Reviewer's report

Title: Australian children's consumption of caffeinated-formulated beverages: a cross-sectional analysis

Version: 1 Date: 31 July 2014

Reviewer: Amy Branum

Reviewer's report:

- Major Compulsory Revisions

In general, there is a problem with the results. The mean intakes are reported inconsistently across tables (i.e., sometimes in mg/day and sometimes g/day) and the mean intakes seem implausible even in mg/day. The Authors need to review and revise the results regarding mean intake. Specific examples follow.

1. Results section: p. 10, lines 211-218: The proportion of children/adolescents reporting caffeine consumption seems low at only 15%. A recent US study reported approximately 75% of children and adolescents reported caffeine consumption on any given day (Branum et al, 2014). Although the results are from two different countries, the discrepancy seems greater than what might be expected. Can the Authors give any reasons why overall caffeine consumption may be relatively low among Australian youth?

2. Results regarding mean caffeine consumption: I believe that the Authors have an error in their mean caffeine intake calculations which needs to be addressed. In Table 1, a mean intake of 61 mg/day among consumers is presented which is in keeping with previous studies. However, a similar mean intake is presented, now in g/day, among all children (64 “g/day”). Aside from the mg to g issue, this mean intake is not consistent with the information presented in Table 1 where a mean intake of 11 mg/day for the entire sample is presented. Furthermore, the means presented in Tables 3-5, even if presented in mg/day instead of g/day, are not consistent with Table 1 and seem excessively high. A 12 ounce can of soda contains 130 mg of caffeine so a mean intake of 555 mg per day is the equivalent of drinking over 4 cans of soda per day. This type of value seems like an outlier, rather than a mean, even if the distribution of intake is heavily skewed. The Authors need to double check these results and make sure the units of measurement are consistent/plausible.

Figure 2: Is it possible for the Authors to break down CFB by type in this figure? Since non-energy drinks account for the overwhelming majority of CFB consumed, it may be more helpful to see the individual types of CFB (e.g., soda, tea, etc.) in this figure.

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