

Abstract

Over the past decade, American public health authorities have made increasingly alarming claims regarding how obesity is becoming the nation's leading public health problem. These warnings have inspired a flurry of legislative, administrative, and judicial responses, and calls for further legal intervention are issuing constantly from obesity researchers and public health officials. This article surveys and critiques the sudden wave of attempts to use the American legal system to shrink the nation's waistline. The article demonstrates that the health risks associated with the populace's fairly modest increasing average weight have been greatly exaggerated; that the causal links, if any, between body fat and disease are not well understood; and that attempts to make heavier than average people thinner almost always fail. One consequence of this failure is that the claim that significant long-term weight loss is medically beneficial remains an untested hypothesis. Therefore, attempts to use the legal system to make the population thinner are striving to achieve a presently unachievable goal of unknown medical efficacy. The article analyzes the sources of the nation's obsession with thinness, and concludes that the current legalization of fat has little to do with science, and much more to do with the economic motivations of the weight loss industry, a culture beset by eating disordered thinking, and widespread anxieties about over-consumption in general. It recommends that scarce public health dollars be spent on interventions that actually benefit public health, rather than on futile and potentially dangerous attempts to use the legal system to make Americans thinner.

The Legalization of Fat:

Law, Science, and the Construction of a Moral Panic

Introduction

Sasha Cohen and Jennifer Portnick have several things in common. Both are young women from California; both are athletes; and both have had their athletic endeavors become the subject of national news stories. Cohen is best known for having won a silver medal in figure skating at the 2006 Winter Olympics. Portnick, a popular San Francisco-

area aerobics instructor, became the subject of a great deal of media attention when her application to teach a class at a local Jazzercise aerobics studio was rejected, despite her excellent professional qualifications.¹ They have something else in common, as well: according to our public health authorities, both Cohen and Portnick possess medically inappropriate bodies.

Cohen is five feet two inches tall, and weighs 95 pounds. Portnick is five feet eight inches tall, and weighs 240 pounds. According to the federal government, Cohen is dangerously “underweight,” and Portnick is dangerously “obese.” Both women fall outside the narrow range of government-approved weights for women of their height, and, as a consequence, they are two of the approximately 135 million adult Americans whose body weight is considered inherently unhealthy by our public health establishment. Obesity researchers claim that Cohen should weigh between 101 and 119 pounds, and that her failure to conform to this “ideal” body mass for a woman of her height puts her health in danger.² As for Portnick, these same researchers claim that she ought to weigh between 122 and 143 pounds, and that her present weight all but guarantees her severe health problems, despite the fact that she teaches six aerobics classes a week, and appears to be in excellent health by all measurable criteria.

¹ The Jazzercise fitness club chain rejected Portnick’s application on the grounds that she did not fit the chain’s preferred image for an aerobics instructor. Because San Francisco is one of the very few municipalities in the nation that prohibits discrimination on the basis of appearance, Portnick filed a complaint with the city’s Human Rights Commission. After mediation, Jazzercise agreed to drop its requirement that its aerobics instructors be thin. See Elizabeth Fernandez, *Exercising Her Right to Work*, SAN FRANCISCO CHRONICLE May 7, 2002, at A1.

² See *infra* note 134, and accompanying text.

In fact, the assertion that Cohen and Portnick do not weigh what they ought to weigh has little or no scientific basis. As we shall see, contrary to the claims of our public health authorities, there is a very broad range of weights across which there is no correlation between increased health risk and body mass, let alone any sort of causal relationship. And even among people, such as Cohen and Portnick, who fall outside that broad range, there are good reasons to be skeptical of the claim that such people are at any increased health risk because of their weight, and especially of the claim that it would be in their interest to attempt to lose (or gain) weight.³ On the contrary, there is every reason to believe that Sasha Cohen and Jennifer Portnick are each at what is a healthy weight for them, and that to claim otherwise is neither scientifically accurate nor socially beneficial.

Of course there is one thing that Cohen and Portnick do not have in common: even though each maintains a body mass that correlates with approximately the same level of epidemiological risk, Cohen is considered fashionably thin, while Portnick is classified, both culturally and medically, as very fat. Indeed, both the current public health warnings regarding fat, and the legal consequences they are now generating, have far more to do with the fact that in this culture Sasha Cohen is considered a sex symbol and Jennifer Portnick is not, than they do with any genuine health concerns.⁴

³ Epidemiological studies find little or no variation in health risk among people with body mass index figures ranging from the high teens to the mid 30s. *See infra* footnotes 106-114, and accompanying text. Cohen, with a BMI of 17.4, is just below this range, and Portnick, with a BMI of 36.5, is just above it.

⁴ An amusing if disturbing illustration of the aesthetic imperatives underlying the current fat panic was provided by the April 2002 issue of *Vogue* magazine, which was supposedly devoted to celebrating body diversity in the form of what it called “The Body Eclectic.” As Emily Nussbaum notes, the issue actually celebrated “tall and skinny (6-foot model Eva Kubatova); short and skinny (5-foot-5 inch model Devon Aoki); pregnant and skinny (model Angela Marie Wilkerson); and good old-fashioned emaciated (a lithe 5-foot-11-inch Jacquetta Wheeler).” Nussbaum goes on to note that “Size 2 Lauren MacIntyre’s profile of Size 0 figure skater Sasha Cohen abounds in anorexo-porn, purringly comparing her subject to a pearl and a rubber band, just what is essential, with no unnecessary slack.” Emily Nussbaum, *A La Mode*, SLATE, April 2, 2002.

This article is about how the weight of Americans is becoming a subject of bureaucratic surveillance and intervention.⁵ In particular it is about the legalization of fat: the process by which, over the past few years, a subject – so-called “overweight,” and “obesity” -- that had been considered almost wholly outside the purview of the legal system has become an intense focus of legislative and judicial concern.⁶ The article has four parts. Part I describes how Americans came to be convinced that we are in the midst of an “obesity epidemic,” and the sudden explosion of legal activity this belief has triggered. Part II examines the scientific claims that fuel that belief, and that must ultimately justify efforts to subject body mass to legal regulation and control. Part III analyzes some of the factors that have inspired so much distortion of the evidence in the ongoing war on fat. Part IV describes how, in the end, the legalization of fat has very little to do with science, and everything to do with what social scientists call a “moral panic.”

