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This Article maintains that obesity in the United States is an enormous public health issue that causes the health care costs of the obese Americans greatly to exceed those of citizens of normal weight. Recognizing that that much of that cost will be born by publicly financed programs and that the taxes supporting those programs will constitute an externality that the fat impose on the thin, the Article proposes a tax on high calorie food-but only when that food is purchased by the obese. The Article addresses many of the administrative, moral and other objections to a tax aimed at a segment of our society identified by its excessive weight.

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INTRODUCTION

As we enter the twenty-first century, fat is America’s largest public health problem¹—larger even than smoking or heavy drink-

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1. See ROLAND STUM, *The Effects Of Obesity, Smoking, And Drinking On Medical Problems And Costs*, 21 HEALTH AFF. 245, 245–51 (2002), available at <http://content.healthaffairs.org/content/21/2/245.full.html>; Nanci Hellmich, *Panel: Obesity Is Century’s Greatest Public Health Threat*, USA TODAY (June 15, 2010), http://www.usatoday.com/news/health/weightloss/2010-06-15-dietaryguidelines16_ST_N.htm (asserting that obesity is the century’s greatest public health threat according to a thirteen-member panel of national nutrition and health experts). This advisory committee for the 2010 Dietary Guidelines for Americans suggests four steps to tackling the obesity epidemic: (1) “[r]educ[e] excess weight and obesity by cutting calorie intake and increasing physical activity”; (2) “[s]hift[ing] to a more plant-based diet”; (3) “[s]ignificantly reduce intake of food”; and (4) “[m]eet the 2008 Physical Activity

ing.² About two-thirds of the American population (including at least one-third of children)³ are overweight, and more than 30 percent is obese.⁴ This means that “[f]or the first time in the history of our nation, . . . this younger generation may . . . have a shorter life span than their parents as a direct result of the obesity epidemic.”⁵ This rise in fatness first showed itself in the last century and accelerated over the past thirty years.⁶ And it has not receded in the first decade of the new century. That we are growing fatter has become grist for the public press,⁷ and its ugly consequences for our health have become a favorite topic of study by public health academics.⁸

These consequences to our health and the public costs resulting from them are summarized as follows in a 2007 paper sponsored by the National Bureau of Economic Research:

Guidelines for Americans.” See *id.* See also Haomiao Jia & Erica I. Lubetkin, *Trends in Quality-Adjusted Life-Years Lost Contributed by Smoking and Obesity*, 38 AM. J. PREVENTIVE MED. 138, 141–42 (2010) (concluding that the overall health burden of obesity has an equal, if not greater, impact on quality-adjusted life-years than smoking).

2. See Strum, *supra* note 1, at 249.

3. See Allison A. Hedley et al., *Prevalence and Trends in Obesity Among US Children, Adolescents, and Adults, 1999–2002* 291 JAMA 2847, 2849 (2004), available at <http://jama.jamanetwork.com/article.aspx?articleid=198912>.

4. See Katherine M. Flegal et al., *Prevalence and Trends in Obesity Among US Adults*, 303 JAMA 235, 238 (2010), available at <http://jama.ama-assn.org/cgi/content/full/303/3/235?ijkey=ijKHq6YbJn3Oo&keytype=ref&siteid=amajnl> (stating that overall, 68 percent of US adults are overweight or obese, with 33.8 percent obese and 34.2 percent overweight).

5. See CNBC, *Fat Facts, ONE NATION OVERWEIGHT*, <http://www.cnbc.com/id/36919883/> (last visited Apr. 17, 2011).

6. See Benjamin Caballero, *The Global Epidemic of Obesity: An Overview*, 29 EPIDEMIOLOGIC REV. 1, 1–2 (2007); see also *Obesity*, WORLD HEART FED’N, <http://www.world-heart-federation.org/cardiovascular-health/cardiovascular-disease-risk-factors/obesity/> (relating changing eating and physical activity patterns over the last half-century to increases in obesity and overweight) (last visited Nov. 15, 2012).

7. Obesity has caught the attention of all the major news media outlets and agencies. See, e.g., Associated Press, *Obesity’s Yearly Costs: \$4,879 for a Woman, \$2,646 for a Man*, USA TODAY, Sept. 21, 2010, http://www.usatoday.com/yourlife/fitness/2010-09-21-obesity-costs_N.htm?csp=34; Associated Press, *Cost of Obesity: Health Suffers, So Does Wallet*, CBS NEWS (Sept. 21, 2010, 9:15 AM), <http://www.cbsnews.com/stories/2010/09/21/health/main6887142.shtml>; Diana Holden, *Fact Check: The Cost of Obesity*, CNN (Feb. 9, 2010, 5:24 PM), <http://www.cnn.com/2010/HEALTH/02/09/fact.check.obesity/index.html>. Steven Reinberg, *Almost 10 Percent of U.S. Medical Costs Tied to Obesity*, ABC NEWS (July 28, 2010), <http://abcnews.go.com/Health/Healthday/story?id=8184975&page=1>.

8. See, e.g., Inas Rashad & Michael Grossman, *The Economics of Obesity*, 156 THE PUBLIC INTEREST 104, 104 (2004) (estimating that annual obesity-related health costs are more expensive than annual smoking-related costs by as much as \$75 billion or more “because of the long and costly treatments for [obesity] complications”); CHRISTIANE SCHROETER ET AL., *DETERMINING THE IMPACT OF FOOD PRICE AND POLICY CHANGES ON OBESITY* 3–4 (2005), available at https://www.ifama.org/events/conferences/2005/cmsdocs/1156_Paper_Final.pdf. The Yale Rudd Center for Food Policy & Obesity, founded in 2005, is an academic institution at one of America’s most well-respected universities, devoted entirely to the study of obesity and food policy. To learn more about the Center, see YALE UNIV. RUDD CENTER FOR FOOD POL’Y & OBESITY, <http://www.yaleruddcenter.org/> (last visited Nov. 15, 2012).

Excess body weight is the fifth most important risk factor contributing to the burden of disease in developed countries. Rising [body mass] steadily increases the risks of type 2 diabetes, hypertension, cardiovascular disease, and some cancers. In addition, obesity is responsible for [approximately six to ten percent] of national health expenditures in the United States Moreover, the lifetime medical costs related to diabetes, heart disease, high cholesterol, hypertension and stroke among the obese are \$10,000 higher than among the nonobese.⁹

Impairments to our collective health from obesity are large, and the externalities—in the form of the thin paying for the excess debilities of the fat—are substantial. In this paper I propose a scheme to minimize these costs and the externalities using a tax that is more focused than any yet proposed or adopted. My tax would apply only to consumers who are overweight or obese. I appreciate that such a tax might face objections concerning its efficacy, administrative feasibility, and even its morality. I describe the tax and address potential objections below. In Part I, I explain my proposed tax. The tax is applied (like a sales tax) on the sale of certain foods that promote obesity, but only when those foods are purchased by a person who is already overweight or obese. Since this tax will be applied only to such persons, it differs radically from the tax now commonly applied in many places in the United States on certain foods. In Part II I deal with many of the administrative problems of evasion that attend a sales tax that is to be applied only (1) on certain foods and (2) when those foods are purchased by a subset of purchasers. Part III also deals with the efficacy of such a tax, addressing whether the tax is likely to diminish the consumption of the target foods. In Part IV I anticipate many of the moral and even constitutional objections that will be raised against this tax, which consciously discriminates against the obese and overweight.

I. THE TAX

I propose that we first identify the foods that are calorie-dense—fatty beef, butter, ice cream, sugared drinks, and the like. Of course, there will be legitimate disputes over which foods to choose

9. Sara Bleich et al., *Why is the Developed World Obese?* 1, (Nat'l Bureau of Econ. Research, Working Paper No. 12954, 2007) (citations omitted), available at <http://www.nutr.info.com/pagina/info/whyisthedevelopedworldobese.pdf>.

and much special pleading, but identifying calorie-dense foods will not be hard. There is plentiful research on the identity of such foods and on their probable contribution to our excess weight.¹⁰ I anticipate that it will be easier for the Food and Drug Administration (FDA) to identify the foods to be targeted than it is to determine the efficacy of even a moderately complex drug.

