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## CALORIC SWEETENED BEVERAGE TAXES: THE GOOD FOOD/BAD FOOD TRAP

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*This article is part of a series of Policy Issues articles on Soda Tax. You can also find articles on [Should Soft Drinks be Taxed More Heavily?](#), [Can Taxing Sugary Soda Influence Consumption and Avoid Unanticipated Consequences?](#), [Sugar-Sweetened Beverage Taxation as Public Health Policy-Lesson from Tobacco](#), [Soda Taxes and Substitution Effects: Will Obesity be Affected?](#), [Better Milk than Cola: Soft Drink Taxes and Substitution Effects](#), and [Evaluating Excise Taxes: The Need to Consider Brand Advertising](#) as part of this theme.*

Obesity has become so prevalent and its correlation with a broad set of chronic diseases so compelling that few would argue society should do nothing about it. The policy debate is not about whether to act but about what to do. This article contrasts the recommendation to tax one class of food—caloric-sweetened beverages—with a more comprehensive strategy.

### Public and Private Health Recommendations

The National Heart Lung and Blood Institute provides a summary of what the public health community sees as the recommended steps for preventing overweight and obesity: “A lack of energy balance most often causes overweight and obesity.... Overweight and obesity happen over time when you take in more calories than you use.”

The National Institutes of Health (NIH) also catalogues the many factors that contribute to overweight and obesity; they include: spending too much time sitting down watching screens; a physical environment that promotes vehicle use rather than walking; competition for the dining-out dollar that leads to larger portion size; lack of access to healthy foods or individualized portions; advertising messages promoting processed, calorie-dense foods; genetic factors; hormonal or other metabolic causes; use of medicines that contribute to weight gain; emotional needs that encourage overeating; quitting smoking; sleeping too little or too much; and aging.

Given this complex array of contributing factors across diet, lifestyle, personal makeup and surrounding environment, it is not surprising that NIH focuses its recommendations for preventing overweight and obesity on learning a number of healthy behaviors: make following healthy lifestyle a family goal, including following a healthy eating plan; focusing on portion size; remaining active; reducing screen time; and keeping track of weight, body mass index, and waist circumference.

This public health strategy essentially has three components: balancing calories in with calories out; choosing the right foods in the right portions, and taking responsibility for good health outcomes for one’s self and any dependents. Balance, choice and responsibility taken together represent a strategy that fits the complexity and scale of the overweight and obesity problem. The Mayo Clinic concurs: “Whether you’re at risk of becoming obese, currently overweight or at a healthy weight, you can take steps to prevent unhealthy weight gain and related health problems. Not surprisingly, the steps to prevent weight gain are the same as the steps to lose weight: daily exercise, a healthy diet, and a long-term commitment to watch what you eat and drink.”

Given the broadly-based nature of the causes of overweight and obesity, the public and private health strategies recommended by experts address the multiple causes of weight gain and place the onus for change on individuals. Is the idea of taxing sweetened soda beverage a useful element in a strategy for combating overweight and obesity?

On balance, it does not seem to be, for several reasons. First, it oversimplifies the problem by focusing on only one of many dietary inputs and ignoring the output side of the caloric equation. Second, it fails to address the many tax “loopholes” left behind—including substitution of other caloric-sweetened foods for the missed calories, consumption of other calorie-dense foods driving the weight-gain-train and rising tolerance over time for higher-priced sweetened soda. Third, it ignores its own collateral damage, including the regressive incidence of the tax on low-income people and the burden unnecessarily placed on responsible consumers of sweetened soda. Finally, it does not lead to better understanding of the problem and individual accountability.

### **Correlation, Not Causation**

Advocacy of a soda tax starts with a “link” between rising consumption of caloric-sweetened beverages and overweight and obesity. But the advocates of this approach gloss over the nature, tightness or relevance of that linkage to its taxing strategy. As to the nature of the linkage, unlike smoking, which is hazardous to one’s health under any circumstances, caloric-sweetened beverages are not intrinsically hazardous or even problematic. “Taken as directed,” they can be pleasurable, a quick source of energy, a nice meal complement or a break from the tedium of the day. It is when sweetened soda is consumed excessively that it begins to contribute to overweight and obesity. As with so many of life’s choices, it is the dosage that matters.

As to the tightness of the linkage, a recent longitudinal study of weight gain in both men and women published in the *New England Journal of Medicine* found:

“On the basis of increased daily servings of individual dietary components, 4-year weight change was most strongly associated with the intake of potato chips—1.69 lb., potatoes—1.28 lb., sugar-sweetened beverages—1.00 lb., unprocessed red meats—0.95 lb., and processed meats—0.93 lb. . . .” (Mozaffarian, et al., 2011).

While increased consumption of soda is a contributor to long-term weight gain, it was not the leading contributor. Ironically, it looks like increased consumption of meat and potatoes accounts for much more of the gain. One can always take too much of a good thing, including mom’s old prescription to “eat your meat and potatoes” for good health.

More importantly, it is only increases in consumption that had the measured effects. Portion control is also vital to maintaining a healthy weight. Finally, more alcohol—0.41 lb. per drink per day—more TV—0.31 lb. per hour per day—and less sleep—other prominent characteristics of modern lifestyles—also contribute to weight gain (Mozaffarian, et al., 2011). A healthy, stable weight comes from the many factors that make up a healthy behavior pattern.