⁵ A topic beyond the scope of this article is the extent to which what I call the legalization of fat is playing a role in the extension of the surveillance state. Specifically, to the extent Americans are being encouraged to keep our weight under close surveillance because we know the government is monitoring and regulating body mass with increasing intensity, weight may be an important element in the extension of what Michel Foucault famously described as the “panoptic” quality of the modern state. That is, we perceive the state has its subjects under observation, and as a result we internalize this system, whether or not we are actually being observed at any particular time. Cf. MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON (trans. Alan Sheridan, 1979) 201: “The major effect of the Panopticon . . . [is] to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power . . . [this ensures that] the surveillance is permanent in its effects, even if it is discontinuous in its action; that the perfection of power should lead to rendering its actual exercise unnecessary; that this architectural apparatus should be a machine for creating and sustaining a power relation independent of the person who exercises it; in short, that the inmates should be caught up in a power situation of which they are themselves the bearers.” Among many other things, this quote could be considered a good description of the logic of the contemporary diet culture.

⁶ The terms “overweight” and “obese” are question-begging. “Overweight” assumes that persons so labeled are heavier than they should be, and therefore have something wrong with them. “Obese” invokes this assumption even more powerfully. Because these assumptions are largely false, the use of these terms inherently distorts discussion of the subject. I use both words throughout this article because they have become the standard terms for discussing this subject; nevertheless, they should always be read with an implicit “so-called” modifying them. Fat activists prefer the word fat, which they want to see returned to its older linguistic meaning as a neutral descriptor, i.e., similar to terms such as tall, or red-haired. *See generally* MARYLIN WANN, FAT?SO! (1999).

I

A. A Brief History of Fat

The social meaning of weight has varied enormously across cultures. For most of human history, in most times and places, fatness has been considered a sign of wealth, beauty, status and power. This includes the United States until about 1900. In the late 19th century, the 200-pound actress Lillian Russell (she was six feet tall) was considered the reigning beauty of her day, while extremely fat men such as William Howard Taft and Diamond Jim Brady literally embodied the apex of social and political power. For complex reasons, this ideal began to shift about 100 years ago. The history of weight in America in the 20th century is a narrative over the course of which a fat ideal is gradually replaced by an ever-shrinking standard of thinness.⁷ Not coincidentally, this shifting cultural and aesthetic standard has been accompanied by an increasingly intense medicalization of body fat. Until the 20th century, medical interest in body weight was focused largely on concerns about malnutrition; in societies in which food is scarce and many people live in the shadow of starvation, the medical risk associated with high body weight tends to be considered a marginal subject.

⁷ *See generally* KIM CHERNIN, THE OBSESSION (1981); RICHARD KLEIN, EAT FAT (1996); HILLEL SCHWARTZ, NEVER SATISFIED (1986); ROBERTA POLLACK SEID, NEVER TOO THIN (1989).

America's rapidly growing affluence changed this dynamic. The first 50 years of the 20th century featured enormous advances in public health: for the first time, many previously epidemic infectious diseases were brought under control, nutrition and sanitation both improved drastically, and as a consequence between 1900 and 1950 American life expectancy rose by nearly 20 years.⁸ During these decades the first widely available medical and life insurance plans were devised, and the insurance companies who offered them became keenly interested in risk selection, that is, in being able to predict when their policyholders were likely to die.⁹ Indeed, arguably the single most important figure in the transformation of higher than average body mass into what came to be considered a pathological condition was a Metropolitan Life Insurance company executive, Louis Dublin. Dublin played a key role in the creation of the contemporary concept of "overweight."¹⁰ (Until recently, most languages did not even have a word for this concept, for the same reason they lack words such as "over-rich" or "overhealthy.")¹¹ Dublin noted that the MetLife policy holders with the lowest mortality rates were those in their 20s, and from this deduced that the best weight for survival purposes was the average weight of policy holders in their 20s. From this astonishingly crude hypothesis, the famous MetLife height and weight charts were born. Between the 1940s and the 1980s, generations of Americans consulted MetLife's charts of so-called "desirable" (later changed to "ideal") weight for information on what their bodies were supposed to look like.

⁸ Department of Health and Human Services, National Center for Health Statistics, *National Vital Statistics Reports*, vol. 53., no. 6, Nov. 10, 2004.

⁹ ROBERT KUTTNER, *EVERYTHING FOR SALE* 117-20 (1999).

¹⁰ GLENN GAESSER, *BIG FAT LIES* 44-51 (1996).

¹¹ ERIC OLIVER, *FAT POLITICS* 64 (2005).

Over the years, many critics have pointed out that the MetLife charts were highly unscientific (indeed, the company itself does not use the charts to price insurance).¹² But, in a nation that was becoming increasingly obsessed with thinness, Dublin found a ready audience for his claims, especially among medical personnel. Dublin was a tireless advocate for the theory that being heavier than average was a serious health risk, and over the years he gave hundreds of lectures to medical organizations on this theme. By the 1950s, the public health establishment and the mass media were echoing Dublin's message:

Medical spokesmen deluged the professional and lay press with their pronouncements about the dangers of excess weight. In the spring of 1952 Dr. James Hundley of the National Institutes of Health declared that "high blood pressure, heart disease, diabetes and a shortened life span are all associated with obesity." The following November, in a U.S. News & World Report article entitled, "Danger of Being Too Fat," Dr. Hundley answered the question, "Is Excess Fat Really Dangerous?" with an emphatic, "There is no question about that. It is." "Obesity has replaced vitamin deficiency diseases as the #1 nutrition problem in the United States today," Dr. W.H. Sebrell, Jr., Director of the National Institutes of Health, announced. Dr. Lester Breslow, Consultant to the President's Commission on the Health Needs of the Nation, made a similar proclamation and stressed that even "normal Americans" are [now] so heavy "that [their weight] is inducing excessive mortality." He urged that all Americans strive for the weights deemed desirable by the Metropolitan Life Insurance Charts. The press informed the public about the unsettling news in a barrage of articles, like the New York Times piece entitled, "Overweight: America's #1 Health Problem." For the rest of the decade, these dire warnings continued unabated. Scientists were unequivocal. Overweight shortened life. Dieting and weight reduction lengthened it. "Pleasingly plump" was not just unfashionable. It was deadly.¹³

¹² The limitations of the data used to assemble the charts included that policyholders represented a very skewed sample of the population as a whole; that weights were self-reported, and only once, so that any weight gain or loss between the time of purchase of insurance and the death of the policyholder, usually decades later, remained outside the data pool; and that the charts didn't reflect the risks associated with even this limited data. When MetLife issued the most recent version of the tables in 1983, the company stated that the weights recommended by the tables "are not the weights that minimize illness or the incidence of disease. These weights are not used for underwriting or the computation of premiums." See GAESSER, *supra* note 10, at 44-51.

¹³ SEID, *supra* note 7, at 120-21.

Indeed, by 1960 nearly half of America's adult population was "overweight" according to the standards now employed by our public health authorities.¹⁴

Yet despite this supposed epidemic of overweight, as well as the increasingly intense pressure to be thin to which American women in particular were subjected during the 1960s, 1970s, and 1980s, and which transformed the weight loss industry into a multi-billion dollar business, that industry was largely unsuccessful in its attempts to convert cultural anxieties about weight into institutionalized public health policies.¹⁵ Americans continued to consider weight an essentially private matter, and the almost complete absence of any laws attempting to regulate weight, or to deal with discrimination based on body size, reflected this consensus.¹⁶

B. The Construction of an Epidemic

Over the last fifteen years, this situation has altered radically. Sociologist Abigail Saguy has documented the recent extraordinary explosion in media coverage devoted to overweight and obesity. From a baseline average of about sixty articles per year on the subject published in the mass media in the early 1980s, Saguy traces the exponential growth in coverage of the subject: approximately 200 articles in 1990, 500 in 1992, 1000

¹⁴ K.M. Flegal et. al., *Overweight and Obesity in the United States: Prevalence and Trends, 1960-1994*, 22 INT'L J. OBESITY 39 (1998) [hereinafter Flegal et al., *Overweight and Obesity*].

¹⁵ See generally KLEIN, *supra* note 7; LAURA FRASER, *LOSING IT* (1998).

¹⁶ Despite, or perhaps as a result of, the extremely powerful bias Americans, and specifically white women, of higher than average weight face, there are still almost no laws prohibiting discrimination on the basis of body size. See *infra* note 84 and accompanying text.

in 1994, 3000 in 1999, and 7000 in 2003.¹⁷ Political scientist Eric Oliver notes that, whether or not the concept of an “obesity epidemic” is valid (he suggests it isn’t), we are certainly witnessing an epidemic of claims that such an epidemic exists.¹⁸ What triggered this massive shift in media attention? Although any comprehensive answer to such a question would be extremely complex, it’s possible to point to several key events.

First, after remaining stable between 1960 -- when 45% of the adult American population was supposedly overweight -- and 1980, the average body mass of the population began to climb again approximately 25 years ago. Between 1980 and 1994 the median weight of Americans increased by about nine pounds, while the mean increased by around 15 pounds¹⁹ (the difference between the two figures is reflected in the fact that this weight gain was spread unevenly across the population: the thinnest quartile of Americans gained essentially no weight, while the heaviest gained around a pound per year.)²⁰ Nine to fifteen pounds of weight gain over a fifteen-year span does not sound like much of an obesity epidemic -- yet because of the way overweight and obesity have been defined, this trend has caused the official obesity rate to double. Our public health authorities currently define overweight as a body mass index (BMI) of 25, and obesity as a BMI of 30.²¹ Body mass follows a normal distribution -- that is, a bell curve -- and because the current official definitions of overweight and obesity have been placed near the center of

¹⁷ Abigail Saguy & Kevin Riley, *Framing Contests Over Obesity*, 30 J. HEALTH POL., POL’Y & L. 869 (2005).

¹⁸ OLIVER, *supra* note 11, at 36-37.

¹⁹ Flegal et al., *Overweight and Obesity*, *supra* note 14.

²⁰ Gina Kolata, *The Fat Epidemic: He Says It’s An Illusion*, N.Y. TIMES, June 8, 2004, at F5.

²¹ The Body Mass Index is a simple mathematical formula, devised by the Belgian astronomer Adolphe Quetelet in the 1830s, which puts people of different heights and weights on a single linear scale of body mass. For example, a 5’4” person is “overweight” if she weighs 146 pounds, while a 5’11” person is “overweight” if he weighs 179. For “obesity,” the respective figures are 174 and 215 pounds. An on line calculator of BMI is *available at*: www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm.

the curve, an average weight gain of a few pounds will push tens of millions of people who had BMIs just below 25 and 30 to just above those definitional thresholds.

Furthermore, in 1998 the federal government lowered the definition of overweight from a BMI of 28 to 25, thereby creating 31 million new overweight Americans overnight.²²

Thus obesity researchers and public health officials were suddenly armed with statistical “proof” that the nation was in the midst of an epidemic of fatness.