Second, I propose that we use Body Mass Index (BMI) to identify those who are neither overweight nor obese. BMI is a commonly used measure of fatness.¹¹ A BMI from 18.5 to 25 represents normal weight, 25 to 29.9 is overweight, and 30 to 34.9 is obese. The most widely accepted classifications for degrees of obesity are from the World Health Organization (WHO), which defines morbid obesity as a BMI greater than or equal to 40.¹² Only those who could not present an up-to-date card showing that they have a BMI below the cutoff number would pay the tax.

To apply the tax to prepared food purchased at a restaurant, one would use some measure of the acceptable calories in a meal to apply the tax to any meal that exceeded that amount. Currently, some cities¹³ require certain restaurants, mostly fast food chains, to state the number of calories in a meal or item on the menu. If McDonald's already makes this calculation, there is no reason why others cannot do the same. Furthermore, to implement Section 4205 of the Patient Protection and Affordable Care Act of 2010, the FDA is promulgating regulations requiring chain restaurants, retail food establishments, and companies that operate vending machines at twenty or more locations to post calorie information on menus.¹⁴

Any purchaser of food at a grocery store or at a restaurant who has a current card showing him to have a BMI of less than twenty-five (or a BMI less than some other more generous number such as twenty-seven or thirty) would be exempt from the tax. Since the

10. See, e.g., U.S. DEP'T OF HEALTH & HUMAN SERVS., *LOW-ENERGY-DENSE FOODS AND WEIGHT MANAGEMENT: CUTTING CALORIES WHILE CONTROLLING HUNGER* 2-5 (2006), available at www.cdc.gov/nccdphp/dnpa/nutrition/pdf/r2p_energy_density.pdf (discussing food energy density and providing an overview of research on the subject and the food-energy densities of certain foods).

11. For the formula for calculating an individual's body mass index (BMI), see *About BMI for Adults*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html (last visited May 18, 2011).

12. Osama Hamdy, *Obesity*, MEDSCAPE REFERENCE, <http://emedicine.medscape.com/article/123702-overview> (last updated Sept. 24, 2012).

13. See Stephanie Rosenbloom, *Calorie Data to Be Posted at Most Chains*, N.Y. TIMES, Mar. 23, 2010, <http://www.nytimes.com/2010/03/24/business/24menu.html> (discussing federal, state, and local legislation in places such as New York City, California, and Oregon requiring food calorie and nutrition information to be posted at restaurants such as McDonald's).

14. See *New Menu and Vending Machines Labeling Requirements*, U.S. FOOD & DRUG ADMIN., <http://www.fda.gov/food/labelingnutrition/ucm217762.htm> (last updated June 28, 2012).

card is the only way to get the exemption, every person with a BMI below the cut off would have an incentive to get it.

This tax has several virtues over a traditional Pigovian tax, which is applied to all purchases of a targeted product. First, since the tax is applied only to persons who are overweight or obese, it better attacks the externality caused by those with high BMIs by forcing them to pay a tax that is not imposed on the public at large. Second—unlike taxes applied to all—this tax does not punish proper use of calorie-dense products. Butter, beef, ice cream, and many other calorie-dense foods do not *a priori* pose risks to the health of the normal and underweight.¹⁵ In this sense food differs from cigarettes; we believe that every cigarette carries the risk of cancer and other diseases and that there is no acceptable minimum number of cigarettes one can smoke.¹⁶ Finally this monetary tax can be expected to have a more powerful impact than a conventional Pigovian tax, because it will stigmatize the overweight and obese and so give them an enhanced incentive to change their behavior.¹⁷

II. PROBLEMS OF EFFICACY AND ADMINISTRATION

Changing human behavior by charging a tax that is applied only to certain purchasers of certain foods faces several challenges.

15. Some such foods, for instance, may be part of a high-protein diet, a potentially effective weight loss strategy. See, e.g., Andrea C. Buchholz & Dale A. Schoeller, *Is a Calorie a Calorie?* 79 AM. J. CLINICAL NUTRITION 899S, 904S (2004). But see MARION NESTLE & MALDEN NESHEIM, *WHY CALORIES COUNT: FROM SCIENCE TO POLITICS* 167 (2012), Donald K. Layman et al., *A Moderate-Protein Diet Produces Sustained Weight Loss and Long-Term Changes in Body Composition and Blood Lipids in Obese Adults* 139 J. NUTRITION 514, 519 (2009).

16. Alna Hunter, *Tobacco Smoking Danger: Even One Cigarette Risky, Surgeon General Says*, CBS NEWS (Dec. 9, 2010, 10:57 AM), http://www.cbsnews.com/8301-504763_162-20025136-10391704.html.

17. A recent book challenges this conclusion. See NEIL SEEMAN & PATRICK LUCIANI, *XXL: OBESITY AND THE LIMITS OF SHAME* (2011). The authors argue against shame as a useful device: “This book is about the failure of the culture of shame to help in the battle against obesity. Far from helping, it has led to a rise in depression, anxiety, and self-loathing.” *Id.* at 4. In their book, the authors propose a different strategy to tackle the obesity epidemic: a ground-up approach, vesting control and economic resources in the hands of consumers in the form of “healthy-living vouchers.” Drawing an analogy to education system vouchers, Seeman and Luciani assert that “healthy-living vouchers” could be redeemed at certified places, such as gyms or vegetable sellers, and would be more effective in helping consumers make healthy life choices and maintain a healthy weight. This approach is aimed at positively reinforcing healthy eating and exercise choices instead of shaming or taxing the overweight and obese into making those choices. The idea behind the system is that “the root causes of obesity are multifarious . . . [e.g.] genes, . . . medication, depression, poverty and peer pressure. So the solutions need to be multipronged, too.” Matt Ridley, *Free-Market Solutions for Overweight Americans*, WALL STREET JOURNAL, Apr. 2, 2011, <http://online.wsj.com/article/SB10001424052748704471904576230692570676256.html?KEYWORDS=obesity>.

Some of these are direct challenges to the tax's efficacy—namely, the elasticity of demand for calorie-dense food and uncertainty about the cause of obesity. First, if the consumption of calorie-dense food is unresponsive to price increases, a tax will not reduce intake. Second, if obesity's principal cause is a modern decline in calorie-burning exercise at work and play or genetic changes in the population, the tax will have only a limited impact. Further, for some genetic disorders fatness might not be the cause of illness but rather the other way around.¹⁸

Three of the challenges to the tax are not directly to its efficacy but indirectly in the form of administrative barriers to its application. The first of these is separating the fat from the thin. BMI is not a perfect measure of fatness; we know that it incorrectly labels some as overweight who are otherwise healthy. Second, it is difficult to identify the foods to tax and exclude and to agree upon a way to tax prepared food served at a restaurant. Finally, there is the issue of agent buyers (e.g., normal-weight children sent to the store to buy for overweight parents, and a variety of other evasions).

A. *Elasticity of Demand for Calorie-Dense Food*

If the demand for calorie-dense food is completely inelastic, a Pigovian tax of 10 or even 20 percent of the cost of food would be unsuccessful in changing the behavior of the fat. Stated another way, if consumers will buy unhealthy foods almost regardless of cost (within reason), a tax will be ineffective in deterring unhealthy food choices and replacing them with healthier ones. In such a situation, the tax would become merely a mean-spirited cost heaped on the back of fat people. Thus, it is important to consider the price elasticity of demand for calorie-dense food and the impact of a tax such as the one proposed.

Price elasticity of demand (PEOD) can be defined as “the expected proportional change in product demand for a given percentage change in price.”¹⁹ For example, a product with a

18. See, e.g., *Obesity and Overweight: Causes and Consequences*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/obesity/adult/causes/index.html> (last visited Apr. 17, 2011) (“Behavior, environment, and genetic factors may have an effect in causing people to be overweight and obese. . . . Science shows that genetics plays a role in obesity. Genes can directly cause obesity in disorders such as Bardet-Biedl syndrome and Prader-Willi syndrome.”).

