

Soda Taxes Make the Poor Poorer, Maybe Fatter

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Philadelphia Mayor Jim Kenney recently approved an ordinance imposing a 1.5¢ per ounce tax increase on sugar-added and artificially sweetened soft drinks, including diet sodas, in an attempt to curb obesity.



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According to the U.S. Centers for Disease Control and Prevention, the City of Brotherly Love is one of the most overweight areas in the United States:

- In 2011, more than two-thirds (67.9 percent) of adult Philadelphians, and 41 percent of 6 to 17 year olds, were overweight or obese.
- Specifically, 35.7 percent of adults were overweight and 24.4 percent were obese.
- Notably, 24.2 percent of adults surveyed had not done any physical activity in the past 30 days.

The tax will increase the price of each 12 ounce can of soda by 18¢, and the price of a 12-pack by \$2.16 [see the figure]. The tax will not apply to baby formula, products that contain more than 50 percent milk, fresh fruit or vegetables, and unsweetened drinks that require the buyer to add sugar. Mayor Kenney wants to use the projected \$91 million revenue to expand prekindergarten programs, create community schools, improve parks, recreation centers and libraries in poorer neighborhoods, and give tax credits to businesses that sell healthy beverages.

A soda tax should reduce consumption because the added cost will cause some consumers to buy fewer sodas or substitute other beverages. Diet soda, which usually has no sugar and zero calories, would be the natural substitute for regular soda, but given that it is also subject to the tax, consumers will have to find other alternatives, which could have more calories and more sugar. Thus, if taxing high calorie drinks is the solution to combating obesity, it would seem that taxing every beverage other than water would be more effective than a discriminatory soda tax.

Do Soda Taxes Reduce Consumption? In 2014, after the national adult obesity rate reached 32.8 percent, Mexico instituted a national soda tax of 1 peso per liter, a tax increase of approximately 10 percent. According to Organization for Economic Cooperation and Development (OECD) national health surveys:

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- Proportionally, Mexico has more overweight people than the United States, and was 4th in overall soda consumption in 2014, according to Euromonitor International.
- Soda sales in Mexico fell 1.9 percent during the year following the tax, but then rose by 0.5 percent the following year.

Mexicans, of course, cannot get untaxed soda without leaving the country, whereas Philadelphia residents can purchase untaxed soda outside the city limits. On paper, a tax should decrease soda sales, but there are numerous external factors that could affect overall consumption, such as the price of close substitutes.

Do Soda Taxes Reduce Obesity? There is evidence that tax increase have little effect on obesity, which the CDC defines as a body mass index (BMI) number greater than 30, while a BMI score greater than 25 is considered overweight. A study of over 2.5 million Americans throughout the United States published in *Contemporary Economic Policy* in 2010 found that:

- A 1 percentage point increase in soft drink taxes is associated with a 0.003 decrease in BMI scores.
- This means that to lower the score of an obese population from 30 to 25 would require a 1,666 percent increase in soft drink taxes.
- To illustrate, the price of a 20-ounce soft drink that previously sold for \$1.69 would rise to \$28.17!

Low-income people would be most affected by this price increase, because they consume more soda than any other income group. According to Gallup:

- Only one-fifth of individuals with incomes of more than \$75,000 drink regular non-diet soda.
- One-third of those with incomes from \$30,000-\$74,999 drink regular soda.
- However, 45 percent with incomes less than \$30,000 drink soda.

Most low-income people will either pay

more for a soda or choose a cheaper, but perhaps unhealthier, alternative. They will either be fatter or poorer.

Soda Consumption Trends. According to *Beverage Digest*, in 2015, U.S. soda consumption hit its lowest level in 30 years. The volume of soda sales has been falling since 2005, from 10.2 billion cases to 8.8 billion in 2014, which makes any attempt at reducing obesity through a soda tax even more questionable. If obesity were directly linked to soda consumption, one would expect to see a decrease in obesity since 1985. Instead, nationwide, there has been an increase in the percentage of adults defined as obese — from 11.12 percent in 1990 to 28.60 percent in 2014.

The recent implementation of a soda tax in Berkeley, California, as well as Philadelphia, looks more like politicians are trying to jump on the bandwagon of anti-soda rhetoric to claim credit and political points for already falling sales.

Conclusion. Regardless of whether or not soda taxes reduce obesity (and the evidence indicates they do not), government should not limit consumers' options. A better policy would be to educate consumers on the health benefits of different foods and beverages, and let them make their own decisions.

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