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Small soda taxes insufficient to curb consumption among children, study finds

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Small sales taxes on soft drinks in the range currently in force in some states are insufficient to reduce consumption of soda or curb obesity among children, according to a new RAND Corporation study.

Such small taxes may reduce consumption in some subgroups such as children at greater risk for obesity, but reducing consumption for all children would require larger taxes, according to the study published by the journal *Health Affairs*.

"If the goal is to noticeably reduce soda consumption among children, then it would have to be a very substantial tax" said Roland Sturm, the study's lead author and a senior economist at RAND, a nonprofit research organization. "A small sales tax on soda does not appear to lead to a noticeable drop in consumption, led alone reduction in obesity."

Taxes on soft drinks and other sugar-sweetened beverages have been proposed as part of many anti-obesity efforts, with the goal being to discourage consumption of the high-calorie drinks in order to curb excess weight gain.

Researchers estimated 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. Details about state soda taxes were compared to information about weight and soda consumption among 7,300 children enrolled in the Early Childhood Longitudinal Study, which has been gathering information about a national group of

children for many years.

Children studied reported drinking an average of six sodas per week, but there was wide variation among the group. Fifteen percent reported drinking no sodas in the prior week, while 10 percent consumed two or more sodas per day. The amount of soda purchased at school was small.

The analysis could find no significant link between the consumption of soda or weight gain among children and differential taxes on sodas versus other foods. Existing differential taxes (taxes that are imposed on sodas and not other food items sold in grocery stores) are small, averaging 3.5 percent and none are larger than 7 percent.

The higher sales tax on soda in some states did seem to reduce soda consumption and curb weight gain among children at higher risk for obesity -- those who were heavier, children from low-income families, African-American children and those who watched a lot of television. Children in all these groups drank more soft drinks than children in general.

The impact was more pronounced for children from these groups who had access to soft drinks at school. Price effects may be stronger in school settings where cafeterias or vending machines round prices up, although there are alternative explanations, according to the study.

The fact that small sales taxes have no strong effect on consumption should not be surprising and the much larger soda taxes recently proposed in several areas are likely to have a much larger effect, Sturm said. An 18 percent soda tax proposed and then dropped from New York's Executive Budget last year, for example, could help prevent excessive weight gain between third and fifth grades by 20 percent.

In order for soda taxes to be most effective, researchers say they should

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. The latter may often not be clearly linked to the purchase of soda. One such approach to creating an excise tax would be to levy a tax on the sugar content of soda drinks.

"Soda taxes do have the potential to help reduce children's consumption of empty calories and have an impact on obesity, but both their size and how they are structured are key to whether they create measurable impact," Sturm said.

Provided by RAND Corporation