19. Tatiana Andreyeva et al., *The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food*, 100 AM. J. PUB. HEALTH 216, 217 (2010), available at http://www.yaleruddcenter.org/resources/upload/docs/what/economics/FoodPricesElasticity_AJPH_2.10.pdf.

PEOD number of -0.50 means that a ten percent increase in the price of that product (e.g., from levying a tax on the product) would reduce consumption by five percent. A product that is “elastic” is responsive to increases in price, meaning that consumers will purchase proportionately less of the product (per the PEOD of the specific product) when the cost is greater.

The public data on elasticity of demand for calorie-dense food is sparse and somewhat contradictory, but nothing suggests that the demand is completely inelastic. Price elasticity of demand figures vary by category or type of food. Generally, the PEOD for high-calorie food prepared away from home, like fast food, has been estimated at -0.81²⁰ to -0.692.²¹ By comparison, the estimated PEOD of prepared meals—those that are ready to eat, such as hot, premade meals or takeout items—is -0.3744.²² More specifically, for example, sources suggest that the PEOD for soda “is ‘elastic’ (-1.15) meaning that a 10% tax would reduce consumption by 11.5%.”²³ PEOD figures are slightly less elastic for “salty snack foods,” with a PEOD of -0.45 for potato chips and -0.22 for all salty snack foods (including potato chips, pretzels, popcorn, and nuts).²⁴ By comparison, the PEOD for all milk products is -0.59, while skim to 1% to whole milk ranges from -0.75 to -0.79, and eggs is -0.27.²⁵ The PEOD for fruit and vegetables may be as low as -0.16 and -0.21, respectively.²⁶ So it appears that the tax might greatly reduce the consumption of sugared soda and fast food, two of the important high-calorie offenders, because raising prices on foods such as soda and potato chips could actually deter consumption.

If, as I expect, the tax brings unwelcome attention to one’s fatness, the experience of the cigarette may be a good proxy for the tax’s effect. Starting in the middle of the twentieth century, there was a conscious and successful effort to change the cigarette

20. *Id.* at 219.

21. See SCHROETER ET AL., *supra* 8, at 16 & n.5.

22. John L. Park & Oral Capps, Jr., *Demand for Prepared Meals by U.S. Households*, 79 AM. J. AGRIC. ECON. 814, 823 (1997).

23. See YALE UNIV. RUDD CTR. FOR FOOD POLICY & OBESITY, *SOFT DRINK TAXES: A POLICY BRIEF* 3 (2009), available at <http://www.policyarchive.org/handle/10207/bitstreams/21232.pdf> (citing BEVERAGE DIGEST, Nov. 21, 2008, at 3–4). Another source suggests that the PEOD for soda is between -0.8 and -1.0 (i.e., for every 10 percent increase in price, there would be a decrease in consumption of roughly 8–10 percent). Kelly D. Brownell et al., *The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages*, 361 N. ENG. J. MED. 1599, 1602 (2009), available at <http://www.nejm.org/doi/pdf/10.1056/NEJMhpr0905723>.

24. Fred Kuchler et al., *Taxing Snack Foods: Manipulating Diet Quality or Financing Information Programs?*, 27 REV. AGRIC. ECON. 4, 14–15 (2005).

25. Andreyeva et al., *supra* note 19, at 219.

26. *Id.*

smoker from the cool Humphrey Bogart of *Casablanca* into the contemptible smoker of 2013. In 1977, the well-known child and adolescent psychiatrist, Richard Gardner, called for a “national campaign that results in stigmatization rather than glorification of the smoker.”²⁷

That campaign’s success must have exceeded Gardner’s hopes by a large margin. Today it is commonplace for businesses and universities to ban smoking not just from public meeting places but also from private offices and outdoor spaces.²⁸ In New York City it is common to see smokers standing out in the rain or cold, suffering the public disapproval of passersby on top of the physical discomfort of the rain or snow. These smokers are forced into the open to smoke absent any serious claim that there would be danger in the low concentration of secondhand smoke left over from their private indoor cigarettes.²⁹ The interest in driving persons outside when accommodation could easily be made inside, and the more recent proposals to ban smoking even on the open spaces on college campuses and in public parks, cannot be justified by the threat of secondhand smoke. I believe that these rules have a subtler motive—to humiliate smokers, to force a public admission of their subservience to the cigarette.³⁰

Because fatness was never stylish in America and is already more widely scorned than smoking, the monetary fat tax will necessarily

27. Richard Gardner, Letter to the Editor, ‘*Fatuous and Futile*’ Road to Self-Esteem, N.Y. TIMES, July 30, 1977, at A13.

28. See, e.g., Javier C. Hernandez, *Smoking Ban for Beaches and Parks Is Approved*, N.Y. TIMES, Feb. 2, 2011, <http://www.nytimes.com/2011/02/03/nyregion/03smoking.html>. As of July 1, 2011, smoking is prohibited on the entire University of Michigan Campus, inside and out. See Kevin Brown, *Statewide May 1 Smoking Ban Already University Policy*, RECORD UPDATE, Apr. 19, 2010, <http://www.ur.umich.edu/update/archives/100419/smokefree>.

29. Rabiya S. Tuma, *Thirdhand Smoke: Studies Multiply, Catchy Name Raises Awareness*, 102 J. NAT’L. CANCER INST. 14, 1004–05 (2010) (“Now a small but growing number of scientists are testing the possible health effects associated with the residue that cigarette smoke deposits on furniture, clothing, and other surfaces, a substance some are calling ‘thirdhand smoke.’ The magnitude of the problem, the amount of attention and resources it warrants, and even the definition of the term itself remain a matter of debate, however. Some tobacco control experts think any effect from thirdhand smoke will be relatively limited and that the new term has driven recent interest more than scientific discoveries have.”).

30. With a little embarrassment, I admit my own part in the humiliation ritual. In the fall of 2008 I taught at Columbia University in New York. Returning in a cold November rain from class in an adjoining building, I saw a line of smokers hunkering in the front of the main law school building on 116th Street under a scant two-foot ledge. The ledge was doing little to divert the rain. There among a dozen puffing students was my friend Professor Marvin Chirelstein, a noted tax and contracts scholar. Had I been a nicer person, I would have averted my eyes and gone in without comment. But I recognized my duty when I saw it and stopped to acknowledge Marvin and to point out the obvious—that Marvin must be strongly attracted to cigarettes to stand in a cold rain with a bunch of students. (He may have told me to go to hell, but I have forgotten.)

humiliate obese persons.³¹ Consider the grocery store checkout line where the clerk asks innocently for the patron's not-fat card. The person just behind in line will hear the patron's admission that he has none. Overhearing that admission, the observer may regard it as a public acknowledgment of fatness. Of course, the humiliation can be more pointed—suppose the checkout clerk asks if the patron left his card at home, eliciting a second response that amounts to an admission that he is overweight.

And these exchanges are innocuous by comparison with what might occur in a restaurant. Suppose that the bill for lunch is to be split among several diners and the waiter asks for everyone's card; if I cannot produce one, my colleagues are likely to sneak a look at my girth. When the host is to pay for all, he will have to be even more adept to avoid embarrassing his fat guest. He will have to alert the waiter not to ask for cards and probably be forced to swallow the tax's surcharge not only on the fat man's meal but on the entire bill.

Humiliation is an inevitable part of the fat tax. Smoking can be done in private, but one is fat all the time. And since, in my opinion, being fat—at least for the middle and upper-middle classes—is more objectionable than being a smoker,³² the nonverbal admission of fatness is more to be avoided than the acknowledgment of an occasional cigarette.

The combination of stigmatization and a substantial tax has reduced the prevalence of smoking among American adults from 42 percent by approximately half over the last fifty years.³³ This reduction has happened in the absence of any widely available substitute for the cigarette. By contrast the substitutes for calorie-dense food are ubiquitous, so we can hope and even expect that demand for calorie-dense food will prove even more elastic than is the demand for cigarettes.³⁴

31. See E.L. Harvey & A.J. Hill, *Health Professionals' Views of Overweight People and Smokers*, 25 INT'L J. OBESITY 1253, 1259 (2001) (noting that in a study of health care professionals' opinions of smokers and obese people, "obese people were rated most negatively of all groups"); Rebecca M. Puhl & Chelsea A. Heuer, *Obesity Stigma: Important Considerations for Public Health*, 100 AM. J. PUB. HEALTH 1019 (2005) (explaining the stigma associated with obesity).

