
The Obesity Epidemic

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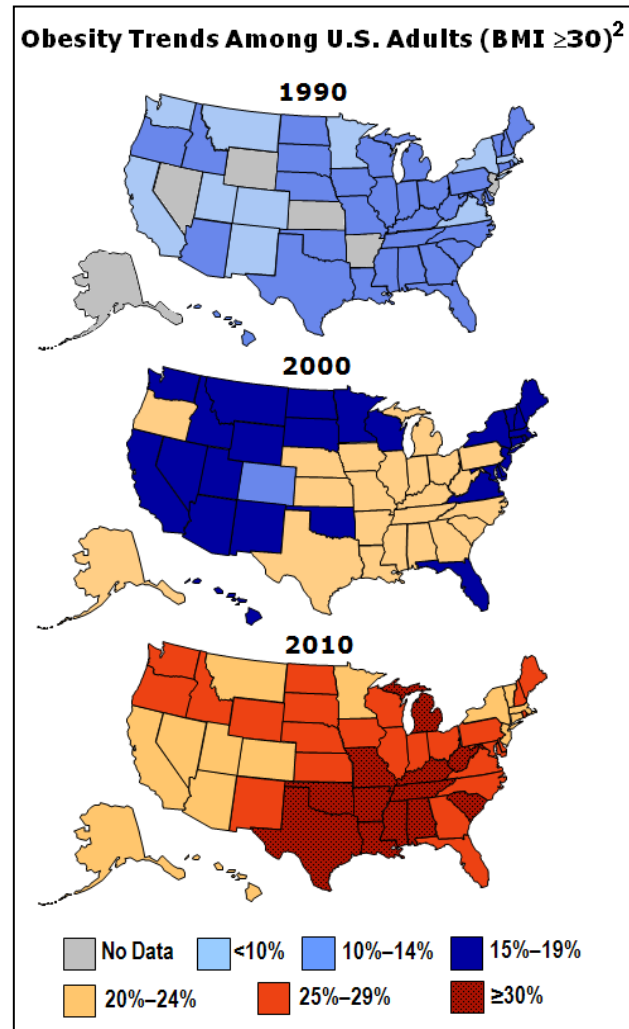
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Introduction

The incidence of chronic, noncommunicable diseases, such as heart disease, is increasing at an alarming rate on the global scale. The growing prevalence of overweight and obesity have led to an upsurge in cases of diabetes and other obesity-related diseases. About 18 million people die every year from heart disease, of which diabetes and obesity are major predisposing factors. Worldwide, more than 1.1 billion adults are overweight, 312 million of which are obese. The number of children that are overweight or obese is also growing.¹ Obesity, and the associated diseases, has become a worldwide epidemic and must be dealt with before the societal, economic, and security implications become too much to handle.

Obesity has been traditionally thought of as a result of an “American” or “Western” lifestyle. Obesity in the United States is very much an epidemic since approximately one in three adults and one in six children are obese. The rate of obesity has dramatically increased in just the past 20 years, as shown by the figure to the right. Obesity is attributable to heart disease, cancer, and diabetes, making it a major cause of death.²

Recent societal, economic, and cultural conditions have all contributed to the rise in obesity. While obesity simply results from people consuming more calories than they burn, many factors in American culture have lead to this lifestyle. Primarily, calorie-dense food is more readily available and opportunities for physical activity are lacking. Americans eat more processed foods and eat out more frequently; causing the consumption of foods that are much higher in sugar, calories, and fat than what



¹ “Obesity and Diabetes in the Developing World - A Growing Challenge,” Hossain, Parvez et. al., New England Journal of Medicine, 2007; www.nejm.org/doi/full/10.1056/NEJMp068177

² “Overweight and Obesity,” U.S. Centers for Disease Control and Prevention; <http://www.cdc.gov/obesity/>

Americans typically ate 50 years ago. In addition, healthier foods may be more expensive than processed foods or quick-serve restaurant meals. The use of technology and the layout of cities and communities have led Americans to a more sedentary lifestyle. People usually must drive places since walking is too far and many people have jobs that require them to sit in front of a computer for hours each day.

However, obesity is not just an American or Western issue. Developing countries have been adopting a more Western lifestyle with decreased physical activity and overconsumption of high-calorie foods. More people are leaving the rural agricultural lifestyle for urban areas, where they have cars and desk jobs. This has caused the rates of obesity to triple in the past 20 years in developing countries. As a result, the prevalence of diabetes is growing rapidly and could reach global pandemic levels by 2030. The health complications from obesity and diabetes could overwhelm developing countries that are already straining under the burden of other diseases. Furthermore, healthcare systems, if they exist, may not be able to handle a global pandemic, thus leading to serious societal, economic, and security issues.