Second, researchers began to make increasingly bold claims about the supposedly devastating health effects of body fat. For example, a much-noted 1995 article in the *New England Journal of Medicine* claimed that being as little as ten pounds overweight raised a woman’s risk of death due to cardiovascular disease by 60%.²³ And a 1999 article in the *Journal of the American Medical Association* asserted that overweight and obesity were causing 300,000 deaths per year, making excess weight second only to smoking as a leading cause of preventable death.²⁴ This latter article was cited nearly two thousand times in the media over the next three years; it would be followed by a 2004 article in the same journal, co-authored by Julie Gerberding, the Director of the Centers for Disease Control, which upped the annual carnage from overweight and obesity to 410,000 deaths.²⁵ This article claimed that no less than one out of every six American deaths was being caused by our expanding waistlines.

²² OLIVER, *supra* note 11, at 22.

²³ JoAnn Manson et. al., *Body Weight and Mortality Among Women*, 333 NEW ENG. J. MED. 677 (1995). For a detailed critique of this particular claim, see PAUL CAMPOS, *THE OBESITY MYTH* 14-16 (2004).

²⁴ David Allison et. al., *Annual Deaths Attributable to Obesity in the United States*, 282 JAMA 1530 (1999).

²⁵ Ali H. Mokdad et. al., *Actual Causes of Death in the United States, 2000*, 291 JAMA 1238 (2004) [hereinafter Mokdad et al., *Actual Causes of Death*].

Third, the federal government's public health agencies began to aggressively market the idea that overweight and obesity represented a health crisis of the first order. In 2001, then-Surgeon General David Satcher issued a major report, entitled *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*.²⁶ It claimed that fatness was killing hundreds of thousands of Americans every year, as well as producing billions of dollars in extra healthcare costs, and it called on both government and industry to take immediate steps to slim America down. Subsequently, the National Institutes of Health (NIH) and the Centers for Disease Control (CDC) dramatically increased funding for obesity research, and lost no opportunity to highlight obesity as a major public health issue. Federal and state governments responded by launching a variety of initiatives, including spending hundreds of millions of dollars on television and radio campaigns intended to get the word out to Americans that fat kills.²⁷ In the wake of the September 11 terrorist attacks, Satcher's successor, Richard Carmona, declared that obesity was "the terror within." Weight gain was "a threat that is every bit as real to America as weapons of mass destruction," the new Surgeon General proclaimed.²⁸

As we have seen, when obesity researchers and public health authorities sounded the alarm, the media were more than happy to help spread the word.²⁹ The synergistic relationship between public health warnings about obesity and media coverage of the subject culminated in a national "obesity summit," held in June of 2004 in Williamsburg,

²⁶ See *The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity*, last updated on Apr. 27, 2004, <http://www.surgeongeneral.gov/topics/obesity/calltoaction/toc.htm> (last visited Feb. 24, 2006).

²⁷ OLIVER, *supra* note 11, at 160.

²⁸ *Surgeon General to Cops: Put Down the Donuts*, CNN.com, February 28, 2003.

²⁹ Saguy & Riley, *supra* note 17.

Virginia. Hosted jointly by Time Magazine and ABC News, and moderated by Peter Jennings, the summit brought together politicians such as Arkansas governor Mike Huckabee and Secretary of Health and Human Services Tommy Thompson, with officials such as Carmona and Satcher, prominent diet doctors, obesity researchers, and other speakers for a high-profile strategy session designed to combat Carmona’s “terror within.” (The only skeptical voice among the roughly fifty speakers on the three-day program was my own).³⁰

All of this has begun to have a marked effect on the American legal system. Prior to this decade, American law had paid little attention to citizenry’s weight. That is no longer the case. Over the past few years, the American waistline has begun to be regulated by federal, state and local governments, and through the trial courts. Let us now turn to the remarkably rapid and ongoing legalization of fat.

C. The Federal Government Responds

1. Legislation

Since 2002, the intense publicity surrounding the supposed obesity epidemic has generated a flurry of federal legislative proposals. These bills have in turn inspired furious lobbying efforts from various stakeholders, including, among others, agricultural interests, the food and restaurant industry, trial lawyers, and pharmaceutical companies.

³⁰ See Philip Elmer-DeWitt, *The New Battle of the Bulge*, TIME MAG., June 7, 2004, at 8. (As I walked off the stage after giving my talk, Time’s science editor, Philip Elmer-Dewitt, who had moderated the panel, remarked to the audience, “Paul, we may not agree with what you say, but we will defend to the death your right to say it.” Afterwards, several journalists noted to me that it struck them as inappropriate for a representative of Time—the event’s putatively neutral journalistic host—to make such a comment. On the other hand, Elmer-Dewitt did include a dissenting voice. Many such conferences do not make even this minimal of an effort to provide some sort of intellectual balance to their proceedings).

The result, so far, has been largely a stalemate; but the intensity of the legislative action over the past three years demonstrates how the new politics of obesity has generated an ongoing clash of powerful interest groups, looking to either capitalize on, or avoid being harmed by, America's current panic over fat.

Such legislative battles are illustrated by the history of the Personal Responsibility in Food Consumption Act, a.k.a. the Cheeseburger Bill.³¹ Introduced in the House in July of 2003 by the Republican leadership in the name of tort reform, the bill was designed to insulate the food and beverage companies and restaurants from liability for suits claiming that that so-called "junk food" had caused customers to become fat and (therefore) sick. A press release accompanying the submission of the bill announced, "We need to put the brakes on plans by trial lawyers to make restaurants and the food industry the next Big Tobacco."³² A similar measure was introduced in the Senate, but after a year of strenuous lobbying efforts in the halls of Congress and in the mass media, neither measure emerged from the 108th Congress.

Another major federal legislative initiative triggered by concerns over weight was the Prevention of Childhood Obesity Act, introduced by Democrats in the Senate in 2004.³³ This bill called for the establishment of a commission to coordinate federal efforts to prevent obesity in youth. The bill would have required the Government Accountability Office (GAO) to assess federal nutrition programs, and also called for a study of media influences on childhood obesity. The bill authorized grants to existing state childhood

³¹ H.R. 339 108th Cong. (2d Sess. 2003).

³² Rogan Kersh & James Morone 30 J. HEALTH, POL., POL'Y & L. 839 (2005).