32. See *Being Fat 'Is as Bad as Smoking'*, BBC NEWS (Feb. 25, 2009, 11:17 GMT), <http://news.bbc.co.uk/2/hi/health/7908575.stm>.

33. Mary Mederios Kent, *Not All Americans Are Smoking Less*, POPULATION REFERENCE BUREAU (Feb. 1, 2011), <http://www.prb.org/Articles/2011/us-smoking-trends.aspx?p=1>.

34. Soft drinks present one example. Estimates of the price elasticity of soft drinks range from -0.73 to -1.264 . See Tatiana Andreyeva et al., *The Impact of Food Prices on Consumption: A Systematic Review of Research on Price Elasticity of Demand for Food*, 100 AM. J. OF PUB. HEALTH 216, 219 (2009) (reviewing fourteen food-demand studies to reveal an average price elasticity of -0.79 for soft drinks.), Eric A. Finkelstein, et al., *Impact of Targeted Beverage Taxes on*

B. Calories v. Genes or Sitting

Instinctively, most of us agree with the modern press that blames our wolfing of Big Macs and our children's attraction to Coke as the cause of our fatness. But it is possible that we are fatter than our ancestors because they exercised more than us at manual labor or at play. The time that our children spend in front of the television³⁵ gives some credence to this claim, as do the modern change from a rural economy to an urban one and the change from manual labor to computer-based intellectual labor. And maybe Darwin has been at work, expanding the breadth of our rear ends and the facility of our fingers on the keyboard while shrinking our legs and arms. If our fatness comes from new genes or from our sedentary lives, the tax is misdirected and is unlikely to have the effect for which we hope.

But genes are easy to dismiss as the source of the obesity epidemic. The fat epidemic did not really get underway until 1960, and much of the spread of obesity occurred between 1970 and 2000.³⁶ Evolution takes far longer to produce the kind of change in weight that we have seen in the last fifty years.³⁷ We can be confident that today's obese and overweight Americans have the same genetic composition as their grandparents and great grandparents who were not overweight.

Higher- and Lower-Income Households, 22 ARCH INTERN MED 2028 (2010) (estimating the price elasticity of carbonated SSBs to be -0.73); TRAVIS A. SMITH ET AL., TAXING CALORIC SWEETENED BEVERAGES: POTENTIAL EFFECTS ON BEVERAGE CONSUMPTION, CALORIE INTAKE, AND OBESITY, ECON. RES. SERV., U.S. DEP'T OF AGRIC. 8 (2010) (finding a price elasticity of -1.26 for soft drinks).

An abundance of substitutes, like water, milk, and tea, may explain these high price elasticities. See Kelly D. Brownell, *The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages*, 361 NEW ENG. J. OF MED. 1599 (2009) ("An alternative (water) is available at little or no cost, hence a tax that shifts intake from SSBs to water would benefit the poor by improving health and lowering beverage expenditures.").

35. *Reduce Screen Time: Limit Computer Time and Television Usage*, U.S. DEP'T OF HEALTH & HUMAN SERVS., <http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/reduce-screen-time/index.htm> (last visited Apr. 1, 2011) (citing HENRY J. KAISER FOUND., GENERATION M²: MEDIA IN THE LIVES OF 8-18 YEAR OLDS (2010)) (stating that eight- to eighteen-year-olds spend an average of four and a half hours daily in front of the television, compared to an average of twenty-five minutes a day reading books)).

36. See Katherine M. Flegal et al., *Prevalence of Obesity and Trends in the Distribution of Body Mass Index Among US Adults, 1999-2010*, 307 JAMA 491, 491 (2012); Katherine M Flegal et al., *Overweight and Obesity in the United States, Prevalence and Trends, 1960-1994* 22 INT'L J. OBESITY 39, 45 (1998) (concluding that between 1976-80 and 1988-94, the prevalence of obesity increased markedly).

37. See Nicole Crawford, *Facts on Obesity in America*, EHOW.COM, http://www.ehow.com/about_5479162_obesity_america.html (last visited Nov. 15, 2012); see also David Bjerklie & Michael D. Lemonick, *America's Obesity Crisis: Evolution: How We Grew So Big*, TIME, June 7, 2004, <http://www.time.com/time/magazine/article/0,9171,994385-1,00.html>.

Decline in exercise is somewhat harder to dismiss. First, the great decline in manual labor occurred in the 1960s and 1970s—before the weight of citizens of developed countries ballooned.³⁸ Second, the available measures of physical activity—while far from perfect—show modest change from 1990 to 2001 relative to the large weight increase in these populations during the same period.³⁹ Finally, the growth of “available calories”—also a somewhat imprecise measurement—is sufficient alone to explain most of the weight gain in most developed countries and all of the gain in others.⁴⁰

The decline in physical activity may be significant for children—who seem to have substituted TV and Wii for time at play—but the general population appears not to have undergone a sufficient decline in physical activity to explain more than a small part of the weight gain.⁴¹ The evil appears to be increase in energy input (calories), not a decrease in energy output (exercise).

Finally, what about the most fundamental challenges to my thesis—that fat does not cause ill health, which is instead caused by lack of exercise, or that ill health itself causes fatness. Is it plausible that ill health causes fatness, not the other way around?⁴² Not to me. If ill health causes fatness, then how do we explain the rise of obesity in the last thirty years? During this explosion of rising obesity in the United States, the quality of healthcare and the general health of the population that is not obese has improved.⁴³

38. See Eric A. Finkelstein et al., *Economic Causes and Consequences of Obesity* 26 ANN. REV. PUB. HEALTH 239, 241 (2005).

The fraction of wage and salary workers employed in goods-producing industries fell from 27% in 1980 to 19% in 2000; however, this decline represents the continuation of a longer-term trend: 35% of jobs were in goods-producing industries in 1960. This gradual decline in manual labor began well before the rapid rise in obesity rates and suggests that other factors are more likely to be responsible for the rise in obesity.

Id. (citations omitted); see also MARLENE A. LEE & MARK MATHER, U.S. LABOR FORCE TRENDS, June 2008, available at <http://www.prb.org/pdf08/63.2uslabor.pdf>.

39. See Sara N. Bleich et al., *Why Is the Developed World Obese?*, 29 ANN. REV. PUB. HEALTH 273, 286–87 (2008).

40. See *id.* at 289–90.

41. Cf. Boyd Swinburn, *Increased Food Energy Supply Is More Than Sufficient to Explain the U.S. Epidemic of Obesity*, 90 AM. J. CLIN. NUTR. 1453, 1455 (2009) (“[R]educations in physical activity do not appear to be driving the increase in obesity in the United States . . .”).

42. See Debbie A. Lawlor et al., *Reverse Causality and Confounding and the Associations of Overweight and Obesity with Mortality*, 14 OBESITY 2294, 2294, 2299 (2006) (demonstrating “that with appropriate control for smoking and reverse causality, both overweight and obesity are associated with important increases in all-cause and cause-specific mortality, and in particular with cardiovascular disease mortality”).

43. See Teddi Johnson, *Nation’s Overall Health Not Improving, Assessment Finds*, THE NATION’S HEALTH, Feb. 2012, at 1, 1; see also NAT’L RESEARCH COUNCIL (US) COMM. ON NAT’L

It is conceivable that fat people who exercise but remain fat despite that exercise do not suffer all of the ills that we observe in our overweight population.⁴⁴ But there is little evidence that this population exists in numbers worth counting. Sufficient exercise will burn the excess calories and keep even a big eater from obesity.⁴⁵

C. Who Is Fat?

There is no easily administered, foolproof measure of fatness. BMI is the most widely used and easiest to compute, but it is merely an approximation. The BMI assumes a fixed level of muscle and bone for a certain height in a male and a different level for a female of the same height. But this assumption is wrong at the edges. For example, all of the cornerbacks in the NFL probably have a BMI above twenty-five, but none of them is fat.⁴⁶ This is because the assumptions of the BMI equation underestimate their muscle and bone.⁴⁷ Other tests are available; for example, the Japanese measure fatness by comparing waist size.⁴⁸ That test or possibly others⁴⁹ could provide alternatives for lean, muscular youngsters, like the cornerbacks, and for other exceptional persons, like pregnant women.