Policy Actions

The alarming rate at which the prevalence of obesity has risen has caught the attention of many policymakers across the world. Societies and governments want people to lead healthy lifestyles to reduce the risk of obesity, but encouraging or mandating this type of lifestyle is a difficult issue. Being underweight, healthy weight, overweight, or obese is an outcome of personal choices for most people. Therefore, policy intervention in what and how much to eat and how much to exercise is complicated.

Since obesity is a very big and growing issue in the United States, some policies have been proposed on the federal, state, and local government levels. One proposal is to require nutrition labels on menus at restaurants. The state of California has already implemented a law like this that requires chain restaurants to provide nutritional information on their menus.

Another proposal is to tax processed foods and beverages that are high in added sugar, fat, calories, and/or salt. A “sugar tax” on sodas and other beverages is currently being discussed among policymakers. France actually implemented a “soda tax” in January 2012.³ France hopes to combat obesity and the federal budget deficit by making high-sugar soda more expensive. This

³ “French ‘Cola Tax’ Approved: Paris Vows to Fight Deficit and Obesity,” ABC News, 2011; <http://abcnews.go.com/International/french-cola-tax-approved-paris-vows-fight-deficit/story?id=15254687>

policy is part of a growing trend in Europe to impose taxes on foods and drinks associated with poor health and obesity. Hungary, with a 19% obesity rate, has had a tax on candy since the 1920s. In 2011, it imposed a tax on packaged food and drink products with high sugar, salt, or caffeine levels. Also in 2011, Denmark passed the first-ever tax on foods high in saturated fat. This “fat tax” is imposed on the wholesalers and increases the cost of a hamburger by about 40 cents, and by about 12 cents for a bag of chips.⁴

Countries around the world have also been discussing how to get their populations, especially those in urban areas, to be more physically active in order to reduce the rates of overweight and obesity. Local and federal governments preserve natural areas and build parks which can make access to physical activity easier. Bike share systems and bike lanes are very popular in Europe and are gaining momentum in the United States. First Lady Michelle Obama has also implemented the “Let’s Move!” campaign to fight childhood obesity in the United States.⁵ This is a comprehensive initiative puts children on the path to a healthy future by giving parents helpful information on fostering a healthy environment. Wal-Mart, one of the biggest grocery chains in the country, pledged to join this campaign by making its foods healthier and more affordable. The “Strong4Life” campaign in Georgia has also targeted childhood obesity with controversial advertisements with sayings, such as, “Being fat takes the fun out of being a kid,” and “It’s hard to be a little girl if you’re not.” These advertisements have stirred up controversy across the United States and have been said to be too negative and aimed at the children instead of the parents.⁶

The policy climate on obesity is a complicated one. Policymakers, especially in the United States and Europe, recognize the threats of high rates obesity, but are reluctant to make lifestyle-changing policies. Many people are weary of the government regulating what or how much they eat and how active they are. People are not necessarily willing to give up their lifestyle choices. To add to this reluctance are the providers of unhealthy foods. For example, Coca-Cola has expressed strong opposition to France’s soda tax calling it “a tax that punished our company and stigmatizes our products.”

⁴ “Fat Tax Spreads from Hungary to Denmark,” Wallenchinsky, David;
http://www.allgov.com/Unusual_News/ViewNews/Fat_Tax_Spreads_from_Hungary_to_Denmark_111004

⁵ “Let’s Move” Campaign by Michelle Obama; www.letsmove.gov

⁶ “Georgia’s child obesity ads aim to create movement out of controversy,” By Emanuella Grinberg, CNN;
<http://www.cnn.com/2012/02/07/health/atlanta-child-obesity-ads/index.html>

Implications of the Obesity Epidemic

The increasing rate of obesity is not just a health issue; high rates of obesity could have other societal, economic, and security implications. In some societies, there is a stigma in which people believe that obese individuals lack self-control and are not able to perform essential tasks. Some obese people have even claimed discrimination, as in the case of airlines charging obese people for two seats in lieu of one.

