

Taxing Sugar Sweetened Beverages: The Case for Public Health

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Issue:

Chronic disease is a significant concern for population health in Canada. In 2016, an estimated 26% of the population in Alberta had diabetes or prediabetes, an alarming statistic considering that diabetes has the potential to reduce the lifespan by 5-15 years (1). On top of this, in 2014, 20% of adults were obese, while 6.2% of youth were obese and 17% were overweight (2, 3). Obesity is a serious chronic condition in its own right, which links to negative health outcomes including type 2 diabetes, high blood pressure, heart disease, stroke and cancer (4). In 2008, the direct and indirect economic costs of obesity in 2008 were estimated to total between \$4.6 and \$7.1 billion (5).

Sugar-sweetened beverages (SSBs), defined as beverages that contain added sugar, corn syrup, or other caloric sweeteners, offer limited health benefits and have been linked to serious health risks (6-8). Examples of SSBs include soft drinks, fruit drinks, sports and energy drinks, vitamin water, sweetened coffee and tea beverages, sweetened milks and milk alternatives, and any other beverage to which sugar has been added (7, 8).

According to research from the University of Waterloo, commissioned by prominent health organizations, over the next 25 years SSBs will be responsible for 650,488 cases of overweight and 2,101,399 cases of obesity, 624,856 cases of type 2 diabetes, 180,769 cases of ischemic heart disease, 59,956 cases of cancer, and 23,263 cases of stroke (9). In addition, the report states that over the next 25 years, SSBs will contribute to an additional 38,385 deaths, 1,433,485 healthy life years lost because of illness, disability or early death, and approximately \$33,753,536,562 in direct health care costs (9). Research suggests that regularly choosing water or other low-calorie beverages over SSBs can contribute to healthier weights over time, and decrease risk for type 2 diabetes and stroke (10). A large scale study of adults in the United States who were followed for 16-20 years concluded that drinking more water in place of SSBs or fruit juices was associated with lower weight gain over the long-term (11).

Self-reported data from the 2014-2015 Alberta Community Health Survey found that 12.7% of the adult population in Alberta consumed a sweetened coffee and/or sweetened tea beverage daily, while 10.9% consumed soft drinks daily (12). This survey also found that daily consumption of soft drinks among males (14.7%) was twice that of females (7.3%) (12). Indeed, while sales of soft drinks have decreased over the past several years, these traditional items have been offset by new beverage categories, such as energy drinks, flavoured water, and sweetened coffee and tea (13).

Government public health policies, including taxation, have proven to be effective tools for facilitating a healthy lifestyle. In the field of tobacco control, increasing taxes on tobacco products as part of a comprehensive strategy has contributed to a decrease in tobacco use in the province (14). Fiscal measures can also encourage healthy eating by creating financial disincentives for purchasing and consuming unhealthy foods and beverages. Over the past several years, there have been calls in Canada and internationally for a general junk food tax (15-17). However, unlike tobacco products, which have no safe level of use, the challenge of defining what constitutes 'junk food' has often stalled public health efforts to tax unhealthy foods and beverages. In contrast to other unhealthy foods, SSBs offer limited nutritional value other than calories, which are derived almost exclusively from simple sugars. Therefore, developing criteria for a tax on SSBs compared to other foods is a simpler and more feasible policy option.

To-date, many jurisdictions around the world, including Finland, France, Hungary, Mexico, the Cook Islands, St. Helena, India, Chile, Belgium, and the American cities of Berkley and Philadelphia, have already implemented some form of SSB tax (18, 19). A tax on SSBs has also been endorsed by the World Health Organization (20). In the Canadian context, many

civil society organizations, such as Chronic Disease Prevention Alliance of Canada (CDPAC), Dietitians of Canada, Heart and Stroke, Canadian Diabetes Association, Quebec Weight Coalition, Childhood Obesity Foundation, and the British Columbia Healthy Living Alliance (18, 21-26), are calling for government action to implement a tax on SSBs as a way to address obesity and chronic diseases in Canada. Moreover, among Canadian jurisdictions, the Government of the NWT recently announced plans to investigate the introduction of an SSB tax by 2018-2019 (27).

There are a number of different taxation models for a tax on SSBs (e.g. sales taxes, excise taxes and special taxes). Sales taxes are applied as a percentage of the product's price and are reflected at the cash register (18). Excise taxes, on the other hand, tend to be levied on the manufacturer as a fixed amount per volume (18). Another policy option is implementation of a special tax (% of product price or per volume) at the retail level, similar to certain tobacco and alcohol special tax models in Canada (18).

Overall, per volume taxes have a number of benefits over those applied as a percentage of the product price. For example, their impact does not fluctuate with price, they are easier to administer because the tax is based on volume and are less susceptible to industry manipulation (18, 28). In Canada, many organizations have recommended an excise tax at the federal level. However, implementation of a special tax may be more feasible for provinces and territories (18). It is also important to note that for an SSB tax to have an impact on purchasing behaviour, research suggests that a substantial difference in price is needed (29-33). Specifically, experts recommend a minimum tax of about 20% of the price, as a current tax of 7% in the US has not produced the desired effect on weight outcomes (34).