BMI is probably the most widely accepted and feasible of the measures of fatness, so it should be the general test. But it would be possible to offer more accurate (and probably more expensive) tests for the outliers. We could offer an alternative test to anyone

STATISTICS, IMPROVING HEALTH CARE COST PROJECTIONS FOR THE MEDICARE POPULATION: SUMMARY OF A WORKSHOP 48 (2010), available at <http://www.ncbi.nlm.nih.gov/books/NBK52806/>.

44. See Kyle J. McInnis et al., *Counseling for Physical Activity in Overweight and Obese Patients*, 67 AM. FAM. PHYSICIAN 1249, 1249 (2003), available at <http://www.aafp.org/afp/2003/0315/p1249.html>.

45. Cf. *id.* (explaining that there is a “strong impact of physical activity on promoting health and preventing disease, or achieving and maintaining a healthy body weight.”).

46. Joyce B. Harp, Letter to the Editor, *Obesity in the National Football League*, 293 JAMA 1061, 1062 (2005), available at <http://jama.jamanetwork.com/article.aspx?articleid=200447>.

47. See NAT’L INSTS. OF HEALTH, CLINICAL GUIDELINES ON THE IDENTIFICATION, EVALUATION AND TREATMENT OF OVERWEIGHT AND OBESITY IN ADULTS 57 (1998), available at http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf (noting that “BMI overestimates body fat in person who are very muscular”).

48. Norimitsu Onishi, *Japan, Seeking Trim Waists, Measures Millions*, N.Y. TIMES, JUN. 13, 2008, available at <http://www.nytimes.com/2008/06/13/world/asia/13fat.html>.

49. Another test for measuring health is calculating waist to hip ratio, which some sources claim is a better method of assessment. See Miranda Hitti, *Testing for Obesity: Bye-Bye BMI? Waist-to-Hip Ratio May Be Better Test of Heart Attack Risk Than Body Mass Index*, WEBMD HEALTH NEWS (Nov. 3, 2005), available at <http://www.webmd.com/diet/news/20051103/testing-for-obesity-bye-bye-bmi>.

who had reason to believe that the BMI would not be a proper measure of his fatness. Presumably, most of these people would be athletes who have more bone and muscle than the formula anticipates but who have substantially less fat than their high BMI would indicate under normal circumstances.

D. Identifying Food Subject to the Tax

Once the FDA has published its list of calorie-dense taxable foods, how does the checkout person at the supermarket identify them? That is easy. With barcode screening, even a mom and pop store's computer can be programmed to identify each item purchased for inventory and marketing purposes. To add a 10 or 15 percent tax to some but not all foods would require only a small change to the program that drives the cash register.

How is a restaurant to determine which items on the menu are calorie-dense and which are not? That is harder, but not too hard. Most restaurants possess this information, and larger organizations such as restaurant chains with many establishments offer it on websites or in handouts available on location (e.g., McDonald's).⁵⁰ As one of a growing number of states and municipalities to do so, New York City requires⁵¹ some fast-food chain restaurants to show the calorie count in each dish on their menus.⁵² New York City, at the forefront of the movement, first required that calorie count information be posted on restaurant menus in 2008.⁵³ At the federal level, the FDA just released proposed rules that would require chain restaurants and food-service businesses with twenty or more locations to post calorie counts on menus and menu boards (with a

50. See Maria Scinto, *How to Count Calories at Restaurants*, LIVESTRONG.COM (June 2, 2011), <http://www.livestrong.com/article/83414-count-calories-restaurants/>.

51. See Meredith Melnick, *Calorie Counts on Menus: Apparently, Nobody Cares*, TIME HEALTHLAND (Feb. 16, 2011), <http://healthland.time.com/2011/02/16/calorie-counts-on-menus-apparently-nobody-cares/>.

52. See GUIDANCE FOR INDUSTRY: QUESTIONS AND ANSWERS REGARDING THE EFFECT OF SECTION 4205 OF THE PATIENT PROTECTION AND AFFORDABLE CARE ACT OF 2010 ON STATE AND LOCAL MENU AND VENDING MACHINE LABELING LAWS, FOOD & DRUG ADMIN. (Aug. 2010), <http://www.fda.gov/food/guidancecomplianceregulatoryinformation/guidancedocuments/foodlabelingnutrition/ucm223408.htm>. For a timeline of the regulatory action taken on nutrition labeling in restaurants, see Food Labeling: Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments, 76 Fed. Reg., 19,192 (proposed Apr. 6, 2011) (to be codified at 21 CFR pts. 11, 101).

53. See N.Y., N.Y., RULES OF THE CITY OF N.Y., HEALTH CODE, tit. 24, § 81.50 (repealed 2008); see also *NY Orders Calories Posted on Chain Menus*, CNN (Jan. 22, 2008), http://articles.cnn.com/2008-01-22/health/calories.menus_1_calorie-counts-calorie-information-menus?_s=PM:HEALTH.

few notable exceptions).⁵⁴ All of these measures have a common aim: to provide consumers with more information in order to encourage better food choices.⁵⁵ As I suggest below, putting patrons of elegant restaurants to this test will force an awful choice on the managers and on some patrons of those restaurants. To avoid embarrassment and confusion, restaurants might choose to code various items on the menu as subject or not subject to the tax.

Identifying the food subject to the tax will be easy at a computer-driven checkout station. Solving the problem for a dish at a restaurant will be slightly more trouble, but hardly insurmountable.

E. Gaming the System

Since properly applying the tax will require identifying persons who are exempt (because they are beneath the cutoff BMI), and since it will be in the interest of everyone who does not qualify to avoid the tax, we can expect efforts to evade the tax to be more than trifling. And, of course, the humiliation—which I describe above as a virtue—is here a vice: it exaggerates the urge to avoid the tax not only by proper means (losing weight) but also by fraudulent means (using another's card).

Society's attempt to identify those old enough to buy alcohol or cigarettes by use of driver's licenses or other identification cards has demonstrated the fallibility of an identification card. Most crudely, the card can be a counterfeit, or it can be procured by bribing the issuer's agent or even by sending a thin family member to get a card in another's name. Some of these issues could be minimized by combining the card with a driver's license or with some other form of picture identification that is important to the owner. Iris scanners or other new technology may, of course, render these forms of fraud ineffective.⁵⁶

The problem of counterfeit or otherwise fraudulent cards could be minimized by making the sponsor of the testing station liable for the fraud of its agents and by making the cardholder liable for

54. The FDA was authorized to make these rules by the health care overhaul law passed in 2010. See William Neuman, *Calorie-Counting Rule to Leave Out Movie Theaters*, N.Y. TIMES, Apr. 1, 2011, <http://www.nytimes.com/2011/04/02/business/02menu.html>. Notably, all food items served at movie theaters would be exempt from the calorie-posting requirements, as well as alcohol served anywhere. The rules are still open to consumer and industry feedback but will likely go into effect next year largely unchanged. See *id.*

55. See Melnick, *supra* note 51.

56. See, e.g., *Biometric Education: Iris Recognition*, ROSISTEM, <http://www.barcode.ro/tutorials/biometrics/iris.html> (last visited Apr. 1, 2011) (describing "iris-scan technology as one of the biometrics that is very resistant to false matching and fraud").

presenting a counterfeit card. And, of course, if a person who looks like an offensive lineman presents a card showing a BMI of twenty-three, the clerk might challenge him, just like waiters challenge persons who look too young to be twenty-one when they order alcohol at a bar. The purchase of food over the Internet or over the phone poses an additional problem, since the seller will have no opportunity to check the card. We could do what sellers of cigarettes and alcohol do—namely, force any purchaser who seeks to avoid the tax to appear in person. The iPhone or similar technology may shortly make it possible to identify a caller and his BMI.

