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REDUCING OBESITY: POLICY STRATEGIES FROM THE TOBACCO WARS*

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Obesity Sickens, Kills, and Creates Significant Societal Costs

For the first time since the Civil War, American life expectancy is projected to decrease.¹ The reason: diseases related to obesity.

Obesity now affects one in six children and more than one in three adults.^{2,3} Obesity rates have more than doubled over the past 40 years, and the percentage of children age six to 11 who are obese has quadrupled,⁴ climbing from 4 to 18.8%; 40% of American adults will be obese by 2015.⁵ Obesity and excess weight contribute to more than 20 chronic illnesses, ranging from diabetes and hypertension to conditions with less well-known links to obesity, such as colon cancer.⁶ In 2000, obesity caused an estimated 112,000 deaths.⁷ With each obese employee estimated to cost employers 20 lost days of work a year, obesity adversely affects productivity more than any other health problem.

Rising obesity rates also affect health care spending.⁸ In 2009, obesity and overweight together will add \$228 billion to the nation's health care bills.

This issue affects all of us, including the non-obese. Obesity increases health insurance premiums for the average non-obese worker by an average of \$150 a year in 1998 dollars,⁹ totaling \$25.6 billion in extra premium costs.

Tobacco: What America Is Doing Right?

In 1965, Congress adopted the Federal Cigarette Labeling and Advertising Act and, in 1969, the Public Health Cigarette Smoking Act. Both this and subsequent legislation required a health warning on cigarette packages, banned cigarette advertising in the broadcast media, led to major anti-tobacco public information campaigns, banned smoking in certain (mostly indoor) places, encouraged the development and coverage of nicotine patches and other new treatment modalities to facilitate smoking cessation, enacted and enforced measures to prevent children and youth from accessing tobacco products, and significantly increased excise taxes on tobacco. As a result, fewer than half as many adults smoke today as when the country began its anti-tobacco work. The World Health Organization has determined that not only in the United States but also worldwide, the single most effective policy was the increase in cigarette tax.

Can Successful Tobacco-Control Measures Provide a Model for Fighting Obesity?

Similarities

Both obesity and tobacco use are major risk factors for chronic disease and premature death, both generate significant health care costs, both involve aggressive marketing campaigns to consumers by industries that reap significant financial rewards, both are disproportionately represented among lower socioeconomic groups, both carry a social stigma, and both are difficult to treat clinically.

Differences

Despite these similarities, there are also important differences between fattening food and tobacco. Tobacco consumption is not recommended, even in small quantities, as a regular part of one's lifestyle. By contrast, everyone has to eat. Yet even with fattening food, many advocate moderation, not complete sup-

pression of consumption; the quantity of fattening food eaten by Americans is so great that even a significant reduction would still leave many of us eating immoderate amounts. Clearly, identifying fattening food would be helpful.

An expert panel in the United Kingdom developed a method that evaluates each food item by balancing nutritional gain against health risks.¹⁰ For each 100-gram serving, the food's nutritionally risky elements — calories, saturated fat, salt, and sugar — are balanced against the food's nutritional benefits, defined in terms of fruit and vegetable content, fiber, and protein. If the balance tilts strongly in favor of nutritional benefit, the food is classified as "healthier" (e.g., pasta, chicken breast, fruit). If the food's ranking on the scale shows that nutritional risks clearly exceed nutritional gains, the food is classified as "less healthy" (e.g., sugary sodas, french fries, bacon), and "intermediate" (e.g., lean meat, baked potato, bran cereal.) This model has received extensive and repeated testing, confirmation, and validation as applied to both children and adults.¹¹⁻¹⁸ The model is now used by the British government to identify foods that may not be advertised to children. Whether this model is used in the United States, or even a more simple method using calories, it will be important to have a single method that classifies food.

Another important difference between tobacco and obesity-inducing food is that, unlike with tobacco, exercise can offset the effects of eating fattening food. However, over the past decade, as the percentage of obese adults and children increased, and the average daily caloric consumption rose by 7.1%, the proportion of adults who exercised during leisure time increased even more, by 9.4%. This pattern suggests that overeating, rather than too little physical activity, has been the primary driver increasing the prevalence of obesity.

Combating Obesity with Public Policy Interventions Patterned After Anti-Tobacco Efforts

This section focuses on three strategies that seem particularly promising in their potential impact: taxes on fattening food, product labeling requirements, and a comprehensive advertising ban.

1. Taxes on Fattening Food

While clearly unpopular, taxes must be included in the options as the World Health Organization has determined that taxes have been the single most important factor worldwide to reduce the number of people who smoke.

Current taxes

Presently, 40 states impose modest taxes on sugared beverages and snack foods.^{19, 20} The United Kingdom applies its 17.5% value-added tax (VAT) to particular food items, including "treats" like ice cream, sugared drinks, and candy as well as certain snacks and alcohol. France's VAT is set at 19.6% for foods such as sweets, chocolate, and margarine while other foods are taxed at a 5.5% rate,²¹ and Canada levies a 5% goods and service tax on snack food items such as candy, soft drinks, and chips.