High rates of obesity can have serious economic consequences. In 2008, the medical care cost of obesity was \$147 billion in the United States.⁷ These costs include preventive, diagnostic, and treatment services related to obesity. Other indirect costs include the lost time value of income lost from decreased productivity, restricted activity, and sick days. Costs also include the value of future income lost by premature death due to obesity or obesity-related diseases.

Obesity could also become a national security issue in countries that have a very high obesity rate for young adults. Simply put, future generations could be too physically inept to serve in militaries because of obesity. In the United States, it is estimated that over 27 percent of all Americans 17 to 24 years of age are too heavy to join the military if they want to.⁸ If this percentage keeps increasing, then there may not be enough healthy people to serve in the military at some point in the future. This issue could be even more prevalent in smaller countries that have smaller populations to choose from. These national security implications make the obesity threat even more alarming.

Policy Options

I. Mandate physicians to take and make patients aware of their BMI and prescribe them exercise and a good diet.

Motivation is found for people in a variety of ways. Governments should mandate physicians to perform regular BMI (body mass index) analyses and make their patients aware of the risks that their current BMI has on their health. Along with raising a patient's awareness, the physicians should also prescribe them exercise and a good diet. Scare tactics, or fear campaigns, when done correctly can motivate people to take the suggested action in order to avoid the feared consequence because they are being explicitly told the problem along with a realistic way to fix the problem. This

⁷ "Overweight and Obesity," U.S. Centers for Disease Control and Prevention; <http://www.cdc.gov/obesity/>

⁸ "Too Fat to Fight," Mission Readiness, 2010; www.missionreadiness.org/research/

motivation should cause patients who are overweight or obese to move toward a healthier lifestyle, decreasing their risk of related diseases. This would not only decrease obesity rates but also decrease insurance costs due to the lower rates of associated diseases. Having physicians regularly collect BMI data will help researchers track trends in BMI to provide feedback for the policy.

Another benefit to this policy would be an increase in public awareness of the problem of obesity. In places where healthcare is not as upfront with information as the United States, mandating that patients are told that obesity is a problem will help increase national awareness of the problems associated with an inactive and unhealthy lifestyle. This awareness will hopefully motivate people to avoid becoming overweight.

This policy may also act as a preventative measure in less developed nations. Having this policy in place as a nation develops toward a more industrialized lifestyle may help prevent that population from following trends towards obesity. This would provide a healthier future for these nations that have already been struggling with health related issues.

Some consequences of this policy include that it may prove to be ineffective and there might be a high cost to regulate it. People may lose faith in their physicians if they are explicitly told that they are overweight because emotions could be hurt or they may not have the means to change their lifestyle. The question of how to monitor that physicians are actually providing the appropriate information is also an issue. The cost to effectively monitor this kind of regulation would be enormous and may be too high for less developed nations to implement.

II. Regulate or tax added sugar in processed foods

Atkin's, South Beach, Paleolithic, NutriSystem, Mediterranean, Weightwatchers, these are just a few of the most popular diets on the market today, and each claim to be the best and most effective for losing weight and keeping it off. However, if any one diet worked as well as the reviews claimed, wouldn't that diet have a monopoly on the market? When you break down each of these diets, they all have one commonality, a low glycemic index and a reduction in the number of carbohydrates consumed. Carbohydrates are essentially sugar; they are broken down into simple sugars, which are further broken down into glucose for use at the cellular level. Without glucose, our body would be unable to function, but when the body is given too much, it ends up as fat storage in adipose tissue. When we consume sugar directly, it skips several steps in the process and goes straight to the bloodstream, making calories more available for either use or storage.

Globally, sugar has started to show a correlation between obesity and obesity related diseases such as hypertension, heart disease, and diabetes. In 2007, the cost of diabetes alone

amounted to 174 billion dollars.⁹ Throughout the world, the obesity epidemic is 30% greater than malnutrition, and in twenty years, projections show 50% of Americans will be obese and the world will quickly follow suit.¹⁰

Through government regulation and taxation of added sugars, the public can begin to change unhealthful habits. Using these taxes to subsidize produce and nutritional foods will make healthy eating more affordable and economically viable for both company and consumer. Considering that much of the developing world has followed and continues to follow the United States' example, policy can be implemented to change habits and crack down on added sugars in foods and beverages. Healthful foods will be more readily available at lower prices, and lower income families will have the opportunity to have an overall healthier diet. In conjunction, countries will see a decrease in healthcare costs and in turn will be able to more evenly distribute funds to necessary expenditures.

