Government Anti-Obesity Policies Are Rarely Effective

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ABSTRACT

Addressing the obesity epidemic is an important national initiative with a goal of reducing its harmful health-related effects as well as reducing the individual and governmental economic burden of secondary complications. There are multiple strategies that might be used, with one strategy being increased government influence on health behavior through policy. This brief article discusses one side of the effect of government anti-obesity policy. *Journal of Clinical Exercise Physiology*. 2016;5(1): 12–15

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INTRODUCTION

The rise of obesity in America is a great cause of concern. It is associated with myriad health problems, including diabetes, hypertension, high cholesterol, heart disease, stroke, sleep apnea, some cancers, gallstones, gout, asthma, and osteoarthritis (9). The root of the problem is that Americans today are consuming more calories while simultaneously maintaining a more sedentary lifestyle (17).

Rising rates of obesity and obesity-related diseases have led to increasing calls for government efforts to counter the obesity epidemic. In general, these policy approaches fall into two categories. The first approach focuses on informing and educating consumers, typically through nutrition labels or calorie posting, in hopes that better information will lead to healthier consumer choices. The second, more intrusive approach focuses on penalizing less healthy choices, typically through additional taxes. However, to date these efforts have failed to produce significant health improvements. And in some cases the anti-obesity programs have been counterproductive. In addition, some government policies have, in fact, contributed to the growing obesity problem. Let's examine these policies in more detail.

INFORMATION DISCLOSURE AND EDUCATION

Since 1994, the Food and Drug Administration has required all food items to disclose key nutrition information on the Nutrition Facts Panel as part of its strategy to combat obesity by educating the public on unhealthy choices (23). Yet there is little evidence that this approach is effective. While many consumers report consulting the nutrition label, few make different choices as a result (4,8). Many consumers, especially less educated and elderly individuals, have difficulties understanding the label (22). In addition, critics argue that the information disclosure approach is ineffective since excessive consumption stems not from lack of information but rather from limited self-control (10,25). Even fully informed consumers have a hard time sticking with their diets.

More recently, some local governments have passed legislation requiring calorie information to be posted on restaurant menus. In general, studies found that calorie disclosures have little impact on consumers' purchasing behavior. For example in 2008, New York City required all restaurant chains to post calories on their menus. However, a preliminary study evaluating the law's impact found no change in calories purchased as a result of this policy (14). Similarly, a menu-labeling regulation adopted in King County, Washington in 2009 resulted in no changes in consumer purchasing behavior (16). Experimental studies obtained similar results. For example, one study examined the impact of calorie postings on consumer purchases at Starbucks and found only a small decrease in calories per

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transaction (3). In another study, customers at McDonald's restaurants were given daily or per-meal calorie recommendations upon entering the restaurant, yet the recommendations had no effect on purchases (11). Despite its failure, the calorie disclosure policy has now been adopted on the federal level and expanded to the entire nation (19).

Another danger with the educational approach is that government advice may be based on flawed information. For example, since 1980s the Dietary Guidelines encouraged Americans to consume low-fat diets in order to decrease the risk of heart disease and obesity (31). Similarly, the Food Guide Pyramid, introduced by the United States Department of Agriculture (USDA) in 1992, recommended that a majority of daily calories come from complex carbohydrates, while limiting consumption of fat (30). Yet a decade later, the medical community reversed its position. In 2005, the Dietary Guidelines Advisory Committee increased the amount of fat recommended in diets, but the advice largely went unnoticed (26). Finally in 2015, the committee recommended that the government not set a limit on total fat; reduced-fat foods were specifically not recommended for obesity prevention (28). Despite the reversal, the American public still actively avoids fats compared to carbohydrates (12). The impact of previous education efforts persists and continues to misinform the American public. Reeducating the public will likely take considerable time and effort.

SIN TAXES

Another common anti-obesity strategy is to discourage consumption of unhealthy foods through higher taxes (aka, sin tax). However, studies show that, for instance, soda taxes do not necessarily produce the desired impact on consumption. For example, one study found that higher tax rates on soft drinks moderately decrease soda consumption among children but do not change the total caloric intake (18). The study found that children replaced soda with other high-calorie beverages in ways that completely offset decreased soda consumption. Another study examined the impact of a 5.5% sales tax on soft drinks imposed by the state of Maine in 1991 and a similar 5% sales tax on soft drinks adopted in Ohio in 2003 (7). The study found no statistically significant impact of the sales tax on the consumption of soft drinks. In addition, sin taxes are often regressive in nature, placing higher burdens on lower-income individuals who more often make these types of purchases (1).