One could also avoid the tax by proxy shopping—by sending a friend or a thin member of the family to do the grocery buying. In the long run, that evasion might be more costly than paying the tax (how many times will my neighbor buy my weekly groceries without a payment?). And it will not work for an eleven-year-old who has an obese mother hovering in the background with her credit card.

This tax, like all others, will suffer its share of evasion. It is difficult to predict whether the level of evasion will be large enough to justify extraordinary penalties such as criminal liability for the taxpayer or the food seller. The evasion issues are interesting, but they are not new. We have plenty of experience in dealing with persons who offer cards to show them to be someone they are not or to have an age or other attributes that they do not possess, and we have a wealth of time-tested responses to combat such behavior.⁵⁷

III. OBJECTIONS TO THE FAT TAX

There are many possible objections to any tax that applies to some foods but not to others, and an even larger number to discrimination between fat people and thin ones. Some of these objections are prompted by sympathy for the fat: some will find it morally repugnant to direct more scorn at those already afflicted with the social stigma against the obese. Others may object out of doubt about the efficacy of the tax, about the cost of its application, or from doubt concerning the externalities. While I recognize the merit of some of the challenges to my proposal, I believe that these

57. See e.g., Dave C. Pearson et al., *Youth Tobacco Sales in a Metropolitan County: Factors Associated With Compliance*, 33 AM. J. OF PREV. MED. 91 (2007) (“[N]ot asking for age or ID significantly increased the risk of a sale, whereas asking for proof of age significantly decreased the chances of a sale.”); Nancy A. Rigotti, *The Effect of Enforcing Tobacco-Sales Laws on Adolescents Access to Tobacco and Smoking Behavior*, 337 NEW ENG. J. OF MED. 1044, 1048 (1997) (“We found that enforcing a tobacco-sales law for two years improved merchants’ compliance and reduced the sales of cigarettes to minors under our test conditions.”).

objections do not outweigh the value of the tax that I describe. A good way to test our intuition about the proposed treatment of the fat is to compare it to our current treatment of the smoker.

A. *Is Obesity a Disease?*

The fat tax is sure to draw the charge that it constitutes unfair discrimination against persons with a disease or a genetic disposition that dooms them to be fat. This argument is not persuasive. For the reasons stated above, it is not plausible that genetic disposition is the principal cause of obesity.⁵⁸ Obesity has dramatically increased in the last thirty years in a population whose genetic composition has experienced no more than trivial changes during that time.⁵⁹

For the same reasons, it is hard to make the case that obesity is a disease—by that I mean an addiction so strong that we cannot expect the obese to face it down.⁶⁰ If the attraction of fatty meat and butter is so strong, how did our grandparents and great-grandparents resist it? The dramatic rise of obesity in the United States since 1970 belies the claim that the attraction of these foods is so strong that we should treat it as a disease beyond the bounds of free will.

Remember too the smokers. Smokers have claimed that they are not to blame for smoking, because tobacco is addictive. Society has shown contempt for that argument; it has responded with ever-greater prohibitions on smoking. We expect smokers to overcome their addiction to tobacco.⁶¹ How are overeaters different?

58. See *Obesity & Genetics*, CTNS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/Features/Obesity/> (last visited June 22, 2012); *Genomics and Health*, CTNS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/genomics/resources/diseases/obesity/index.htm> (last visited June 22, 2012). This statement is true for all but a small minority of cases of relatively rare genetic disorders like elephantiasis and steatopygia.

59. See Caballero, *supra* note 6, at 1–2.

60. The American Psychiatric Association does not currently recognize obesity as a disease in the sense of an addiction. There are currently no plans to change that diagnosis in the next volume of the organization's Diagnostic and Statistical Manual of Mental Disorders (DSM) (the fifth edition is due in 2013). See Madison Park, *Binge Eating Recommended as a Psychiatric Diagnosis; Obesity Is Not*, CNN (June 1, 2010), http://articles.cnn.com/2010-06-01/health/eating.disorders.bingeing.obesity_1_ednos-binge-diagnostic-criteria?_s=PM:HEALTH.

61. See, e.g., *Safeway v. San Francisco*, 797 F. Supp. 2d (N.D. Cal 2011) (upholding a city ordinance which prohibited the sale of tobacco by any store containing a pharmacy, in part on the grounds that the ordinance's purpose—to make those already addicted to smoking cease their habit—was legitimate); *Meeks v. Apfel*, 993 F. Supp. 1265 (W.D. Mo. 1997) (upholding an administrative decision denying social security benefits in part because the plaintiff, addicted to nicotine, ignored his doctor's advice to stop smoking); *N. Miami v. Kurtz*, 653 So.2d 1025 (Fla. 1995) (holding that a city regulation requiring job applicants to

B. *Would the Tax Be Unconstitutional?*

This tax is openly and intentionally discriminatory. So? Virtually every tax distinguishes among various groups of payers. The progressive income tax applies a higher rate to the millionth dollar than to the one hundredth. Real estate taxes are higher on more valuable homes than on less valuable neighboring homes. All state sales taxes exempt certain classes of products and most services. This endless list alone probably dooms a constitutional challenge, especially when one considers the state's interest in reducing its public medical bill.

A constitutional challenge might have a chance if the obese were a protected class⁶² or if the tax lacked an obvious and sensible purpose, but it does not. Numerous federal courts have held that obesity does not constitute a disability under the Americans with Disabilities Act (ADA) and that obesity is not a protected class under Title VII.⁶³ For example, in *Armstrong v. City of Dallas*,⁶⁴ the

sign affidavits stating that they did not use tobacco in the prior year passed constitutional muster);

62. The obese are not currently a listed class of persons protected from discrimination by Title VII. At least one commentator has speculated, however, that the obese might be able to argue for this protection by claiming that weight discrimination disparately impacts a class that is currently protected. For example, a plaintiff who could prove that weight discrimination adversely impacts a particular race or sex group might have a cognizable action under Title VII, even if obesity is not a protected class itself. See Donald L. Bierman, Jr., *Employment Discrimination Against Overweight Individuals: Should Obesity be a Protected Classification?*, 30 SANTA CLARA L. REV. 951, 971–72, 975 (1990).

63. See, e.g., *Torcasio v. Murray*, 57 F.3d 1340, 1354 (4th Cir. 1995), *cert. denied*, 516 U.S. 1071 (1996) (reviewing and summarizing case law and finding that obesity is not a disability under the ADA); *Butterfield v. N.Y.*, No. 96Civ.5144, 1998 WL 401533, at *13 (S.D.N.Y. July 15, 1998) (holding obesity is not a protected class under Title VII); *Aguilar v. Lundy Enters., Inc.*, Civ. A. No. 86-1977, 1997 WL 187381, at *2 n.3 (E.D. La. 1997) (noting that obesity is not a protected category under Title VII) (citing *Armstrong v. City of Dallas*, 997 F.2d 62, 66 (5th Cir. 1993)). At least one federal regulation interpreting the ADA agrees with these results. See *Morrow v. City of Jacksonville, Ark.*, 941 F. Supp. 816, 821 (E.D. Ark. 1996) (citing 29 C.F.R. Part 1630, App. § 1630.2(j) (“[E]xcept in rare circumstances, obesity is not considered a disabling impairment.”)). The same may not be true at the state level. For instance, in Michigan:

- (1) An employer shall not do any of the following:
 - (a) Fail or refuse to hire or recruit, discharge, or otherwise discriminate against an individual with respect to employment, compensation, or a term, condition, or privilege of employment, because of . . . *weight* . . .
 - (b) Limit, segregate, or classify an employee or applicant for employment in a way that deprives or tends to deprive the employee or applicant of an employment opportunity, or otherwise adversely affects the status of an employee or applicant because of . . . *weight*.

Elliott-Larsen Civil Rights Act, MICH. COMP. LAWS ANN. § 37.2202 (West 2010) (emphasis added).