³³ S. 2894 108th Cong. (2d Sess. 2004).

obesity prevention and control programs, and grants to develop new such programs. It also would have funded grants for school programs designed to prevent childhood obesity, to promote safe walking and bike routes, to create “healthy” neighborhoods, and to educate students about nutrition. This bill was notable in that, unlike many such federal proposals that provide no actual funding for their programs, it specifically authorized several billion dollars from the federal budget for the purpose of combating childhood obesity – a factor which no doubt played a major role in its defeat, despite a good deal of bipartisan support.

In the fall of 2005, a more modest bill, the Improved Nutrition and Physical Activity Act, was re-introduced in the Senate, after having been put forth in an earlier version in 2003 by Senate Majority Leader Bill Frist.³⁴ This act creates grants to train health professionals to combat childhood obesity, and for community-based programs that increase physical activity, improve nutrition, and promote healthy eating behaviors. It also provides for the collection of nutritional and fitness level data about children by the National Center for Health Statistics.

Senate Democrats have introduced several anti-obesity measures, with, not surprisingly, little success to date. For example, Senators Patrick Leahy and Tom Harkin have tried to expand the Department of Agriculture’s regulatory authority over meals served in public schools, and Harkin has pushed for regulation of TV food advertising aimed at children, with his Healthy Lifestyles and Prevention (HeLP) America Act, which failed to emerge

³⁴ S. 1325 109th Cong. (1st Sess. 2005).

from the 108th Congress.³⁵ Democrats have also recently introduced legislation to require Medicaid to cover drugs “medically necessary to treat obesity.”³⁶

In addition, a raft of resolutions have attempted to express “a sense of the Congress” that obesity is a serious public health threat that ought to be addressed, without actually dedicating any federal funds to the issue (these resolutions are usually sponsored by Democrats who are aware they can do little to pass more substantive legislation). In 2002, one such resolution expressed the sense of the Congress that private health insurance companies should encourage healthier lifestyles, provide discounted premiums to those who exercise regularly, and encourage frequent screening of certain diseases.³⁷ In 2005, another resolution attempted to express Congress’s views regarding obesity in America by stating that the federal government had a responsibility to raise awareness about the medical complications supposedly caused by obesity, to fund obesity research, to improve access to health care to treat obesity, and to target reduction of childhood obesity. This resolution also urged the President to create a National Obesity Awareness Month.³⁸

In 2005, two resolutions creating national awareness days or months were explicitly couched as attempts to combat obesity. One, creating a “National Take a Kid Mountain Biking Day,” passed the Senate in September.³⁹ Another, supporting the creation of “Winter Outdoors Month,” extolled the calorie-burning potential of alpine skiing,

³⁵ S. 2558 108th Cong. (2d Sess. 2004).

³⁶ H.R. 286 109th Cong. (1st Sess. 2005).

³⁷ H.Con.Res 474, 107th Cong. (2d Sess. 2002).

³⁸ H.Con. Res. 204, 109th Cong. (1st Sess. 2005).

³⁹ S. Res. 257 109th Cong. (1st Sess. 2005)

snowboarding, snowshoeing, and cross-country skiing.⁴⁰ (Both bills were introduced by representatives from Colorado, a state with significant mountain biking and skiing industries.) Such resolutions are largely symbolic, but what they symbolize, among other things, is the increasing willingness of our national legislature to frame a wide variety of issues in terms of the effect particular policies will supposedly have on the national waistline.

Furthermore, given the strong anti-regulatory climate that has prevailed in Washington in the years since Republicans gained control of both houses of Congress and the presidency, the recent legislative efforts to regulate obesity are particularly notable. If and when a political climate more favorable to regulation returns to the federal government, aggressive obesity legislation seems likely to be a prominent part of any new regulatory agenda.

2. Agency Action

Much current federal government policy regarding health and weight is being created by administrative agency rulemaking. For example, in April of 2002 the Internal Revenue Service issued a ruling that defined obesity as a disease.⁴¹ This was an enormous victory for the weight loss industry, which had lobbied intensively for such an IRS policy for more than fifteen years. The practical consequence of the ruling is that it allows taxpayers to deduct expenses that can be plausibly characterized as incurred in the course of

⁴⁰ H.R. Res. 557, 109th Cong. (1st Sess. 2005).

⁴¹ Rev. Rul. 2002-1 C.B. 778 (2002).

treating the “disease” of having a BMI of 30 or above (a category which as of 2002 included approximately 25% of all adult Americans).⁴² The medical care deduction now includes “amounts paid for the diagnosis, cure, mitigation, treatment, or prevention of disease, or for the purpose of affecting any structure or function,” although it does not include deductions for weight loss designed to improve appearance or the taxpayer’s general “sense of well being.” One of the most significant aspects of this ruling is that it makes weight loss surgery – a dangerous and controversial procedure that costs on average around \$26,000, and which was performed on more than 170,000 Americans in 2005 – tax-deductible.⁴³

In 2003, the Food and Drug Administration Commissioner created an Obesity Working Group to research strategies for dealing with the “obesity epidemic.” The report was released in 2004, and focused on recommendations for food labeling, food packaging, and obesity education. For instance, it recommended that food producers list the entire contents of a package as a single serving size “if it can reasonably be consumed at a single eating occasion.”⁴⁴ (Nutritionists have long complained of such practices as listing a 20-ounce bottle of Coke as containing two and a half servings). The FDA has already begun implementing new labeling requirements for food; for example, trans-fats are now

⁴² K.M. Flegal et al., *Excess Deaths Associated With Underweight, Overweight, and Obesity*, 293 JAMA 1861 (2005) [hereinafter Flegal et al., *Excess Deaths*].

