with sensitivity? This should have also been questioned by your ethics board at the University.

2. Line 146: Am I misunderstanding Table 2, but from the multivariate analysis there is not a relationship with fast food consumption and obesity? Yet in the text, fast food consumption is listed as having an association with obesity. Please check your results.

3. Line 173: I don't know what the population of Sri Lanka is, so the 1/5 number has no reference value for me. I would suggest including an approximate number of adolescents and also an estimate of the number of adolescent girls to show the amount of the population where obesity will have an impact.

4. Lines 208-214: This paragraph should be reworked. The first two sentences appear to be opinions of the authors, but are not actually direct findings of this study. The study cited is not directly related to this study - boys were not compared to girls here and parenting style was not examined. I would suggest revising this paragraph to be more clear about the point that the authors are trying to make or remove the paragraph all together.

5. Line 218: In this part of the discussion section there would be an opportunity for the authors to make suggestions about why fast food consumption was not associated with obesity. Was the sample size too small? Some other potential reason? This finding seems to be in contrast to the high energy intake associated with obesity - why might this be?

6. Lines 246-248: I would argue that there are already many studies that have examined school food environments and policies and their association with eating patterns in adolescents, just perhaps not in Sri Lanka. If you mean that these types of studies should be specifically explored in Sri Lanka, then please be specific. Otherwise it looks like the literature has not been checked.

Minor Essential Revisions

1. There are many missing or extra spaces throughout the text. For example before or after punctuation, hyphens, brackets or forward slashes. I'm not sure if
it is because the text is fully justified, however I don't think that would affect the spaces before and after periods, etc. The manuscript should be checked over to fix all of these instances.

2. Line 59: compared to when/what?

3. Line 60: there should be citations provided here on the "studies that have identified adverse consequences of obesity".

4. Line 61: Check grammar at the end of the sentence. A word is missing. Also, you should specify that studies are lacking in Sri Lankan adolescents, since I would argue that there are not studies lacking in this regard in other countries.

5. Line 69: Should say non-obese children (not "normal children")

6. Line 100: Spend should be spent

7. Lines 126,127,128: I see strange boxes on either side of the < sign. I'm not sure that symbol these were supposed to be, but the boxes don't make sense.

8. Line 148: girl should be girls

9. Line 152: pattern should be patterns

10. Line 164: Missing a word at the end of the sentence for it to make sense.

11. Line 176: Need should be needs

12. Line 182: Misconceive should be misconceived

13. Line 183: check grammar or for an incorrect or missing word

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

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.