64. 997 F.2d 62 (5th Cir. 1993).

Fifth Circuit held that obesity does not constitute a protected class under Title VII and thus upheld the discharge of an obese firefighter. Troy Armstrong was a firefighter with the Dallas Fire Department for over twenty years.⁶⁵ Seventeen years into Armstrong's service, the Dallas Fire Department "responded to a perceived [obesity] crisis by adopting a Physical Fitness Weight Program."⁶⁶ The program established body-weight standards, taking into account body type and height, and also set weight-loss goals for firefighters surpassing those standards.⁶⁷ At the inception of the Physical Fitness Weight Program, Armstrong was 6'3" and 360 pounds—morbidly obese.⁶⁸ Even in the largest body type category, Armstrong exceeded the maximum acceptable weight for his height by 158 pounds.⁶⁹ Armstrong was too obese to fit comfortably behind the wheel of the fire engine that he was supposed to drive.⁷⁰ After a first attempt to lose weight, participating in the Dallas Fire Department program, Armstrong actually gained weight—sixty-six pounds (taking his total weight to 426 pounds).⁷¹ The Dallas Fire Department gave Armstrong numerous chances over a period of several years to meet the weight standards of the program, entering into numerous agreements to continue to employ Armstrong if he could meet the standards in a reasonable period of time.⁷² Then, "[c]iting his failure to abide by the agreement and the fact that his weight constituted a continuing threat to the health and safety of himself, his fellow firefighters, and the citizens of Dallas, the department removed Armstrong from fire-fighting status."⁷³

Armstrong filed complaints with the Equal Employment Opportunity Commission (EEOC), alleging retaliatory discrimination based on weight, Armstrong's race (Black), and earlier EEOC charges he filed.⁷⁴ The Fifth Circuit upheld the lower court decision and grant of summary judgment, finding that the City of Dallas had "established a legitimate, nondiscriminatory reason for its actions, namely Armstrong's excessive weight and the [other job-related infractions]."⁷⁵ Many courts concur with the *Armstrong* court's holding that ordinary obesity is not a "physical impairment"

65. *Id.* at 64.

66. *Id.*

67. *See id.*

68. *See id.*

69. *See id.*

70. *See id.*

71. *See id.*

72. *See id.*

73. *See id.* at 64–65.

74. *See id.* at 65.

75. *See id.* at 67 (footnote omitted).

within the meaning of the ADA.⁷⁶ Additionally, academic literature rejects the claim that obesity discrimination violates the Equal Protection Clause.⁷⁷

C. Is a Tax on Obesity Regressive?⁷⁸

The fat tax is probably regressive. Wealthy taxpayers spend a smaller share of their disposable income on food than low-income persons.⁷⁹ By hypothesis the tax will claim a larger share of the low-income person's wealth than of the high-income person.

Since a larger percentage of the working class is probably overweight or obese than the percentage of the more affluent middle and upper middle class members who are,⁸⁰ this regressivity is magnified. The data show significant correlation between obesity, class, and, in some cases, race or ethnicity.⁸¹ In general the population gets fatter as one descends from upper to middle to working class.⁸² In addition there are systematic differences in obesity rates between white women and black and Mexican-American women.⁸³

But regressivity does not distinguish this tax from the cigarette tax or from many other taxes such as sales taxes, and regressivity has not been a barrier to many other taxes. Cigarette taxes have

76. See, e.g., *Greenberg v. BellSouth Telecomm., Inc.*, 498 F.3d 1258 (11th Cir. 2007); *Francis v. City of Meriden*, 129 F.3d 281 (2d Cir. 1997); *Merker v. Miami-Dade Cnty. Fla.*, 485 F. Supp. 2d 1349 (S.D. Fla. 2007); *Fredregill v. Nationwide Agribusiness Ins. Co.*, 992 F. Supp. 1082 (S.D. Iowa 1997); see also Jay M. Zitter, *Employment Discrimination Against Obese Persons*, 111 AM. JUR. 3d PROOF OF FACTS § 391 (2009).

77. See, e.g., Sayward Byrd, Comment, *Civil Rights and the "Twinkie" Tax: The 900-Pound Gorilla in the War on Obesity*, 65 LA. L. REV. 303, 347 (2004) ("The obese as a class have not been granted special protection under the Equal Protection Clause or declared a protected class.").

78. A regressive tax is one "that imposes a smaller burden (relative to resources) on those who are wealthier." See *Regressive Tax*, ENCYCLOPEDIA BRITANNICA, <http://www.britannica.com/EBchecked/topic/496192/regressive-tax> (last visited Apr. 1, 2011).

79. Consumer Expenditures—2011, BUR. OF LABOR STATISTICS, <http://www.bls.gov/news.release/cesan.nr0.htm> (last updated September 15, 2012).

80. Mary Ferguson, *A Growing Problem: Race, Class and Obesity Among American Women*, DIVERSITY OR DIVISION? http://journalism.nyu.edu/publishing/archives/race_class/other_girlsstuff.html (last visited Apr. 1, 2011) ("Recent research shows that social class measured by income and education can be more powerful than genetics in predicting future health problems, including obesity."); see also Shiriki Kumanyika & Sonya Grier, *Targeting Interventions for Ethnic Minority and Low-Income Populations*, 16 FUTURE CHILD. 187, 187 (2006).

81. See Ferguson, *supra* note 80 ("African-American, American Indian and Hispanic-American women have the highest risk of becoming overweight, according to the Centers for Disease Control. Only one minority group, Asian Americans, has a lower rate of obesity than the general population.").

82. See *id.*

83. See *id.* (citing statistics stating that "37% of African-American women are obese; 33% of Mexican-American [w]omen are obese; 24% of Caucasian women are obese.").

been quite successful in decreasing the incidence of smoking and raising revenue for anti-smoking measures and other causes.⁸⁴ Higher taxes on smokers “have produced sharp declines in consumption. The amount of decline in smoking is directly tied to the size of the tax increase.”⁸⁵ This is so even though cigarette taxes are regressive, disproportionately affecting lower-income individuals, who smoke in greater proportion as a population.⁸⁶ More than half of smokers today earn less than \$36,000 annually.⁸⁷ Further, that proportion of lower-income smokers continues to pay a higher proportion of all cigarette taxes as middle- and higher-income individuals take advantage of their ability to pay for smoking cessation medication and aids.⁸⁸

Some of the sting of regressivity is taken away by the fact that this tax is avoidable—more readily so than the cigarette tax. The tax differs from cigarette taxes in two ways. First, there are appealing substitutes for many fatty foods; the same is not true for cigarettes. Notwithstanding the new e-cigarette, smokers are typically confronted with the harsh, binary choice of smoking or quitting. The demand for most fatty foods is much more elastic; one can generally find substitutes for many such foods.⁸⁹ Second, one can lose weight and so get out of the taxed class. Once one has done so, one can drink sugary Cokes and eat Big Macs, at least until the next weigh-in.

Note too that more than half of the states in the United States tax soda and some junk foods, such as chips and candy, at higher rates than other foods and beverages.⁹⁰ In some states, elevated sales-tax rates may apply to sales of junk food in all stores; in others, taxes disfavoring soda and junk foods are applied only to vending machine sales.⁹¹ As of 2007, state junk-food taxes were as much as

84. See, e.g., Dennis Cauchon, *Smoking Declines as Taxes Increase*, USA TODAY, Aug. 10, 2007, http://www.usatoday.com/news/health/2007-08-09-1Aled_N.htm.

85. *Id.*

86. See Lydia Saad, *Cigarette Tax Will Affect Low-Income Americans Most*, GALLUP, Apr. 1, 2009, <http://www.gallup.com/poll/117214/cigarette-tax-affect-low-income-americans.aspx>.

87. See *id.*

88. See Kit-Ngan Young-Hoon, *A Longitudinal Study on the Impact of Income Change and Poverty on Smoking Cessation*, 103 CAN. J. PUB. HEALTH 189, 192 (2012) (“Cost is a potential barrier to accessing smoking cessation medications lower-income groups use smoking cessation aids less frequently than higher-income groups.”).

