

Taxes on fizzy drinks in NZ: preventing premature deaths and raising funds for health

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A task of public health research is to quantify the health impact of interventions that are upstream and are political. In the food environment, we strongly suspect that regulation of the food industry, food reformulation, marketing and price (i.e. taxes and subsidies) will be some of the most effective interventions to address obesity and poor nutrition. Indeed, much international research supports this (e.g. [1]). Today some of us have published research in the [NZ Medical Journal](#) that finds that about 67 premature deaths a year might be prevented by a 20% tax on fizzy drinks. And that there might be up to \$40 million of revenue raised by such a tax. (Also see [TVNZ interview of Ni Mhurchu](#) and [Radio NZ interview of Blakely](#) on this research.) In this blog we overview the uncertainty about these findings, the role of researchers in generating such findings, and possible policy implications.



We have previously outlined how [difficult it is to estimate precisely the health impact of food taxes and subsidies](#). Change the price of one food, and not only does its consumption change, but also the consumption of foods that are complements or substitutes.[\[2 3\]](#) Thus there is some level of unavoidable uncertainty when modelling the health impact of food taxes and subsidies. In our research just published, we had an uncertainty range of 60 to 73 deaths averted per year - in reality it is probably wider than this due to uncertainty in the price elasticities (which we were not yet able to model) and out-of-model uncertainties (e.g. how the industry and consumer preferences will respond and change in the future). That all said, it seems very likely that a 20% tax on sugary fizzy drinks would benefit health. A growing body of international research suggests this too (e.g. [\[4-6\]](#)).

Some might question whether academic researchers should be assessing the impact of inherently political decisions. However, it is abundantly clear that the major drivers of increasing obesity rates are upstream, stemming from changes in our food environment. Politicians and the general public should be concerned about this, and keen to act. Globally governments and the public realised after the global financial crisis of 2008 that financial markets cannot be left (lightly) regulated; Governments need to set the parameters that prevent gross injustices and attempt to create an environment that is maximally beneficial for society - all, or as many as possible, members of society. Similar arguments apply in the food environment. Increasingly, disease and health system costs will be driven by obesity and diet related diseases, and smart governments can act now to alter that future.



Community-based health promotion, such as the Healthy Victorian Communities programme that Minister Ryall is proposing we adopt as [Healthier Families New Zealand](#), are welcomed. But to optimise health gain and protect the long-term fiscal viability of the NZ health system, action on underlying drivers, such as price and marketing, are also necessary (just like they have been for progressing tobacco control). Therefore, a role of research is to estimate the effect of these more upstream interventions – such as taxes. It is then up to the public and politicians to debate the best policy package including the trade-offs (e.g., should the revenue from a new tax fund healthy school meals). The researcher’s key job is to provide the best information possible (with the uncertainty well-articulated) to inform the evidence-based components of the issues. Then the public and political debate can focus more on societal values and trade-offs.

Should researchers also be advocates for evidence-based policies? Yes – especially on no-brainers such as getting rid of tobacco, and where the evidence clearly points to a ‘best’ policy package. But we as researchers also need to realise that the final decision rests with civil society and elected representatives. Researchers are but one input into the decision making process, albeit offering expert information that should be weighed alongside other issues such as societal values.

It also makes sense for researchers to outline plausible policy options that logically arise from their studies. That too can help the public and political debate become more informed and focused. So, following this line, what we would recommend to decision makers around improving NZ’s food environment:

- Upstream determinants of the food environment undoubtedly got us to where we are today, and almost certainly will be one of the most effective places to prioritise for intervention as well.
- Some upstream actions, such as subsidies on fruit and veges, are fairly uncertain in terms of their impact on health. Researchers should keep assessing these potential interventions, as we have and are continuing to do.
- Some upstream interventions, such as taxes on sugary soft drinks, have quite a bit more certainty. And have a number of appealing features in that if applied to only *sugary* soft drinks, the industry has the ability to shift to focusing on providing zero-calorie fizzy drinks (albeit still a problem for dental health). Also, depending on exactly what is taxed, the NZ Government gains revenue of up to \$40 million per annum that can be used (say) to fund Healthier Families New Zealand or healthy school lunches in

high need areas. Furthermore, sugary sweetened soft drinks are a major issue for children (and in fuelling child obesity), and area that should attract across-political support for action. When it comes to children it is unreasonable to say that they make fully informed decisions about the risks of obesity and chronic diseases such as diabetes.

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