⁴³ Nanci Hellmich, *Gastric Bypass Surgery Seeing Big Increase*, USA TODAY, Dec. 20, 2005, at D8. A recent study of more than 16,000 subjects who underwent weight-loss surgery found a average one-year mortality rate of 4.6% for all patients, which is extraordinarily high for an elective procedure. The rate skyrocketed among older patients, reaching 40% among women 75 and older, and 51% among elderly men. See David R. Flum et. al, *Early Mortality Among Medicare Beneficiaries Undergoing Bariatric Surgical Procedures*, 294 JAMA 1903 (2005). These latter figures are all the more remarkable given that the correlation between mortality risk and obesity declines with age. See Paul Campos et. al., *The Epidemiology of Overweight and Obesity: Public Health Crisis or Moral Panic?*, 35 INT’L J. EPIDEMIOLOGY 55 (2006) [hereinafter Campos et al., *The Epidemiology of Overweight and Obesity*].

⁴⁴ Kersh & Morone, *supra* note 32.

on the list of ingredients that must be declared on food labels. The agency is also planning to attempt to mandate nutritional information displays in restaurants and to create a national program to encourage Americans to eat a healthier diet (it has been noted that despite the word “food” in its name, the FDA has “surprisingly little regulatory authority,” and must therefore “bargain with and cajole food companies and entreat public support for its aims.”)⁴⁵

As Secretary of the Department of Health and Human Services, Tommy Thompson made obesity a primary focus of the agency’s work. He gave pedometers to all his staff, and handed them out regularly to people he met during his tenure as Secretary (like almost all anti-obesity activists, Thompson appears to believe that the point of being physically active is to stay or become thin).⁴⁶ Secretary Thompson’s commitment to fighting the battle of the bulge is illustrated by his schedule in May of 2003. In that month alone, DHHS issued major policy statements on the physical activity levels of Americans and on the economic costs of obesity, while Thompson himself hosted a national “town meeting” on diabetes as an obesity-related condition, where he asked Americans “to pressure the food industry, the fast-food industry, [and] the soft-drink industry . . . to offer healthier foods.”⁴⁷ Apparently recognizing that the personal is indeed political, Thompson went on a well-publicized diet in the fall of that year, and managed to shed (at least temporarily) a number of pounds from his portly frame.⁴⁸ Despite this activity,

⁴⁵ *Id.*

⁴⁶ Virginia Anderson, *U.S. Waking Up to Obesity Crisis, Health Secretary Says*, Atlanta Journal-Constitution, June 3 2004, at 2D.

⁴⁷ Kersh & Morone, *supra* note 32.

⁴⁸ Kim Forrest, *Bushies Have to Be in Shape*, WASHINGTONIAN, Jan. 2005, at 13. What can be called the “body politics” of the disputants in the obesity controversy are complex. People who question the claims that obesity represents a health crisis are, if they are not thin, routinely accused of making unsound

critics of the agency claimed that, for all its impressive rhetoric, little in the way of a substantive policy to combat fat was emerging from DHHS. The non-partisan Congressional Quarterly noted that “rather than imposing new nutrition labeling or other rules on the restaurant industry, the Administration prefers to fund local efforts to encourage more exercise.” Commenting on the gap between the agency’s rhetoric and its actions, public health policy scholars Rogan Kersh and James Morone note that “a variety of academics and journalists have called for a new federal agency to coordinate anti-obesity measures: a Department of Exercise or perhaps a National Institute of Obesity (or, as one wag had it, a Department of Homeland Obesity).”⁴⁹

Again, what is perhaps most notable about recent federal regulatory agency action in regard to obesity is how such regulation flies in the face of both the current general anti-regulatory climate, and the longstanding American cultural norm that the regulation of body mass is a purely individual matter, which is none of the government’s business. In a political climate in which widespread support for aggressive government regulation was not limited to national security issues, we might well already have a Department of Homeland Obesity. Indeed, Surgeon General Carmona’s rhetoric regarding “the terror within” can be interpreted as an attempt to suggest that Americans ought to tolerate

arguments because their weight biases them toward minimizing the risk associated with their own weight levels. Yet as Abigail Saguy points out, one could make the same claim about thin obesity researchers and public health officials:

That a fat person is incapable of speaking objectively about weight seems to be readily accepted, although the idea that a thin person would be biased in a different but equally strong direction seems less intuitive. In this case, thinness functions as the ‘unmarked category,’ much as whiteness or maleness are considered unmarked categories for race and gender, respectively.

Saguy & Riley, *supra* note 17. Curiously, obesity researchers and public health officials who are overweight or obese by their own definitions (a common occurrence) and who nevertheless insist on the importance of achieving thinness rarely have this apparent contradiction pointed out to them by journalists or other researchers. *See infra* note 201 and accompanying text.

⁴⁹ Kersh & Morone, *supra* note 32.

increased governmental regulation of their body weight for the same reason they ought to tolerate increased regulation related to fighting terror: because both terrorism and obesity threaten the nation's very survival.

D. State Action

Although federal government measures naturally tend to draw more attention from the national media, the great bulk of legal measures designed to do something about the supposed obesity epidemic are being enacted at the state level. A survey of recent state legislation reveals that, to this point, state governments have led the way in the ongoing legalization of fat.

In 2002, state lawmakers introduced a then-record 72 bills designed to fight obesity; that number more than doubled to 170 in 2003, and doubled again to more than 350 in 2004.⁵⁰ This trend seems to have continued in 2005, with states enacting laws covering a broad range of topics, from requiring public schools to weigh their students and report the results to parents, to mandating that private insurance companies cover weight loss surgery. What follows is a survey of some of the results of this recent outburst of legislative energy.

1. Nutrition Standards to Control Food and Beverages

⁵⁰ Kersh & Morone, *supra* note 32.