However, there are potentially negative impacts from the implementation of this excise sugar tax. Farmers and countries that rely heavily on sugar exports for financial stability will feel a drain in the financial sector. To help offset this monetary loss, sugar can be utilized as a larger contributor to biofuels and assist in the need for renewable energy.¹¹ Additionally, large companies such as Coca Cola will see this as a threat to business and may suffer substantial consumer and profit losses. This sugar tax may also be viewed as negative control by the government, thus producing public opposition and discontent. Despite the negative repercussions of an excise sugar tax, it has the potential to sway the eating habits of consumers to healthier foods.

III. Lifestyle change, employer and government incentives, and public education campaigns

Dietary factors and physical activity are the two main modifiable components underlying obesity that, if corrected, can serve to prevent excessive weight gain.¹² Human behavior is unlikely to change unless there are substantial motivations for individuals to alter their lifestyles. Businesses serve as one such origin of motivation. The burden of obesity falls heavily on companies,

⁹ American Diabetes Association. "Diabetes Statistics." January 2011. <http://www.diabetes.org/diabetes-basics/diabetes-statistics/>

¹⁰ Lusdig, Robert. "The Sugar epidemic: Policy vs. Policy." November 1st, 2011. <http://www.youtube.com/watch?v=wSu6U8OzPk>

¹¹ U.S. Department of Energy. "Energy Efficiency and Renewable Energy: Alternative Fuels and Advanced Vehicles Data Center." March 30th, 2012. http://www.afdc.energy.gov/afdc/fuels/ethanol_feedstocks.html

¹² "Addressing the Problem of Overweight and Obesity," World Health Organization; [http://whqlibdoc.who.int/trs/WHO_TRS_894_\(part4\).pdf](http://whqlibdoc.who.int/trs/WHO_TRS_894_(part4).pdf)

as they must incur expensive obesity-related health insurance bills.¹³ This is the main reason why some businesses are starting to offer incentive-based wellness programs, which encourage employees to exercise more and eat a healthier diet. Research done by the University of Pennsylvania provided strong evidence that regular financial incentives for losing weight and daily involvement with program participants result in significant weight loss in individuals. The proven success of employer incentive programs marks their effectiveness and makes it logical to expand these strategies to a greater number of businesses. In order for this to occur, government subsidies should be given to companies for the creation of wellness programs. Governmental healthcare agencies (Medicare, Medicaid, etc. in the United States) should adopt similar practices with their customers, offering financial incentives for weight loss and lifestyle changes.

A similar initiative that could be carried out in tandem with incentive programs are governmental public education campaigns. Marketing campaigns promoting healthy lifestyles executed in the United States and other countries have shown to improve the population's awareness of the obesity issue and the intent to alter diets. Government funds could be allocated for such campaigns. However, it should also be noted that media advertisements made by the food industry often have an opposite, negative impact on individual's lifestyles. A study conducted by the Yale Rudd Center for Food Policy and Obesity suggested that increased soft drink and fast food advertising was connected to an increase in consumption of those items by elementary school children.¹⁴ Nutrition policies should also be created to regulate media messages encouraging intake of calorie-dense and unhealthy foods. This strategy of regulating advertisements has proven to be effective in areas such as tobacco control, and could offer similar success in the realm of obesity reduction and prevention.

A clear concern for this suggested policy is the funding source. The financial burdens would likely fall on the government, which limits its feasibility of actually being implemented. In order to address this issue, another dimension to this strategy could be the use of the revenue generated from the proposed sugar tax to fund public awareness campaigns and wellness program subsidies. This combined strategy would be effective in addressing the issue of obesity from different angles while also reducing financial burdens on the government.

¹³ "A Review of Environmental and Policy Approaches in the Prevention of Chronic Diseases," St. Louis University; <http://co.marion.or.us/NR/rdonlyres/628EFF00-D1F8-494A-A422-6C461666B964/0/BrownsonARPHenviropolicy.pdf>

¹⁴ "Employee Weight-Loss Programs Can Work," The Wall Street Journal; 1 <http://blogs.wsj.com/independentstreet/2008/12/10/employee-weight-loss-programs-can-work-with-the-right-financial-incentives/>

IV. Crack down on fast food, label calories, and encourage healthier menus

Media and public awareness of the unhealthiness of fast food chains is not something that has been lacking in recent times, and the amount of influence of the combined forces have led to some proactive solutions by some restaurants. Unfortunately, not all fast food chains have taken the increase in public awareness as seriously as others. While convenience restaurants like Panera Bread, Noodles and Company, and Chipotle successfully provide nutritious fast food, there is much room for improvement for the industry as a whole.¹⁵ Panera Bread, for example, not only posts the amount of calories for a specific item right on the menu, but it also offers different types of whole-grain bread for menu items and the option for an apple or baked chips for a side. Panera Bread's proactive approach for its healthy options has, and should, be praised by the media and public, which will help promote even further industry change.

