



The Brits are doing it: likely health benefits from a levy on soft drinks

16 December 2016

Tony Blakely, Nick Wilson, Cristina Cleghorn, Linda Cobiac

A study published today finds that the UK soft drink levy being introduced in 2017 is likely to benefit health (reduced obesity, diabetes and dental caries) – when considering a range of different Drinks Industry responses. In this Blog we comment on these results and the possible implications for countries like New Zealand.

Before Brexit, the Cameron Government in the UK announced it was taking obesity seriously – well, they at least decided to introduce a levy on sugar-sweetened beverages

(SSBs). Post-Brexit, the Brits are pushing ahead with the levy, and it is now out for public consultation.

So what is the policy? Basically, it is a three-tier levy of (current estimates from the UK Office for Budget Responsibility) of 18 pence per litre on 'mid-sugar' drinks (5 to 8g per 100 ml) and 24 pence per litre on 'high-sugar drinks' (>8g sugar per 100 ml). *If* the tax were to be completely passed on to consumers that would equate to an increase in price of:

- 75% for high-sugar drinks such as regular Coca-Cola, Red Bull and orange juice
- 31% for mid-sugar drinks sugar such as Coca-Cola life (stevia supplemented)
- 0% for low sugar drinks such as Diet Coke.



Varying levels of sugary Coca Cola drinks

But here's the thing. It is up to the Drinks Industry how they 'manage' this levy. They might:

1. Pass it on to the consumer as price increases, as we illustrated above (this effectively turns it into a tax to the consumer who may then choose to buy less or buy cheaper lower-sugar products)
2. Reformulate their products to reduce sugar levels to get them down to a lower levy category
3. Use marketing strategies to change the market share by category of drinks (e.g. changing product size, introduction of new mid-sugar and low-sugar products)
4. Or some combination of a, b and c – possibly, the most likely strategy.

So what impact might this levy actually have on public health? A paper published today in the journal *Lancet Public Health* (including one of us [TB] as a co-author; press release [here](#)) addresses just this question by modelling how the levy may play out through the three options (a, b and c). There are many uncertainties in doing this type of modelling, but, in our view, it is necessary to provide planners and policy-makers with best estimates of the likely health impacts. And it allows us to consider uncertainty – which is always large when consider a new policy (though there is huge international experience with other types of taxes).

What did the study find? Interestingly, product reformulation ("b" above, assuming a best-case scenario of 30% reduction in sugar concentration in high-sugar drinks and 15% for mid-sugar drinks) shows the greatest impact. That is in terms of reduction in obesity, diabetes and decayed missing or filled teeth rates. For example, a 0.9% reduction in obesity rates (95% uncertainty interval 0.03% to 1.9%) across all ages, but an approximately 10% reduction in obesity rates for 4 to 10 year old children.

The price increase ("a" above; assuming 100% tax-pass-through to prices by category, the

expected consumer change in demand and consumption, but no supply side response like reformulation above) generates about half the health gains for reformulation above.

And the change in market share (“c” above; 12 percentage point reduction in high-sugar market share, and 6 percentage point increase in both mid- and low-sugar market share, where 12/6 percentage points would be required for the Industry to achieve its pledge to reduce energy intake from by 20% from 2015 to 2020) generates about the same gains as the price increase mechanism (“a”).

Rankings of these three mechanisms was the same for the other health outcomes of diabetes and decayed missing or filled teeth rates.

Unsurprisingly, if the Drinks Industry just bundled up the levy and passed it on evenly across all levels of sugary drinks, the health benefits would be less.

Perhaps also unsurprisingly, the full health gains of the policy are likely to be greater than just the short-run impacts on obesity, diabetes and oral health. So the actual health benefits would probably be greater than modelled in this study and include long-run benefits on reducing cardiovascular disease, some cancers and arthritis. There might also be benefits to child mental health given how obesity can impact on psychologically.

What might these results mean for other countries like New Zealand?

1. Governments could consider this new study, the information collected during the UK’s consultation process on the levy, and on the early responses by the UK Drinks Industry (as the article details – some companies have already announced reformulation plans). But they also need to keep an eye on the evidence emerging from other approaches to SSB taxes in [Mexico](#), various US cities, and [Pacific Island nations](#).
2. A straight excise tax on SSBs will almost certainly generate good health gains, but this paper suggests that the UK levy approach is an alternative that may open up more opportunity for product reformulation (although reformulation would still – presumably – occur with a ‘straight excise tax’).

In summary, this new study adds to the growing body of evidence that fiscal policy tools applied to SSBs may benefit health, particularly child health, and may save costs for health systems. Governments have a range of fiscal policy options to choose from. And there is high certainty that taxes or levies on SSBs will generate health gain, albeit uncertainty about the actual magnitude of health gain.

Public Health Expert Briefing (ISSN 2816-1203)

Source URL:

<https://www.phcc.org.nz/briefing/brits-are-doing-it-likely-health-benefits-levy-soft-drinks>