HEALTHY PHILADELPHIA INITIATIVE:

Fighting Obesity, Reducing Consumption of Sugary Drinks

As part of a comprehensive program for obesity prevention, the City proposes to implement a tax on sugar-sweetened beverages (SSBs) in FY 2011. A two cents per ounce tax will be levied on retailers based on their annual sales volume of SSBs. This will generate approximately $77 million in annual revenue for the City, potentially lead to decreased consumption of SSBs, and provide a stable source of funding for obesity prevention activities to make healthy foods more available and affordable and promote physical activity in daily living from FY12 onwards.

Obesity in the U.S. and Philadelphia

Obesity is a major risk factor for heart disease, many forms of cancer, and type 2 diabetes. In the U.S., rates of obesity have increased dramatically in the last 20 years.[1] Obesity-related medical expenditures totaled $147 billion in 2008.[2] In Philadelphia, 64% of adults and 57% of children were overweight or obese in 2008.[3] While rates of obesity are high among all racial-ethnic and socioeconomic groups, nearly 70% of children in predominantly African-American and Hispanic Upper North Philadelphia are overweight or obese. Much of the increase in obesity in the U.S. can be attributed to increased caloric intake.[4] Sadly, as nutrient-poor, high calorie foods have become cheaper and more available, nutritious foods have become more expensive.[5]

Sugar-Sweetened Beverages and Obesity

A sugar-sweetened beverage is any non-alcoholic beverage with added sugar, including: soda, non-100%-fruit drinks, sports drinks, flavored water, energy drinks, and ready-to-drink sweetened tea and coffee. Philadelphians drink approximately 60 million gallons of SSBs annually,[6] translating into just under ½ a liter or 170 calories per person per day.[7] Multiple studies have demonstrated a link between SSB intake and obesity.[8,9]

Proposed Tax on Sugar-Sweetened Beverages

The City proposes a two-cent per ounce tax on sugar-sweetened beverages to be levied on Philadelphia retailers based on their annual volume of SSB sales. (In the case of syrup used to produce fountain drinks, the tax will be approximately eighteen cents per ounce, accounting for the fact that 1 ounce of syrup generally produces 9 ounces of beverage.) Retailers will track and report their volume of SSB sales based on ordering and stocking procedures. The Department of Revenue will facilitate reporting and tax collection.

Revenue from Tax

Based on a tool developed by the Rudd Center for Food Policy at Yale and downward adjustments based on local consideration, a two-cents per ounce tax on SSBs would generate $77 million in revenue in FY12.[10] These totals account for potentially decreased consumption from an increase in the price of SSBs and a tax collection rate below 100% but do not account for the costs associated with administering the tax.

Effects of Tax on Price, Consumption, and Obesity

If the costs of the tax were fully passed on to consumers, the price of SSBs would increase by approximately 20%-40% (based on a price of $1-$2 per 20-oz beverage). Retailers may also raise the price of other products or seek to decrease business operation costs. To predict effects on calorie consumption, we also need to understand whether and how people would substitute caloric intake from

other products in the face of decreased SSB consumption. Based on a set of assumptions, Philadelphians could lose 0.9 to 7.1 pounds per person per year from such a tax.[11]

Dedicated Revenue for Obesity Prevention Activities

From FY12 onwards, $20 million in revenue from the SSB tax will be earmarked for multi-faceted, evidence-based interventions to promote healthy eating and physical activity. The Department of Public Health—in conjunction with other City agencies, non-profit organizations, and academic institutions—will implement a multi-year plan for combating obesity to:

1. Make healthy foods more available to Philadelphians by
    a. Increasing the value of food stamps when used to purchase healthy foods
    b. Establishing affordable farmers' markets in low-income communities
    c. Expanding a network of corner stores that offer healthy foods and produce
    d. Improving the quality of food in schools and after school settings.
2. Decrease the availability and consumption of unhealthy foods by
    a. Enacting broad-based media campaigns
    b. Instituting bans on junk foods in schools
    c. Providing nutrition education and enforcement of the menu labeling law.
3. Promote physical activity in daily living by
    a. Creating physical activity standards for after school programs,
    b. Expanding a pedestrian and bike network throughout the city,
    c. Incorporating active living considerations into neighborhood planning.

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[1] Centers for Disease Control and Prevention. http://www.cdc.gov/obesity/data/index.html (Accessed 11/27/2009.)
[2] Finkelstein EA, Trogdon JG, Cohen JW, Diet**z W.** Annual Medical Spending Attributable To Obesity: Payer-And Service-Specific Estimates. Health Affairs 2009. 28;5: w822-w831. (Published online 27 July 2009)
[3] Public Health Management Corporation, Household Health Survey.
[4] Cutler D, Glaeser EL, Shapiro JM. Why Have Americans Become More Obese? Journal of Economic Perspectives 2003. 17:3:93-118.
[5] Brownell, K and Frieden T. Ounces of Prevention – The Public Policy Case for Taxes on Sugared Beverages. New England Journal of Medicine 2009. 360;18:1805-1808.
[6] Rudd Center for Food Policy and Obesity. Available at http:www.yaleruddcenter.org. (Accessed 11/27/2009.)
[7] Duffey KJ, Popkin BM. Shifts in patterns and consumption of beverages between 1965 and 2002. Obesity 2007;15:2739-2747.
[8] Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumptions on nutrition and health : A systematic review and meta-analysis. American Journal of Public Health 2007. 97:4:667-675.
[9] Malik V, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: a systematic review. American Journal of Clinical Nutrition 2006. 84;2:274-288.
[10] Rudd Center Soda Tax Calculator: http://www.yaleruddcenter.org/sodatax.aspx (Accessed 11/27/2009.)
[11]Assuming that 1) at least a portion of the tax gets passed on to the consumer; (Based on research on the effects of cigarette taxes from Farrelly, M.C., and Engelen, M. (2008, April). Cigarette prices, smoking, and the poor revisited. *American Journal of Public Health*, 98 (4), 582-583. Hopkins D. P. et al. The Task Force on Community Preventive Services. (2001). Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *American Journal of Preventive Medicine*, 2001 20(2S), 16-66.) 2) a price elasticity of 1.0 (Andreyeva T, Long MW, Brownell K. The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food. American Journal of Public Health 2009. Published online ahead of print December 17, 2009: e1–e7); 3) at least some of the decreased calories from SSBs are not substituted by other calories; and 4) that levels of physical activity do not change.