Responding to warnings from public health authorities that their citizens are eating themselves to death, many states have recently enacted laws designed to control the consumption of food and beverages. Most of this legislation has been aimed at the food sold in public schools. In 2005 alone, 19 states enacted school nutrition policies, and 23 others proposed them.⁵¹ California led the way in this area, when it enacted the California Childhood Obesity Prevention Act of 2003, which, among other provisions, set nutrition standards for all beverages sold in public schools, and restricted the sale of sugared beverages in elementary and middle schools.⁵² In 2005, the state banned the sale of sugared sodas from high schools, and passed a bill which purported to ban “junk food” from all public schools, by placing limits on the percentage of fat and sugar that could be served in school meals.⁵³

2. Snack Taxes

Arkansas, Virginia and Washington have enacted extra taxes on soda,⁵⁴ while California is currently considering legislation to create a “sin tax” on so-called junk food, the revenues of which would be used to help pay for the dental care and general health needs of children.⁵⁵ In 2005 the New York state legislature considered a bill that would have taxed junk food, video games, and DVD rentals.⁵⁶ And in 2003 Minnesota petitioned the

⁵¹ CATHERINE HENZE, *OBESITY: STATE POLICY ACTIONS* (2005).

⁵² CAL. EDUC. CODE § 49431.5 (West 2003).

⁵³ CAL. EDUC. CODE § 49431.5 (West 2005), S.B. 965 (Ca. 2005).

⁵⁴ OLIVER, *supra* note 11, at 162-64.

⁵⁵ A.B. 2721 (Ca. 2005).

⁵⁶ OLIVER, *supra* note 11, at 159.

Department of Agriculture to allow the state to remove certain “unhealthy” foods, such as candy and soda, from the list of what the state’s residents can buy with food stamps.⁵⁷

3. Recess, Physical Education, and Exercise

Many states are promulgating new rules concerning physical activity standards in schools. In 2004, 31 states introduced, and ten states enacted, physical activity policies. In 2005 44 states introduced such policies, 21 states adopted them, while two bills of this sort were vetoed.⁵⁸ These bills vary quite a bit in substance. For example California created a pilot program to develop Child Nutrition and Physical Activity Advisory Committees, which in turn are supposed to develop and recommend school policies.⁵⁹ Arkansas passed a similar measure, requiring the State Board of Education to develop statewide physical activity standards.⁶⁰ Other states, such as Colorado, have attempted to encourage physical fitness in schools through the recognition and reward of schools that have exemplary physical fitness programs.⁶¹

Such proposed legislation is invariably framed as designed not merely to improve physical fitness, but to do so precisely by fighting obesity. For instance, when Arkansas attempted to pass legislation to construct bike paths, parks, and trails in Little Rock, the

⁵⁷ Staff Editorial, *Welfare Plan Would Keep State Slim*, MINN. DAILY, Feb. 5, 2003.

⁵⁸ HENZE, *supra* note 51.

⁵⁹ *Id.*

⁶⁰ H.B. 1583, 84th Gen. Ass. (Ar. 2003).

⁶¹ H.B. 1237 (Co. 2005).

proposal was designed explicitly to lessen the state's obesity rate.⁶² A similar proposal in California, which would have required the Department of Housing and Community Development to require bicycle and foot paths in all residential and mixed-use developments, was justified on the same basis.⁶³

4. Measuring and Reporting Body Mass Index Results

In 2003, Arkansas became the first state to pass a law requiring public schools to weigh students and report the results of such "BMI screenings" to parents. The state's public schools are also required to inform parents of the "facts" regarding the relationship between BMI and health.⁶⁴ (Arkansas governor Mike Huckabee, who recently lost 105 pounds, has made reducing the state's obesity rate a personal crusade. Huckabee is often mentioned as a potential GOP presidential candidate for the 2008 election). Several states have considered similar legislation, and in 2005 West Virginia and Tennessee both enacted statutes requiring schools to weigh their students and report the results to parents.⁶⁵

5. Extending Health Care Coverage to Obesity

In 1999-2000, Georgia, Indiana and Virginia enacted so-called mandated offering laws, requiring insurers to offer policies providing benefits for various kinds of obesity

⁶² H.B. 1626 (Ar. 2003).

⁶³ A.B. 463 (Ca. 2004).

⁶⁴ H.B. 1583 (Ar. 2003).

⁶⁵ H.B. 445 (Tn. 2005); H.B. 2816 (W.Va. 2005).

treatment.⁶⁶ In 2004, Maryland enacted legislation that required some health care companies to cover weight loss surgery for the so-called “morbidly obese.”⁶⁷ That same year, Idaho started a pilot program to assess the effectiveness of weight loss therapies provided by Medicaid programs.⁶⁸ In 2005 at least five states enacted legislation related to Medicaid or health insurance coverage for obesity treatment. Indiana amended its coverage requirement, Mississippi enacted legislation requiring a commission to undertake a feasibility study, Iowa amended its Medicaid rules to provide coverage for dietary counseling, and Colorado launched an obesity treatment pilot program.⁶⁹ Virginia is currently considering a bill that would require health insurance companies and HMOs to pay for treatments for morbid obesity.⁷⁰

6. Funding Commissions, Studies, Task Forces, and Educational Programs

Many states have enacted legislation creating commissions to study how nutrition and activity policies can be employed to combat obesity. California has considered enacting an additional tobacco tax to fund obesity, diabetes, childhood obesity, and malnutrition prevention programs.⁷¹ In 2003, the state passed a statute that required state health departments to provide new parents with educational health brochures covering, among other things, obesity prevention.⁷² Arkansas created a Child Health Advisory Committee

⁶⁶ HENZE, *supra* note 51.

⁶⁷ H.B. 1410 (Md. 2004).

⁶⁸ H.O. 696 (Id. 2004).

⁶⁹ HENZE, *supra* note 51..

⁷⁰ H.B. 1936 (Va. 2005).

⁷¹ SB 564 (Ca. 2005).