Policy decisions

If policymakers decide to impose such a tax, they need to resolve several policy design issues. The first concerns the food items subject to taxation. A narrowly framed tax on sugary sodas can be justified in terms of such sodas' significant impact on obesity and their absence of nutritional value. But a wider approach should be considered with all foods included in the analysis. A second policy design question involves the level of the tax. The World Health Organization's recommendation for tobacco products is that taxes should represent between two-thirds and three-quarters of the total retail cost. The U.S. Department of Agriculture (USDA) suggests that, for fattening food taxes to change behavior, they may need to equal at least 10-30% of the price of the food.²²

A potential disadvantage of taxing fattening foods is that low-income households would bear a disproportionate burden. Not only are taxes inherently regressive, this particular tax is hard to avoid. At present, the same items tend to have higher prices in low-income than in higher-income areas,²³ and fattening food can cost less than healthier food.^{24, 25}

Another contributing factor is the lack of access to affordable healthy food in many low-income communities.^{26, 27} However, it is easy to exaggerate barriers to food purchase. According to a recent USDA analysis, only 5.4% of American households live more than half a mile away from a grocery store; because of urban density, supermarkets tend to be closer to low-income households than to others (median distances of 0.76 and 0.87 miles, respectively); 87% of food stamp benefits are redeemed in superstores, supermarkets, or large grocery stores; and low-income households are more likely than higher-income households to buy their food at superstores with low food prices.²⁸ Eating at fast food restaurants is more common among higher-income than low-income households.²⁹

To prevent low-income families from losing ground in their ability to buy enough food to ward off hunger, policymakers could use revenue from the fattening food

tax to increase food stamp allotments and fund initiatives to improve access to healthy, affordable food in low-income communities. These efforts could include tax incentives for stores and revising federal nutrition programs to increase the subsidies they provide for the purchase of healthy, nutritious food, including farmers' markets.

If the revenue is used primarily to subsidize low-income households' purchase of health coverage or to help such households gain access to affordable, healthy food, the net benefit received by low-income Americans would exceed the costs they incur; they would pay only some of the taxes but receive most of the benefits.

Approximate amounts of federal and state revenue

If federal policymakers imposed a 10% tax on fattening foods, defined based on their classification as "less healthy" by the above described model, the resulting revenues for the United States, conservatively estimated, would equal roughly \$522 billion over 10 years. Our estimate for Texas alone would be \$2.9 billion in the first year.

2. Clear and Simple Labels

Food in stores

Much of the rest of the developed world, including Great Britain, the European Union, Australia, and New Zealand, is considering initiatives related to "front-of-package" (FOP) "signpost" labeling. Considerable research shows that this approach significantly increases consumers' ability to understand and use nutritional information.³⁰⁻³¹ FOP signpost labeling has changed consumers' buying habits: In 2004, the University of Virginia (UVA) applied simple traffic light signpost labels to 120 vending machines in the UVA Health System. Each snack and beverage received a single, color-coded label of red, yellow, or green, depending on calorie content, with green the healthiest and red the least healthy. Large signs explaining the program were placed on or near each vending machine and a five cent "tax" (approximately 8%) was added to the cost of each red item. After one year, red item sales decreased 5.3%, yellow increased 30.7%, and green rose 16.5%. Overall sales increased 8.3%, and \$7,000 in nickels were donated to the childhood exercise program.

Restaurant food

Approximately half the average American food budget is devoted to meals and snacks outside the home,³² representing approximately 20% of all meals.³³ Fast food restaurants alone account for more than 33% of American calorie consumption.

Consumers are often unaware of the additional

caloric intake. When asked how many calories were contained in a high-calorie restaurant meal they had just eaten, participants underestimated the caloric content by 500 to 1,000 calories.³³

In the proposed federal Menu Education and Labeling Act, lawmakers have likewise proposed requiring restaurant chains with at least 20 outlets to place on their menus the calories for each standard menu item.

3. Banning Advertising of Fattening Food

The food industry spends more on advertising than any other industry³⁴ — \$10 billion in annual marketing directed at children and adolescents,³⁵ who view an average of 12 and 21 commercials, respectively, for food or beverages each day.³⁶ One study estimated that advertising changes alone would reduce the number of overweight American children by 15%.³⁷

At least 50 countries regulate television advertising aimed at children.³⁸ Given the extensive impact of the obesity epidemic, American policymakers could also consider banning mass media advertising and otherwise limiting the marketing of obesity-promoting foods to children and adults alike.

Conclusion

The easy measures have been taken, and more than 100,000 people are still dying. More extreme policy changes are needed. These changes will interfere with profits now enjoyed by many industries, which can be expected to fight against these reforms using every tool at their command. As with tobacco, the battle against food-related industries is uphill. But those who care about the public health, the productivity of America's workers, or the ever-rising cost of American health care have no realistic choice but to engage in this struggle with patience, creativity, strategic and tactical wisdom, and unflinching commitment.

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