

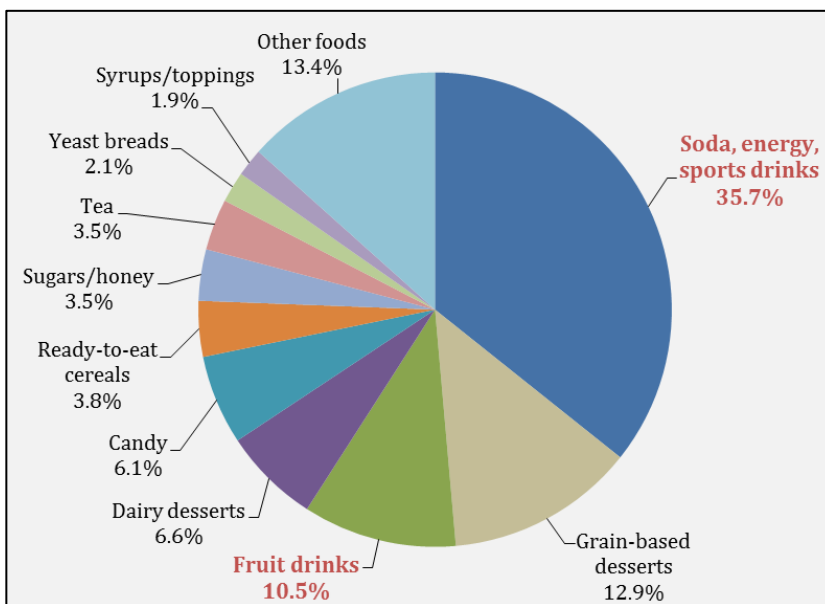
## Understanding the Case for Taxing Sugar-Sweetened Beverages

### Background

Consumption of added sugar is one of the most significant public health hazards of our time. Although the human body responds the same way to both natural and added sugars, foods that naturally contain sugar also include other healthful components, while foods with added sugars typically supply calories with little to no essential nutrients (1). Added sugars represent an average of 16 percent of the total calories consumed by Americans; nearly 36 percent of those added sugars are found in soda, energy drinks, and sports drinks, and another 11 percent are found in fruit drinks (see Graph 1) (1). Americans have not always consumed sugar-sweetened beverages (SSBs) at this high level – over the past decade, per capita consumption has increased by nearly 30 percent (2). The dramatic increase in consumption mirrors the increasing prevalence of obesity in the United States (see Graphs 2 and 3) (3).

Foods that contain added sugars are no more likely to contribute to weight gain than other sources of calories in a diet that is within calorie limits (1). However, as the amount of added sugar increases in a diet, it becomes more difficult to also eat nutrient-dense foods and stay within calorie limits. Research suggests that people do not compensate well for the calories they get from liquids by eating less food (4).

**Graph 1: Sources of Calories from Added Sugar in the U.S. Population, Aged 2 Years and Older, NHANES 2005-2006**



Data Source: National Cancer Institute. Sources of Calories from Added Sugars among the US Population, 2005–06. [http://riskfactor.cancer.gov/diet/foodsources/added\\_sugars/](http://riskfactor.cancer.gov/diet/foodsources/added_sugars/)

It is these factors that implicate SSBs as one of the largest drivers of the obesity epidemic. More than any other type of food, studies have demonstrated that consumption of SSBs contributes to the risk for obesity, diabetes, and other serious health problems in both adults and children (4). In fact, for each additional can or glass of SSB consumed per day, the likelihood that a child becomes obese increases by 60 percent (2). The financial impacts of SSBs are also substantial – chronic diseases related to poor diet cost the United States an estimated \$147 to \$190 billion per year (4). Diet-related diseases also cost society in terms of decreased work productivity, increased absenteeism, poorer performance in school, and reduced fitness of military recruits (2).

