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Can Taxes on Sugar-Sweetened Beverages Reduce Obesity?

Americans are becoming increasingly overweight and obese. During the past four decades, the obesity rate for children ages 6 to 11 has more than quadrupled, and more than tripled for adolescents.[1] The negative consequences of obesity, including diabetes, heart disease, and stroke, make it a major public health problem. Approximately $79 billion is spent each year for overweight and obesity, with about one-half of these costs paid by Medicare and Medicaid.[2]

The causes of obesity are numerous, but sugar-sweetened beverages are associated with obesity more than for any other category of food. In one prospective study, for example, middle-school students over the course of two academic years showed that the risk of becoming obese increased by 60% for every additional serving of sugar-sweetened beverages per day.[2]

Children are drinking more sugar-sweetened beverages than in the past, with the percentage of total caloric intake of sugar-sweetened beverages more than doubling for children and adolescents from 1977 to 2001.[2] Research shows that children and adolescents today derive 10% to 15% of total calories from sugar-sweetened beverages and 100% fruit juice.[3]

In their search for ways to reduce the consumption of sugar-sweetened beverages, policymakers have looked to the success of tobacco taxes in reducing tobacco consumption. Research shows that cigarette taxes reduce smoking. In general, every 10% increase in the price of cigarettes reduces overall cigarette consumption by about 3-5%.[4] For soft drinks, it has been estimated that a 10% tax could reduce consumption by 8%, with higher effects anticipated for some heavy users.[5]

To date, 33 states have sales taxes on soft drinks, but research shows that overall soda consumption has not been reduced. Researchers examined the potential effect of soft drink taxes on children's consumption and weight by examining differences in existing sales taxes on soft drinks between states. The study reviewed data on soda consumption of 7,300 children enrolled in the Early Childhood Longitudinal Study. Of note, children drank

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[1] Robert Wood Johnson Foundation. *The Negative Impact of Sugar-Sweetened Beverages on Children's Health*, November 2009.
[2] Brownell, et al. *Ounces of Prevention -The Public Policy Case for Taxes on Sugared Beverages,* New England Journal of Medicine, April 30, 2009.
[3] Wang, Y., et. al., *Increasing Caloric Contribution From Sugar-Sweetened Beverages and 100% Fruit Juices Among US Children and Adolescents, 1988-2000*. Pediatrics 2008.
[4] Lindblom, E. and Boonn, A. *Raising Cigarette Taxes Reduces Smoking, Especially Among Kids (And the Cigarette Companies Know It).* Campaign for Tobacco-Free Kids, January 9, 2009.
[5] Rudd Center for Food Policy & Obesity, Yale University. *Soft Drink Taxes*, A Policy Brief, Fall 2009.
[6] Sturm, R., et al. *Soda Taxes, Soft Drink Consumption, and Children's Body Mass Index*. Health Affairs, May 2010.
[7] NYC Department of Health and Hygiene press release, *Preliminary Findings Highlight Health Benefits of Proposed Tax on Sugar-Sweetened Beverages.*
[8] American Beverage Association News Release, *National Poll Finds Americans Oppose Tax On Soft Drinks*, March 23, 1010.
[9] Browell, et. al, The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages, New England Journal of Medicine, October 15, 2009.
[10] *Pubic Opinion on Health Care Issues*, Kaiser Health Tracking Poll, The Henry J. Kaiser Family Foundation, July 2009.

Sugar-sweetened beverages contain added caloric sweeteners such as high-fructose corn syrup, and include sports drinks, fruit drinks, sodas and sweetened teas, with some researchers also including fruit juice.

an average of six sodas a week.[6] While higher risk children showed reduced consumption, the results showed no significant link between the consumption of soda or weight gain and differential taxes on soda versus other foods in the total sample. Researchers were not surprised, and said that the taxes— averaging 5.2% and not higher than 7%—are too small to affect consumption.[6]

Some propose a tax of one cent per ounce for beverages that have any added caloric sweetener, which would increase the cost of a 20-ounce soft drink by 15% or 20%. A recent study from Columbia's Mailman School of Public Health for the NYC health department found that a penny per ounce tax could prevent 145,000 cases of obesity over the next decade, saving New York State $2 billion in health care costs.[7]

In order for the tax to have the greatest impact, researchers offer additional suggestions. One, that taxes be structured as an excise tax that would increase the shelf price of the product, rather than a sales tax collected at the cash register. This is because the sales tax may not always be clearly linked to the soda. Second, the revenue generated from the taxes must be used for other obesity prevention efforts.[6]

In recent surveys, support for sugar-sweetened beverage taxes depended on how the issue was framed and whether people think the funds will be used to support prevention of obesity in children and adults. According to the American Beverage Association, which opposes taxes on sugar-sweetened beverages, 56% of Americans oppose the tax, because they believe lawmakers are more interested in raising money for government than in using the revenue for public health.[8] However, a 2008 poll of New York State residents found that 52% of respondents supported a soda tax; 72% supported such a tax if the revenue was used to support programs for the prevention of obesity in children and adults.[9] According to Kaiser Health Tracking Poll, support for taxing unhealthy snack foods or sodas hovers a bit closer to the 50% mark, backed by 55% and 53%, respectively.[10]

In Illinois, we may soon have an opportunity to find out if raising soda taxes reduces obesity. The Illinois Alliance to Prevent Obesity, of which the Chicago Department of Public Health is a member, is currently reviewing a variety of options to reduce Illinois' obesity burden, and increasing Illinois' current tax on unhealthy food and beverages (soda) is among such options. The state currently has a tax on soda and candy of 6.25%. Chicago has an additional tax on bottled and canned soda of 3%, and tax on fountain soda at the rate of 9% of the retailer's cost price of the fountain syrup. However, the Illinois General Assembly has enacted a soda tax cap that precludes Chicago from raising its soda taxes above the current 3% for bottled and canned soda, and 9% on the cost of fountain syrup. Given the state law preemption over local soda tax increases, the Department will continue to monitor the state soda tax increase proposals as an overall means to decreasing obesity in Chicago as well.