Reviewer’s report

Title: Reductions in sugar sales from soft drinks in the UK from 2015-2018

Version: 1 Date: 16 Sep 2019

Reviewer: Barry Popkin

Reviewer's report:

Overview: In general, I think the author’s understood many of my points but not all so I will be rather specific in what is needed.

1. Title: this is a combination of sugar company change and consumer demand changes. You are using sales data. The title must be changed to discuss sugar changes made by both consumers and companies or remove companies. In no way are you separating supply from demand. Nor are you looking at product specific reformulation and new products. And if so, you must realize that all of this is partly companies responding to consumer changes we are seeing globally in high income countries. So, remove companies from the title. You can in the introduction make it clear that these changes result from the complex interaction between company-initiated changes and consumer demand, Even the introduction ignores the massive public information campaign of advocates, the NHS and others and all the media. Just look at the newspaper articles in the UK on sugar, the TV programs, etc.

So, the introduction must be reframed.

2. Your paper: by using total volume and not per capita per day you ignore many shifts that have gone on in population. In Mexico, we found a completely different trend when total Euromonitor sales and per capita was used. We found the same in the US. You must make this change in the figures and tables. You can put the total sales into an appendix but for the health community to understand how these sales translate to meaningful measure this shift is necessary. This is not done for your sugar content tables 1-3 but for the figures it would allow us to understand the impact on consumer intake; however, for table one total volume add a row for daily per capita sales. It sounds great to discuss total sugar volume of sales changes but to interpret that for the health community we must understand daily per capita changes. This is a public health and medical journal and not an industry one.
3. Your sample of beverages: you need to be upfront about this. This is truly a low measure. For example, in Chile we had 2241 unique beverages in 2017 (ignoring the same item with 6-10 sizes etc.). This is a country of 19 million vs your much larger and higher income country. Our even larger countries had many more. Your sample is not a full sample. You can talk to your Cambridge team to learn what the numbers are and you must so readers have a full sense that this is a subsample only.

In South Africa we had 5925 individual beverages with unique content. There is just no way the UK can have your tiny number.

You must discuss this as a subsample. But ideally you can learn the true number from the White et al evaluation you are part of.

4. in the figures could you add the exact numbers [just in boxes inside each bar so interpretation is easier. you will find that is important also for presentations and to expand usage of your figures. you did this in figure 4 so why not add to other figures. it would help the reader. you put percentage change on the top of one but why not absolute per capita amounts in the figure bars?

5. There is a separate paper by peter Scarborough et al on which several of the coauthors are involved. How your paper differs from that one needs to be discussed in the discussion. That is being reviewed at another major medical journal and will confuse readers if both papers do not discuss and make clear how they are different.

6. Discussion: one thing we are seeing globally with cutoffs from both taxes and both front-of-the-package warning label and positive logos is heaping of composition to get foods and beverages below key cutoffs. you can see that in your shift in content of the low sugar products. and even the mid sugar ones. you might note this. The SDIL design drove this I would think. I have certainly seen this in several other countries [studies in process].
7. Discussion: discuss the per capita changes in the first paragraph. total volume is not as important as is that. you should see a larger decline if you had population growth and if none, then a lower decline. but that is the decline that matters. Again you must be clear throughout that you are discussing a total decline in sales and in the methods and again here exactly if you are doing including sales from retailers and away-from-home chains but not vending and//// You might want to use your national diet data for one year to give a sense of the proportion of intake your coverage might represent.

8. you are not just studying company specific changes but a mix of consumer and company changes. you slip into this often. this gives the companies too much credit. and if you look at low sugar category dynamics these changes came after the SDIL. So, what is causing this—just companies? Not likely not are many other changes. Your use of language suggests results you cannot justify.

9. Discussion: you slip into results linked only to company behavior. that is wrong. these issues are subtle but critical for the public policy side of your paper and you are in a dept of population health. These are results of both purchases and supplies and you must shift your discussion greatly You will need to make revisions and just show those changes but at present this discussion is just incorrect. your final paragraph in the discussion notes this issue but elsewhere in the discussion you are incorrect a few times.

10. The three-tiered SDIL tax design I think drove many of your changes and you showed that. you need to understand all extant tax studies focused on volume. L only the forthcoming south african ones with one tier come close. But you will see in the future that the Chilean FOPL warning labels also produces these changes. But I think for your discussion you need to note this is the first tax design to actively promote reformulation from one level of sugar intake to another and not any sugar to zero sugar.

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Yes
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