Beyond limited effectiveness, taxation policies are subject to political influences that run counter to consumers' health needs. The tax on sugary drinks imposed by Berkeley, California, in 2014 is a case in point (5,13). The tax had two conflicting goals. The first goal was to reduce soda consumption by discouraging soda purchases. The second goal was to raise funds for the city's health programs. Since higher soda consumption would lead to higher tax revenues, the city administration faced incentives to ensure continued soda consumption.

The city's implementation of the tax indicates that the revenue collection goal may in fact be winning out. Research shows that consumers underreact to less salient taxes—consumers are less likely to reduce consumption or are likely to reduce consumption by a lower amount in response to a tax that is hidden from consumers (6). Berkeley imposed the soda tax not on consumers but on soda distributors with the expectation that it would be passed on to the consumers (1). Yet nothing in supermarket aisles or on consumers' purchase receipts indicated that the price of soda included a tax. The tax is effectively designed to maximize the city's revenues and not reduce soda consumption among Berkeley residents.

In the first month of its implementation, Berkeley's soda tax brought in over $116,000 in revenues (13,24). First-year expected tax revenues were projected at around $1.2 million, according to the City of Berkeley. The city council had already divided up the revenue to fund various health programs. Effectively, the city treated the tax as a means to fund various programs. These programs are already gaining the support of various groups. Therefore, Berkeley policy makers have an incentive to ensure that the city continues to profit off the soda tax and therefore need consumers to continue purchasing sugary beverages. This is the opposite of the tax's intended outcome.

PROGRAMS CONTRIBUTING TO OBESITY EPIDEMIC

The growth in obesity rates stems not only from the increase in calories in the American consumer's diet but also from increasingly sedentary lifestyles. One culprit in particular—urban sprawl—could be responsible for the changes in the amount of movement and exercise experienced by an average American. Yet, as the federal government attempts to combat obesity through various nutrition-related programs, it may be at the same time contributing to the rising rates of obesity through its programs that encourage urban sprawl.

Studies show that urban sprawl is associated with less walking and bicycling and with more automobile travel (2,20,27). Sprawling developments increase commuting distances and commuters' dependence upon automobiles for transportation—a trend observed both in Europe and in the United States (29). One study showed that residents of sprawling counties were likely to walk less during leisure time (15). They also tended to have higher body mass index (BMI) and greater prevalence of hypertension. Another study examined changes in urban density and BMI of residents in the U.S. metropolitan areas between 1970 and 2000. The study found a negative relationship between population density and obesity, suggesting that urban sprawl did in fact impact the rise of obesity (33).

The federal government may indirectly subsidize less active lifestyles through two major policies: mortgage interest deduction and highway funding. The mortgage interest deduction allows homeowners to subtract their mortgage interest amount from their tax obligations, substantially reducing the cost of home ownership. Consequently, the policy incentivizes people to own homes rather than rent them. The reason this policy impacts where people live is

that the vast majority (around 85%) of urban dwellings tend to be rented whereas home ownership dominates in less densely populated areas (21). By incentivizing home ownership over renting, the mortgage interest deduction encourages people to move from cities into suburbs.

The federally funded highways also encourage sprawl. Since the 1920s, the federal government has heavily invested in the construction of highways throughout the United States (21). The Interstate Highway System in particular has been called the largest public works project in history. By making cities' commercial centers easily accessible through a short drive, highways encourage families to settle in less densely populated areas, farther away from the city. Since most federal highways are toll free, they put mass transit at a comparative disadvantage (32). Thus, instead of living in cities, which encourage walking, the American public is incentivized to drive on the easily accessible highways for quicker commutes.

CONCLUSION

The rising obesity rates have led to increasing calls for government policies to counter the growing epidemic. However, to date, most common anti-obesity policies have proven ineffective and in some cases led to unintended consequences. Prior to adopting more of the same or similar policies, we must first examine the causes of their failure. As these policies are not adopted in a vacuum, proposed anti-obesity programs need to consider the institutional and political constraints that may hinder their effectiveness. In addition, we must reexamine the usefulness of the government policies that directly contribute to rising obesity rates.

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