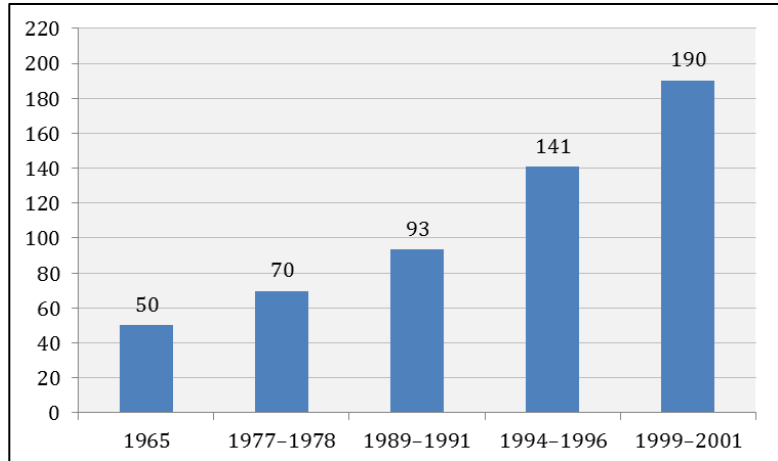
## The Argument for Taxing SSBs

Excess consumption of added sugar leads to considerable health, economic, and social costs. Although decreasing consumption of all foods and beverages with added sugar would be ideal, SSBs are the most pragmatic target. SSBs are the largest source of added sugar in the American diet, and they typically do not satiate hunger or provide any nutritional benefits. While there are several policy options to encourage reduced consumption of SSBs, changing the relative price through taxation may be the most effective approach.

Taxing certain types of products is widely recognized as one of the best strategies to stimulate health behavior change. Tobacco taxes are a prime example – increasing the price of cigarettes through higher taxes has been proven to reduce consumption (5). Taxing SSBs would likely have a similar effect. Prior research shows that changes in food price can improve diet and weight, particularly among youth, low-income populations, and those at risk for obesity (6). In the case of SSBs specifically, research indicates that a 10 percent increase in the price of SSBs would result in an estimated 8 to 12.6 percent decrease in consumption (4). Taxing SSBs also has the added benefit of raising federal revenue that can be directed toward deficit reduction and/or public health programs aimed at further obesity prevention.

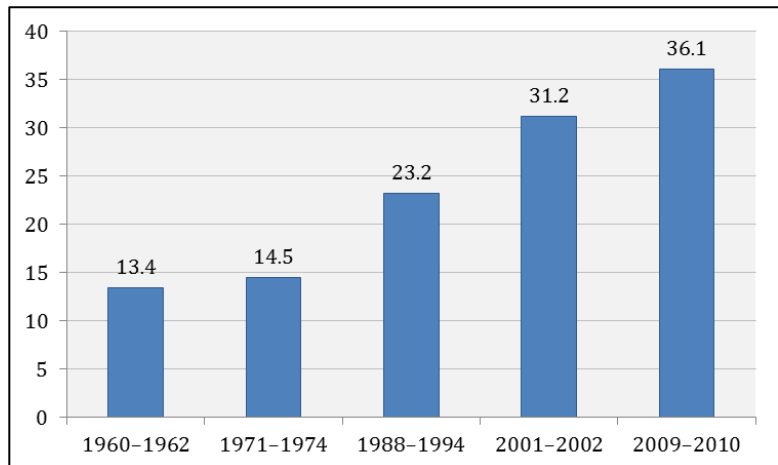
And yet, objections to an SSB tax would undoubtedly arise. Opponents argue that SSB taxes are regressive; that the government should not be involved in personal decisions; that people are ultimately responsible for their own behavior; that SSBs are not comparable to other taxed items like tobacco and alcohol; and that SSB taxes will not solve the obesity problem. Although it is important to weigh the pros and cons of any public health policy, many of these arguments fall short. Poor and minority populations are disproportionately affected by obesity and would derive the greatest benefit from reduced consumption of SSBs. The government is responsible for protecting public health and responding to national health crises, as it has done in the past with tobacco, seat belts, and vaccines. Many consumers are unaware of the risks associated with SSB consumption, and we cannot rely on the beverage industry to change its marketing strategy or reduce availability. Just like with tobacco and alcohol, SSBs are not needed for survival, lead to adverse health consequences, and result in societal costs that impact everyone. And finally, although no single intervention will eliminate the obesity problem, taxing SSBs could be a significant part of the solution.