Benefits to Taking Action:

- Taxation has the potential to reduce consumption of SSBs in Alberta and increase intake of more nutritious beverages (35-40). Although taxation has not yet been implemented in Canada, economic models suggest that a 10% increase in the price of SSBs would reduce consumption of these beverages by 12-13% (41). A recent 2017 study of Mexico's 1 peso per litre tax on SSBs found that the volume of taxed beverage purchases decreased by 5.5 percent in 2014 and by 9.7 percent in 2015 (42). In contrast, sales of untaxed beverages increased by 2.1 percent on average over the course of the study (42). Further, a study exploring the short-term impacts of Berkley's \$0.01/ounce soda tax found that, in low-income neighbourhoods, SSB consumption declined by 21% over a 1-year period from before the tax to after the tax (43).
- Reviews have found that as the cost of soft drinks or SSBs increased, there was a tendency for population-level body weight to decline (31, 38). Some studies found no impact or small increases in body weight (38, 39), but this is hypothesized to be due to existing tax rates that are low and limited in scope (e.g. only cover soft drinks or are only applied at certain locations) (31).
- Taxation would be applied in the general retail environment. Thus, the impact of taxation would be felt beyond specific food settings (e.g. schools, workplaces) and could achieve a greater effect on the overall consumption of SSBs at the population level. This broad-based policy intervention could create an environment where drinking water or healthier beverages becomes a relatively easier choice for individuals, and the price of purchasing SSBs effectively becomes a barrier to consumption.
- Taxation is a cost-effective intervention for governments and taxpayers to reduce SSB consumption and the related costs from obesity and chronic disease, while providing new government revenue. According to the CHOICES project at the Harvard T.H. Chan School of Public Health, a \$0.01/ounce excise tax in 15 American cities could raise over \$600 million in the first year of implementation, as well as prevent 115,000 cases of childhood and adult obesity in 2015 (44). Recently, researchers from the University of Waterloo estimated that a federal 50 cent per litre tax (20% tax based on models using an average pre-tax price of \$2.50/litre) would result in \$29.6 billion in revenue and \$7.4 billion in health care cost savings in Canada over the next 25 years (9).

- Government should invest revenue generated from taxation of SSBs into funding for obesity and chronic disease through the creation of a levy. Over time, investing in prevention will contribute to direct financial gain for government by helping to reduce future healthcare costs. Evidence suggests that a \$1 investment in health promotion can be expected to result in a minimum of \$4-5 cost savings (45).

Considerations:

There are criticisms of using taxation as a policy tool. A common argument against SSB taxation is that such a policy intervention would be regressive, causing harm to individuals experiencing low-income. However, experts have not found robust empirical evidence of this (41, 46). It is also important to note that SSBs themselves are regressive, with negative health impacts disproportionately affecting low-income individuals (47). Along these lines, an SSB tax stands to benefit this population the most by promoting the consumption of healthier, non-taxed alternatives, such as water and milk. In addition, revenue generated from an SSB tax should be used to fund health promotion initiatives that reach vulnerable populations (47).

A tax on SSBs has the potential to play a critical role in obesity and chronic disease prevention by reducing SSB consumption and generating revenue for prevention. Nevertheless, it is important to recognize that a tax is not a magic bullet (48). Indeed, to be effective, an SSB tax must be implemented as part of a comprehensive approach to obesity and chronic disease prevention. This includes the use of multi-faceted strategies, such as initiatives to increase access to drinking water, SSB warning labels, limits on the serving size of beverages, restrictions on food and beverage marketing, and nutrition education (48). In turn, revenue generated from an SSB tax could be used to support implementation of these strategies.

Finally, public opinion polling indicates that there is support for action on SSBs. According to a 2013 Ipsos Reid poll of Canadians, 88% agree that large servings of SSBs can lead to poor health or have negative consequences on one's health and 94% consider over consumption of these drinks to be an important contributor to obesity among Canadians (49). Further, a 2016 survey administered to 1,200 people in Alberta, found that the majority of respondents (58%) would support a tax on soft drinks and energy drinks (50). When government revenue from taxes is reinvested in health, the general public appears to be even more supportive of taxation as a means to encourage healthy lifestyles. A poll in New York found that support for a soft drink tax increased from 52% to 72% when respondents were informed that the revenue would be directed to obesity prevention efforts (51).

APCCP Priorities for Action:

- Advocate for a 50 cent per litre levy on SSBs in Alberta. Revenue generated from a tax should be invested into health promotion initiatives aimed at keeping Albertans healthy and out of the hospital.
- Support national and territorial efforts to implement SSB tax strategies in order to reduce consumption of SSBs and generate funding for prevention.

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