

## Health-related food taxes and subsidies: A critique of opposition arguments

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Health-related food taxes and subsidies are a hot topic internationally. Emerging research suggests they could improve diets and produce substantial health gains. However, the proposition of food pricing policies often meets with vigorous opposition and a range of counter-arguments relating to potential harms, lack of efficacy, and incursion on personal freedoms. In this blog, we briefly analyse 8 common arguments raised in opposition to such policies, and consider their basis drawing on the best available NZ and international evidence.

In recent weeks, we have been involved in publications that modelled food taxes/subsidies (1) and a study of 8 salt reduction interventions that included a salt tax (2). Our findings

generated much interest from many quarters and, not unexpectedly, we encountered arguments opposing such policies and suggesting they would be ineffective, "nanny-state", or detrimental to NZ's food industry and economy. Consideration of such arguments, however, reveals many to be flawed, based on rhetoric or underpinned by selective evidence. Here we consider and respond to eight such arguments.

1. "Taxes and subsidies won't change people's eating or drinking habits"

Price elasticity data demonstrate clearly that as food prices increase consumption falls; conversely when prices go down consumption increases (3). While the experience with food taxes is more limited than with tobacco and alcohol taxes (where it is very extensive) – it is still suggestive of favourable impacts on health e.g., given the results of a recent systematic review of 38 studies (4), a meta-analysis of 9 studies of sugar-sweetened beverage (SSB) tax (5), and a systematic review of simulation studies (6).

Data on the real-world effects of these food taxes and subsidies is also emerging. Evaluation of the Danish saturated fat tax showed decreases of 10-15% in purchases of taxed products such as butter, blends, margarine and oils (7) (but we note some problematic design aspects of this particular tax since it appeared to have been largely introduced to raise revenue and not to improve health (8)). A 10% tax on sugary drinks in Mexico reduced consumption by 12% (Instituto Nacional de Salud Publica 2014), and a junk food tax applied in Hungary led to a 25% decrease in sales of taxed products (9).

Nevertheless, as discussed in a previous blog, the devil is in the detail when it comes to estimating the net health benefit of certain food taxes/subsidies. For example, if the price of sugary food goes up (due to a sugar tax), will consumers buy alternative processed food products that contribute more of other adverse nutrients e.g., more salt? Also industry might reformulate products to avoid taxes but simultaneously increase levels of non-taxed nutrients (e.g., reducing sugar levels but increasing salt levels to boost flavour). A simple policy response might be widespread taxes covering a range of junk foods – to encourage a general shift to untaxed non-processed foods. But it is very hard to model the precise effects that are likely to arise with food taxes and subsidies – except to give general likely directions. E.g., we suspect that a carefully designed and reasonably high sugar-sweetened beverage (SSB) tax will decrease consumption of SSBs and therefore daily sugar intake – and have a high probability of overall positive health outcomes. However, the probabilities of overall health benefit from widespread sugar and fat taxes are not fully certain due to potentially complex substitution effects that require more research.

2. "Education is a more effective way to change behaviour than food taxes"

Education is certainly a necessary part of any comprehensive programme to improve diet and reduce obesity, but is far from sufficient on its own. Education alone only has very small effects on individual behaviour (ACE-Prevention Australia (10), and the NZ SHOP study (11)). Additional interventions are needed to create healthy food environments and to support individuals to make healthier choices. There are strong biological drivers to consume foods high in fat and sugar that made sense when humans commonly faced hunger in our evolutionary past – but now we need to consciously design a food environment that promotes healthier choices in a world of abundant and relatively cheap food.

3. "No single food or nutrient is responsible for the obesity epidemic. Individual foods and nutrients are vilified with no scientific basis"

Unhealthy dietary patterns are a major contributor to ill-health and premature deaths in New Zealand. Nutrition survey data (12) clearly show that New Zealanders are consuming too many (or at least too much of) foods high in sugar, salt and with a problematic mix of fats (too much saturated vs polyunsaturated fats). There is little scientific doubt about excesses of these nutrients being problematic (e.g., see this previous blog on the salt issue; and this one on saturated fat/polyunsaturated fat issue).

4. "The food industry is an important part of the solution and can address health concerns through voluntary measures".

The legal obligation of food and beverage companies is to act in the interest of shareholders and maximise profits. This creates an unavoidable conflict of interest when it comes to public health actions that may impact on industry sales and profits. Food marketing to children is an example of how such voluntary measures don't appear to be effective. Analysis of exposure of children to the advertising of unhealthy foods following introduction of statutory and voluntary codes suggested that voluntary codes did not sufficiently reduce children's exposure to unhealthy food advertising (13). NZ data on sodium levels in processed food (14), and dietary intake of sodium (15), also suggests a fairly limited benefit from voluntary industry approaches. So although the food industry can certainly help benefit public health if they promote fruit and vegetables and reformulate packaged foods to reduce hazardous ingredients, government leadership is required. This can create a level playing field where all sectors of industry contribute to such initiatives in order to deliver measurable population health benefits.

