Reviewer's report

Title: Snacking patterns, diet quality, and cardiovascular risk factors in adults

Version: 1 Date: 11 July 2013

Reviewer: Alison Booth

Reviewer's report:

Minor essential revisions

Introduction
1) Page 4, line 72 – state the country. E.g. “..adults in the US were obese”
2) Page 4, line 88-91 - most of these findings were from the 90s, are there any more recent studies or reviews on the topic?

Methods
3) Page 6, Line 129 – Can you please provide more detail on the “automated multiple pass method”?
4) Page 6, line 133 – Please provide more information on “judged to be incomplete or unreliable by staff … were excluded from these analyses” – how was this judged?
5) Page 7, line 141 - Define “nutrients to limit” and list the nutrients of public health concern.
6) Page 8, line 164 – I understand that this information has been published previously, but it would be good to explicitly state that the anthropometry data was measured data by study researchers.
7) Page 8, line 187 – Please spell CVRF out in the main paper, before using this acronym.
8) Page 9-10 – Clearly state how you placed each person into one snacking pattern. I assume many would have had multiple types of snacks in one day – how did you deal with this? What fell into the miscellaneous category?

Results
9) State the proportion of people having no snacks (& refer to table) first, before going into energy and nutrients to limit
10) P13 line 286 – says “six of the snacking patterns” but only five are listed.
11) P13 line 289 “half of the snacking patterns had a total HEI-2005 score of less than 50” – which patterns is this preferring to? Please list them here.

Discussion
12) Overall, I think this section could be more focussed (or just made more clear) on what new information your study provides to the existing literature. Parts
of the discussion appear to be a repeat the introduction e.g. p17 line 382-387. This needs reviewing.

13) Page 15 from line 344 to 350 – the key pint here needs to be clearer.

14) Page 17, line 389- – lack of association between snacking and CVD: Clarify if this was this for all snacking categories. I think the discussion on SFA here is going a little off track, try to keep focussed.

15) P18 line 413 – should be mentioned in the results

Tables

16) Table 5 - define LCL/UCL

17) Supplement table – Might be useful for readers if you provide further explanation. Can you list some example foods next to the codes?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**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