Reviewer's report

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

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Reviewer:Rosanna Watowicz

Reviewer's report:

I have remaining concerns about the significance of this article. I can see the importance in reporting caffeine intake in children, but this study seems to be examining a very specific sub-category of caffeine intake. The authors state that there are potential adverse health outcomes associated with CFB intake (lines 93-94), but I continue to struggle with this argument. Are the health outcomes from a Diet Coke (a CFB) any worse than those from a frappuccino (a non-CFB)? Also, coffee and tea account for a higher proportion of caffeine intake than CFBs, which seems to be discounted. In the discussion, I believe the authors are trying to argue that CFB consumption and sugar-sweetened beverage consumption are related. If that is the case, then why not examine all caffeinated SSBs (for example, sweetened tea) and not only formulated beverages?

Putting aside the fact that not all caffeinated SSBs were included in this study, the idea that caffeine may increase SSB intake is somewhat interesting. This is discussed in the second paragraph of the Discussion. However, I had difficulty with the articles that are cited to provide the basis for this discussion/argument. The authors state that the inclusion of caffeine in SSBs has been proposed to increase consumption (lines286-287). This statement is the crux of the argument linking SSBs and caffeine, however I was unable to locate the article through PubMed, the Obesity Reviews archives, or even a google search (citation 26, Riddell et al, 2010). I assume that these authors are able to properly paraphrase the conclusions from their own study, but since this citation is so important in the discussion, I would have liked to read the article. The other important citation in this section was 27 (Keast et al, 2011), however I believe that the conclusions from this citation may have been extrapolated too far in the present article. Keast et al conclude that the removal of caffeine from SSBs would allow sucrose to be decreased without affecting flavor, thereby reducing energy intake. I do not think this implies that removal of caffeine from the product would decrease intake as the authors state in lines 288-289.

While the data presented seem scientifically sound and may be of interest to a limited number of individuals, I fail to see the importance of this study as it is presented. I think the authors would be better served to present data on caffeine intake as a whole, or caffeine intake from all SSBs (not just CFBs).

Of minor note, some of the small changes that the authors reported correcting in the most recent cover letter have not be entirely corrected. This seems to be a
minor oversight which can be easily addressed. Specifically, the term "soft drink" is still used in lines 154-155 and the term "increased" is still used in like 225.

**Level of interest:** An article of limited interest

**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