89. See *supra* note 34; but see Jennifer L. Pomeranz, *Taxing Food and Beverage Products: A Public Health Perspective and a New Strategy for Prevention*, 46 U. MICH. J.L. REFORM 999 (2013) (noting the potential existence of “food deserts” in low-income communities, or areas in which healthy alternatives to unhealthy foods are not readily available).

90. Jamie F. Chiqui et al., *State Sales Tax Rates for Soft Drinks and Snacks Sold Through Grocery Stores and Vending Machines*, 2007, 29 J. PUB. HEALTH POL’Y 226, 232–37 (2008).

91. *Id.*

eight percent in some states.⁹² In Great Britain, most foods are exempt from the value-added tax (VAT), but restaurant meals and certain junk foods such as potato chips and ice cream are taxed at the full VAT rate of 17.5 percent.⁹³ Some British public health advocates have suggested that the VAT be modified to tax foods based on their nutritional value, both as a means to raise revenue and to discourage consumers from purchasing so many unhealthy foods.⁹⁴ By hypothesis these taxes that apply to all purchasers are yet more regressive than the tax that I propose. The taxes now in force reach a larger segment of the low-income population than any tax from which the thin are excluded. The same would be true of the proposed taxes on all fast food.

D. Public Health Costs of Obesity

The traditional justification for a Pigovian tax is to remove or reduce an externality (i.e., to free the thin from the costs of fatness that the thin are somehow made to bear). The principal cost of fatness comes from its associated illness. The fat are sicker than the thin. If everyone paid for his own health care without any public subsidies such as Medicare and Medicaid, there would be no such externality, and placing a tax on the fat would have to be justified by paternalistic motives. We would be protecting the fat from themselves, but the cost would be exactly where it should be—with no externalities.

It is undisputed that the overweight and obese experience elevated rates of type 2 diabetes, cardiovascular disease, osteoarthritis, some types of cancer, and other diseases.⁹⁵ Indeed, the overweight

92. See *id.* at 231–37. Surprisingly, Mississippi, the most overweight state in the nation, taxed junk foods at the highest rates. *Id.* at 231; Donald G. McNeil Jr., *Obesity Rate is Nearly 25 Percent, Group Says*, N.Y. TIMES, Aug. 24, 2005, <http://www.nytimes.com/2005/08/24/health/24obese.html>. In contrast, Colorado, the leanest state in the nation, levied virtually no taxes on junk foods or soft drinks. Chriqui, *supra* note 90, at 235; McNeil Jr., *supra*.

93. See Value Added Tax Act, 1994, 38 Eliz. 2, c. 23, sch(s). 7A (U.K.) (exempting food generally from the VAT but excluding a number of categories from this exemption, including, but not limited to, food “suppl[ied] in the course of catering” defined as “(a) any supply of it for consumption on the premises on which it is supplied; and (b) any supply of hot food for consumption off those premises”); Rebecca Smithers, *VAT: What, How Much and Why?*, GUARDIAN, May 29, 2012, <http://www.guardian.co.uk/money/2012/may/29/vat-what-how-much-why> (stating that “[b]asic or staple food items, but not meals in restaurants or takeaway meals” are exempt from the VAT).

94. Kerstin Kühn, *Junk Food Tax Divides the Industry*, CATERER & HOTELKEEPER, July 19, 2007, at 8.

95. See, e.g., Aviva Must et al., *The Disease Burden Associated With Overweight and Obesity*, 282 JAMA 1523, 1523 (1999); Ronald Sturm, *The Effects of Obesity, Smoking, and Drinking on Medical*

and obese are more likely to be injured and are injured more severely than those with healthy BMIs.⁹⁶ They are also at an increased risk of becoming disabled or experiencing functional impairments.⁹⁷ The so-called “obesity epidemic” has caused the Surgeon General to publish an official and voluminous “call to action to prevent overweight and obesity.”⁹⁸

Any reader of these studies would be confident that in any sample of fifty- or sixty-year-olds, the obese would suffer substantially higher health care costs in any period than the normal weight individuals would. With the increase in the government share of these costs, which follows from the 2010 health care legislation, any reader would also be confident that a large share of these costs for the obese would be borne by the public.⁹⁹

Viewed from another angle, the apparent externality looks smaller. If one compares lifetime healthcare expenses of the fat and the thin, the externality shrinks, because the fat die earlier than healthy normal persons.¹⁰⁰ So healthy-weight persons have several more years to accumulate health care costs; even for such persons

Problems and Costs, 21 HEALTH AFF. 245, 245 (2002); *Overweight and Obesity: Causes and Consequences*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm> (last visited June 13, 2012).

96. See generally Kristen C. Matter et al., *A Comparison of the Characteristics of Injury Between Obese and Non-Obese Inpatients*, 15 OBESITY 2384 (2007) (discussing correlations between obesity and injuries requiring hospitalization). One study, using a Centers for Disease Control and Prevention (CDC) telephone survey, even linked obesity to decreased seatbelt use, a finding that has additional implications for the health risks of obesity because automobile crashes are the leading preventable cause of death in the United States. David G. Schlundt et al., *BMI and Seatbelt Use*, 15 OBESITY 2541, 2541 (2007).

97. See, e.g., Dawn E. Alley & Virginia W. Chang, *The Changing Relationship of Obesity and Disability, 1988–2004*, 198 JAMA 2020, 2022 (2007).

98. See U.S. DEP’T OF HEALTH & HUMAN SERVS., THE SURGEON GENERAL’S CALL TO ACTION TO PREVENT AND DECREASE OVERWEIGHT AND OBESITY (2001), available at <http://www.surgeongeneral.gov/library/calls/obesity/CalltoAction.pdf>. The surgeon general’s extensive report outlined obesity trends and health consequences and identified fifteen specific actions that should become immediate priorities, such as increased education about obesity as well as better nutrition in school lunch programs. *Id.* at 33–35.

99. See Rashad & Grossman, *supra* note 8, at 104 (estimating that annual obesity-related health costs are more expensive than annual smoking-related costs, by as much as \$75 billion or more, “because of the long and costly treatments for [obesity’s] complications”). For the first time, a state has proposed a tax to recoup some of the costs of obesity. Recently, Arizona’s governor proposed levying a \$50 annual “fat tax” on some overweight and obese Medicaid recipients, as well as smokers. If the plan is approved by the Arizona legislature, it “would mark the first time the state-federal health-care program for the poor has charged people for engaging in behavior deemed unhealthy.” See Janet Adamy, *Arizona Proposes Medicaid Fat Fee*, WALL ST. J., Apr. 1, 2011, <http://online.wsj.com/article/SB10001424052748704530204576235151262336300.html>.

100. See, e.g., Roni Caryn Rabin, *Obese Teens as Likely as Smokers to Die Early, Study Finds*, N.Y. TIMES, Mar. 3, 2009, <http://www.nytimes.com/2009/03/04/health/04obesity.html>. Some research suggests that the same is true of smokers. See Willard G. Manning et al, *The Taxes of Sin: Do Smokers and Drinkers Pay Their Way?* 11 JAMA 1604, 1608 (1989)

that have had healthy lives, the end-of-life health expenditures can be large.¹⁰¹ The externality is also smaller if one compares healthy-weight persons to those who are merely overweight. So it seems clear that there is a negative externality attributable to the overweight and obese, but that the size of the externality depends upon how one constructs the comparison and the period of comparison that one uses.

CONCLUSION

A tax on calorie-dense food applied only to citizens who are overweight or obese is practical and sensible. Because it would not apply to those of healthy weight, the tax would be less regressive than the current wave of Pigovian food taxes. Because of its stigmatic effect, it promises to have a larger effect than a tax of the same amount that all must pay. To those who think the tax too harsh, I say, consider the scorn that we happily inflict on smokers. The platypygous deserve no better.

101. Pieter H.M. van Baal et al., *Lifetime Medical Costs of Obesity: Prevention No Cure for Increasing Health Expenditure*, PLOS MED., Feb. 2008, at e29 & tbl. 1 (comparing lifetime health-care costs for the obese, smokers, and “healthy-living” populations).