As to the relevance of the linkage, the whole idea of taxing a food puts the emphasis in the wrong place. Behavior, not a bad food, should be the fulcrum of obesity prevention. Taxing soda is like taking away one sweet while ignoring other sweets and calorie-dense foods, oversized portions, inactive lifestyles and other contributing factors to obesity. In fact, if one were to use taxes to combat overweight and obesity, it would probably make more sense to tax the outcome rather than a single input.

### **Substitution Effects**

While a soda tax may reduce consumption of sweetened beverages it may nevertheless fail to reduce overall caloric intake. People will likely substitute other sweetened foods. The gap also may be filled by increased consumption of other calorie-dense foods. Either substitution would frustrate the purpose of the soda tax.

Most studies of the effectiveness of soda taxes assume away this substitution effect. Still, they arrive at tax rates that have to be quite high in order to produce estimated modest dents in the incidence of obesity. Or, as a reviewer of sugar-sweetened soft drink (SSD) and obesity studies concluded, “Assertions that SSD are a disproportionate cause of excess body weight and/or that their avoidance would be effective in preventing weight gain are, in my opinion, not well substantiated by the science,” (Gibson, 2008).

Even harder to estimate is the degree to which people will build up indifference to the tax over time and what effect this tolerance for paying the tax would have on consumption. The history of other “sin” taxes, like those on cigarettes and alcoholic beverages, suggests that consumers adjust to the higher cost and resume or maintain their consumption. The real progress in reducing smoking came not from taxes but from health warnings on packages and

from advertising, education campaigns and “clean indoor air acts”—i.e., policies that aim at changing behaviors, not price relationships.

### **Collateral Damage**

Advocates of soda taxes are wont to minimize or dismiss the welfare effects of their proposal. The incidence of such a tax, however, is strongly regressive. It is not just that low-income families are likely to pay a significant share of the total of such revenue. Such a tax also will consume a larger share of poor peoples' disposable incomes and leave them with even less to spend on healthier foods like fresh fruits and vegetables. Advocates of such a tax also tend to gloss over the difference between causation and correlation. Cigarette smoking causes cancer and other cardiovascular diseases. There is no good or safe dosage of smoking. There even is harm to others caused by second-hand smoke. This is an entirely different linkage than exists between soda consumption and obesity. Caloric-sweetened beverages are safe and enjoyable for many to consume. A tax on them unjustly burdens a portion of the population not deserving of being targeted. This is fundamentally different from taxing cigarettes, where all smokers are fairly taxed.

### **Understanding and Accountability**

Finally, there is nothing about a soda tax per se that contributes to the growth in understanding that would lead most directly to the kind of behavior change needed to arrest and reverse obesity. As a backhanded recognition of this fact, advocates of a soda pop tax will sometimes argue that the revenues raised can be used to fund such educational initiatives.

Two problems arise from such an argument. The first is the practicality of earmarking such revenues for these purposes. The tobacco settlement payments are instructive. Most states have pulled them directly into general revenues or tapped them for budget-balancing shenanigans—as recently done in Minnesota. In a world where “no new taxes” clashes with deficit reduction necessities, neither passage of such a tax nor earmarking it for a broader public health initiative seems likely.

The second problem is even simpler: if such spending legerdemain could in fact be achieved, then why not fund it with a fairer tax? It is, after all, the personal accountability that better understanding and education seek to achieve that will make the real difference in curbing obesity.

All of which brings the discussion back to a more open-ended quest for good health policy with respect to the increase in obesity here and abroad. The foundation for such a policy should not be a soda tax, which only leads to the good food/bad food trap of treating symptoms, not causes. The causes of overweight and obesity are rooted in environmental, behavioral and cultural factors that make obesity easier to come by than to avoid. A narrowly targeted tax leaves most of these factors unaddressed. It is likely to end up misdirected, ineffective, inequitable and unfairly punitive for some.

Changing behavior works best when anchored in good science and broad-based education. The appropriate policy application to rising obesity requires balance, choice and responsibility. Balance calories in with calories out through diet and activity. Make good choices in the quality and quantity of foods consumed. And take responsibility for one's lifestyle. This kind of approach is more likely to work.

It also is more likely to make an ally rather than an adversary of the beverage industry. When that happens, progress often comes more quickly and easily. For example, the Alliance for a Healthier Generation—an initiative of President Clinton's foundation—is working with the beverage industry to change what is offered in school cafeterias. Among the 8,000 schools participating by 2009, it had achieved “a 65% decrease in full calorie soda shipments to schools...and 79% of school districts in compliance with alliance standards,” (Milling and Baking News, 2009). This also is the approach being taken by First Lady Michelle Obama, who is working with food retailers to give poor people better access to grocery stores selling more healthful foods.

A good example of the collaboration potential around an educational rather than a taxation approach is the recently announced 2010 Dietary Guidelines for Americans and its “MyPlate” symbol. “More than 2,000 organizations have joined the Nutrition Communicators Network, which launched June 2 coincident with the unveiling of the MyPlate icon.... Partners include public and private businesses as well as non-profit organizations that represent a diverse cross-section of stakeholders and partners,” (Food Business News, 2011).

## Concluding Comments

Teaching all Americans to eat and live healthier lives rests on the principles of balance, choice and responsibility rather than taxes. That approach pushes a solution that better conforms to the problem. It also fits the idea that collaboration and common ground can work where confrontation and battle grounds often do not.

## For More Information

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