**Graph 2: Per Capita Daily Caloric Consumption from Sugar-Sweetened Beverages in the U.S.**



Data Sources: Nielsen and Popkin. Changes in Beverage Intake Between 1977 and 2001. <http://www.cpc.unc.edu/projects/nutrans/publications/Beverage%20trends-BP-Samara%202004.pdf>; Duffey and Popkin. Shifts in Patterns and Consumption of Beverages Between 1965 and 2002. <http://www.cpc.unc.edu/projects/nutrans/publications/Kiyah-beverage%20trendsOR2007.pdf>

**Graph 3: Prevalence of Obesity among U.S. Adults, Aged 20-74, NHES and NHANES**



Data Source: Fryar, Carroll, and Ogden. Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960-1962 Through 2009-2010. [http://www.cdc.gov/nchs/data/hestat/obesity\\_adult\\_09\\_10/obesity\\_adult\\_09\\_10.pdf](http://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.pdf)

## SSB Tax Strategy

A total of 34 states and the District of Columbia currently have a sales tax on SSBs, ranging from 1 to 7 percent (7). However, the taxes are too small to affect consumption, and research shows that the taxes have little to no effect on obesity (6). In order to achieve the dual purpose of raising revenue and decreasing consumption, many experts advocate for a national penny-per-ounce excise tax on any beverage that contains an added caloric sweetener. Other excise tax options include a tax on beverages that exceed a threshold of added caloric sweetener, or a tax per gram of added caloric sweetener. Of these options, the penny-per-ounce excise tax would be the simplest to administer and is more likely to promote consumption of no-calorie beverages (8).

When compared to sales taxes, excise taxes have several distinct advantages:

- Excise taxes could be levied on beverage manufacturers, who would likely incorporate the cost into the base retail price. As a result, consumers would see the higher price when making a purchase decision. If the relative price of SSBs is higher, consumers may be more inclined to choose healthful beverages. Even if the manufacturer does not pass along the excise tax to the consumer in the form of higher prices, other positive outcomes could occur. For example, manufacturers may reformulate products to be healthier or reduce portion size (9). By comparison, sales taxes are levied at the cash register, which means that consumers only see the increased price after they have already made the decision to purchase.
- Excise taxes are applied per unit, and therefore are not dependent on the price of the product. Since sales taxes are administered as a percent of the product's price, consumers may simply switch to lower-priced brands or opt to buy larger containers that cost less per ounce (8). Sales taxes also would not impact the cost of free refills of fountain sodas (9).
- Excise taxes applied to manufacturers are easier to collect and enforce, and also result in a steady revenue stream since they are not subject to prices set by industry (8).

Taxing SSBs would likely result in considerable benefits to the public's health. Research shows that a national penny-per-ounce excise tax on SSBs could generate new revenue of \$79 billion from 2010 – 2015, and result in an estimated 24% reduction in SSB consumption (6). Interventional studies demonstrate that reduced intake of soft drinks improves health (2). As a result, this policy may also lower overall health care spending by reducing diet-related disease costs in taxpayer-funded health programs and the broader health system.

## Other Considerations

There are several other factors that must be taken into account when instituting a tax on SSBs. First and foremost, the policy must be clear on the types of beverages that are subject to the tax. Including beverages with non-caloric sweeteners (i.e. diet soda) would increase total revenue, but would result in a smaller reduction in overall consumption (6). Secondly, in order to maximize the effect of an excise tax, it should be regularly adjusted to keep pace with inflation so that the price impact and revenue potential are not eroded over time (8). Policymakers may also want to consider instituting a ban on trade discounts and coupons that some manufacturers may offer in order to offset the higher price of SSBs (9). And finally, it is also important to consider societal acceptance of a national SSB tax. Polling data shows that public support for food and beverage taxes to combat obesity has risen steadily over time (8), and popularity increases substantially when tax revenues are used for programs promoting childhood nutrition or obesity prevention (2).

## Conclusion

The science is clear: SSBs contribute to the risk for obesity, diabetes, and other serious health problems. Taxing SSBs is an opportunity to reduce SSB consumption and raise much needed federal revenue. To the extent that at least some of the revenue is earmarked for health promotion, the potential to reduce obesity and chronic disease, and the public support for such a measure, is even more substantial.

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