5. "Health-related food taxes are not broadly supported. They are a radical idea from extreme public health researchers with an anti-business agenda"

There are increasing calls from a number of reputable bodies, including the World Health Organization, for countries to adopt economic measures such as food taxes to improve population diets and behaviours. Recent reports from economic think tanks such as Credit Suisse and the McKinsey Global Institute support such calls and suggest that health-related food taxes are likely to be cost-effective for society. There is some survey evidence for majority public support for a SSB tax in a US setting (16) – although advertising restrictions were even more popular. A citizen's jury in Australia also favoured a SSB tax (17). Both the NZ Medical Association and the Heart Foundation support SSB taxes.

6. "Food taxes are regressive and penalise individuals and families on low incomes"

There is some truth in this argument from a narrow perspective – especially for people who don't buy less of the taxed product. But the bigger picture is that low-income people are typically more price sensitive – and hence are more likely to buy less of the taxed unhealthy food. In addition they stand to benefit more from a health perspective given that they are also typically at disproportionately high risk of diet-related disease (e.g., cardiovascular disease). Hence we see greater health gains for Māori in a modelling study of a salt tax (2), and food taxes/subsidies (1). (A similarly greater health gain for Māori is suggested by modelling work on raising tobacco taxes (18)).

But the pro-equity benefit of such health taxes could be maximised by providing tax relief elsewhere (e.g., reducing GST generally back to 12.5%, change in "working for families", and subsidies on fruit and vegetables). Government could also ring fence the tax revenue for funding health promoting initiatives such as free fruit and healthy lunches for schools in the most deprived areas.

7. "Implementation of food pricing policies would be very complex and expensive to administer, imposing more costs on the tax payer"

A lot of countries have SSB taxes (e.g., France, Hungary, Mexico, many states within the USA, Peru, and multiple Pacific Islands), and an increasing number tax other discretionary foods e.g., Hungary and Finland. Implementation of the SSB taxes does not seem to be a large issue. Though, as demonstrated in Denmark, implementation of wider food taxes can be problematic if not well designed. Similarly, nearly all developed countries have alcohol taxes – and these cover a huge diversity of different types of imported and locally produced beers, wines and spirits. Australia (and other countries such as the UK and Portugal) have differentiated VAT rates for food. Moreover, although most studies have focussed on consumption taxes, taxes can be levied at any point in the supply chain e.g., import duties could be applied at the point that raw salt and sugar are imported into a country.

Furthermore, smart food taxes and subsidies can potentially save healthcare costs, increase productivity by preventing the premature death of workers (e.g., from heart attacks and strokes), and raise revenue. Ultimately a potential dividend is therefore lower income taxes for the tax payer.

8. "Food taxes would harm business and cost jobs"

There are always winners and losers with any changes to food consumption patterns – but the societal optimum is probably a food system which prioritises the provision of: food that is healthy, relatively low cost and enjoyable to eat. Whilst there are fears that food taxes could lead to job losses in the food sector, the reality is that industry responds to change in consumer demand by diversifying product ranges. Recent US research indicated that a 20% tax on sugary drinks could actually result in a net employment increase. This research suggested that declines in beverage industry employment would be offset by new employment in non-beverage industry and government sectors (19).

Taxing SSBs and/or sugar might even benefit the NZ economy in some ways – since all sugar is imported, whereas most other potential substitute food is produced locally. We acknowledge that taxing saturated fat in NZ is more contentious given that NZ is a major producer of meat and dairy and a saturated fat tax clearly needs more research on its likely net benefits. Nevertheless, this is an area which should be debated by society (and it is a legitimate and needed role of academics to provide information for this debate). E.g., should NZ strive to shift its food production and exports in a healthier and more sustainable direction?

## Summary

In summary, the common arguments we listed against health-related food taxes and subsidies don't seem to stack up – and so policy-makers and the public should strive to access the best scientific evidence and not be swayed by rhetoric. While there is still uncertainty about the net benefit of some health-related food taxes and subsidies – we can be fairly confident that some carefully designed taxes would do more good to health than harm. However, and as researchers, we emphasise that food taxation and subsidies are an ongoing area for research, but in general terms food taxes and subsidies look useful as one choice for societies serious about improving nutrition and public health. Importantly, if any food pricing policies were to be implemented in NZ they should be monitored and evaluated carefully and independently.

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