: It would be beneficial to the general public for governments to mandate that fast food restaurants post calorie, sugar, fat, and sodium information directly on the menu, while also making general nutrient information available in plain sight. In addition, offering some small, but noticeable, tax breaks for fast food restaurants that offer cheap, healthy menu items that are clearly labeled on menus will give businesses an incentive to make the necessary changes. What's the reason for the addition? Go to a McDonald's restaurant and order four McChicken sandwiches – the total will be four dollars plus tax. With that order alone a person will have approximately 1,440 calories and 16 grams of fat in one paper bag. The issue with this is that it would take four of those McChicken sandwiches (or any other dollar menu item) to equal the cost of one of McDonald's salads. While McDonald's has made significant strides since its "super sized" days, it is understandable to believe that incentives offered by the government will help fast food restaurants to take a more proactive approach in offering affordable, healthy menu items.

These small solutions combined will have a profound effect on making consumers, along with businesses, more accountable for their own health. However, each approach will have unintended consequences for many sides of the scale. For example, mandating that fast food restaurants post certain information directly on their menu may prove ineffective if the general consumer does not know how to properly interpret the information. Conversely, a fast food restaurant may potentially lose a significant amount of business as a result of nutrient information being available to consumers. Another possible setback is that fast food restaurants may have different views on what the definition of "healthy" is. For this reason, a specific and definite set of standards would

¹⁵ "America's Top 10 Healthiest Fast Food Restaurants," Minkin, Tracy; Health Magazing, 2009; <http://www.health.com/health/article/0,,20411588,00.html>

need to be developed by health experts and implemented in the bill. Although there are unintended consequences with every law, if concern for the obesity epidemic continues to grow then these policy changes can make a difference on a global scale.

Summary and Preferred Alternative

Obesity is a health issue that is exponentially increasing and not likely to diminish in the near future. The four proposed policies discussed in the previous section could all help to reduce the frequency of obesity worldwide. The first proposal would mandate that physicians make patients aware of their BMI and prescribe ways to make their lifestyle healthier. Mandating and regulating physicians to do such things would be difficult to do and may physicians do already tell patients if they are over or under weight. The second policy is a proposal for taxing added sugar in processed foods. While this policy is radical and would affect many corporations, it is possible to undertake since some countries, such as France, already have. The third policy would promote lifestyle change, employer incentives, government incentives, and public education campaigns to combat obesity. This policy would be a huge undertaking by governments and require large amounts of funding. The final policy proposed is to crack down on fast food restaurants by requiring them to include nutrition labels on their menus. While there may be push back from some corporations, this policy would actually be somewhat simple to implement and could be very effective.

While all of the proposed policies have the potential to reduce the rate of overweight and obesity, policies II and III can be combined to produce a very effective governmental program. The authors propose that a sugar tax be implemented in developed countries and then the revenue used to fund employer incentives for healthy activities. In the first stage of this program, beverages would incur an extra tax relative to the percentage of added sugar in the drink, above a certain threshold percentage. If this tax were effective in deterring people from consuming high-sugar foods, then it would be expanded to other types of processed foods. This tax could also influence manufacturers to reduce the sugar contents of their foods. The presumption is that high-sugar foods would become more expensive and thus make healthier foods less expensive, thus influencing the consumers' grocery purchases.

The second stage of this program would take the revenue from the sugar tax and make it available as grants for employers to provide their employees with healthy lifestyle incentives. Employers could apply for these grants and use them to refund gym memberships, race fees, and

other healthy activities for their employees. Grants could also be used to build small gyms or hold healthy events at office buildings. Employers would want to apply for these grants because healthy benefits would make them more attractive to potential employees. Healthier employees would also be more productive at work and reduce the cost of healthcare for their employers.

While there may be some negative consequences of the sugar tax, especially pertaining to some food and beverage corporations and sugar farmers and exporters, the proposed two-step program could have a significant effect on the rate of obesity by making unhealthy food more expensive and easier for employers to provide healthy lifestyle benefits.

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