⁷² SB 877 (Ca. 2003).

in 2003, while in 2005 Illinois launched a School Wellness Policy Task Force.⁷³ Arizona, Delaware, and Rhode Island undertook similar initiatives.⁷⁴ In 2004, Florida enacted legislation that funded awareness campaigns and health worker training programs designed to fight obesity.⁷⁵ Kansas considered, but did not pass, a bill creating a task force to collect and analyze data on child and adult obesity.⁷⁶

7. Tort Liability Shield Laws

By mid-2005, 14 states had enacted so-called “Cheeseburger bills” modeled on the federal Personal Responsibility in Food Consumption Act (which failed to pass the 108th Congress) and 18 more were considering such legislation.⁷⁷ The resources that the food and beverage industries have dedicated to helping enact such legislation at the state level indicates how seriously they take the threat of Big Tobacco-style liability being brought to bear on them, as Americans search for culprits in the spread of an epidemic that is supposedly killing almost as many people per year as cigarettes.⁷⁸

The foregoing represents just a sample of recent state legislative attempts to address America’s supposed obesity crisis. As Eric Oliver puts it, in the past few years “almost every state in the union has adopted or has considered policies to promote weight loss.”⁷⁹

Yet the legislative process is fraught with procedural and practical difficulties. For

⁷³ HENZE, *supra* note 51.

⁷⁴ *Id.*

⁷⁵ H.O. 935 (Fl. 2004).

⁷⁶ H.B. 2366 (Ka. 2003).

⁷⁷ HENZE, *supra* note 51.

⁷⁸ *See, e.g.,* Mokdad et al., *Actual Causes of Death*, *supra* note 25.

⁷⁹ OLIVER, *supra* note 11, at 159.

example, consider the raft of legislation designed to get “junk food” out of the public schools. Such legislation has broad support, yet as Oliver points out, “many of the restrictions are paper tigers. Most of the propositions to ban or restrict vending machines only apply to elementary and middle schools,” while the few jurisdictions that have banned soda in high schools still allow other high-sugar beverages such as Gatorade and Snapple.⁸⁰ Why, Oliver asks, is there significant resistance to such a popular initiative as getting junk food out of the schools?

A big part of the resistance comes from the schools themselves. Perpetually strapped for resources, schools have found that exclusive pouring contracts [these are contracts that require schools to sell a certain volume of the product in return for a flat payment] with soft drink companies provide the much-needed money for extracurricular activities including band, art classes, and sports programs. With citizens often unwilling to pay more in local and state taxes, the only way many schools can fund their programs is by making deals with food and beverage companies. As Jon Peterson, deputy director of procurement for Washington D.C., recognized, pouring contracts are “a godsend.”⁸¹

Faced with the inevitable frustrations of the legislative process, some activists are looking to the courts to craft policies. As Kersh and Morone note, “It *does* appear easier to mobilize public support, move an issue forward, and finance activism in the judicial realm.”⁸²

E. Obesity Litigation

⁸⁰ *Id.* at 163.

⁸¹ *Id.*

⁸² Kersh & Morone, *supra* note 32.

In recent years, three types of obesity litigation have emerged: (1) Lawsuits accusing employers of discriminating against employees or job applicants because of their weight; (2) Lawsuits accusing food companies of false representations regarding the nutritional content of their products; and (3) Lawsuits accusing food companies of misleading consumers by failing to disclose that the companies' products may make them obese.⁸³

Because almost no American jurisdiction has made discrimination based on body weight explicitly actionable, almost all of the first type of litigation has taken place under the Americans with Disabilities Act.⁸⁴ Under the ADA, fat people who believe they are being discriminated against because of their weight can bring two different sorts of claims.

First, they can claim that their obesity constitutes a disability under the statute, and that the defendant is legally obligated to make reasonable accommodations for this disability.

Suits of this type are very rare. For one thing, the Equal Employment Opportunity Commission's ADA regulations state that, absent "exceptional" circumstances, obesity does not meet the definition of a disability under the ADA.⁸⁵ EEOC guidance on this issue tends toward the conclusion that while so-called "morbid" obesity (BMI 40+) can be considered a disability in some circumstances, the vast majority of obese people are not disabled under the meaning of that term under the ADA. Thus most obesity-related litigation under the ADA has proceeded on the basis of the claim that the plaintiff is not

⁸³ Alyse Meislik, *Weighing in On the Scales of Justice*, 46 ARIZ. L. REV. 781 (2004).

⁸⁴ Michigan is currently the only state that prohibits discrimination based on weight. MICH. COMP. LAWS ANN. § 37.2102 (1985 & Supp. 1993). A few municipalities, including San Francisco, Santa Cruz, California, and Washington D.C., have ordinances that prohibit discrimination on the basis of appearance. *See* D.C. CODE ANN. § 1-2501 (1987 & Supp. 1993); SAN FRAN. ADMIN. CODE chs. 12A, 12B, & 12C; SAN FRAN. MUNICIPAL/POLICE CODE art. 33. Very little litigation has taken place under these laws. The controversy involving aerobics instructor Jennifer Portnick was a notable exception. *See infra* note 1 and accompanying text.

⁸⁵ 29 C.F.R. § 1630.2(j) (2005).

actually disabled, but is regarded as disabled by the defendant, and has been discriminated against because of the defendant's belief that the plaintiff's weight is a disability.

For instance, in October, 2005, a claim of this sort resulted in a \$109,000 verdict for John McDuffy, an Oregon truck driver. McDuffy, who weighs 550 pounds, was suspended by his employer and told that he would not be allowed back to work until a doctor cleared him to do so, even though he had only missed two days of work in over a year of employment with the company. After a jury viewed a videotape of McDuffy doing his job, they took less than four hours to award him the full amount his lawyer had requested: \$9000 in back pay, and \$100,000 in non-economic damages. (Ironically, the videotape had been made at the insistence of the defendant trucking company. The company's lawyer chose to play it for the jury during his closing argument, freezing the tape on a frame highlighting the size of McDuffy's belly). The McDuffy case appears to be one of the first jury verdicts ever awarded in favor of an obese plaintiff for size-based discrimination.⁸⁶

The second type of litigation addresses explicit, false representations regarding food products, and fits into well-developed products liability law. Such suits are difficult to track because they usually end in settlement. The few that have come to public attention generally do so because they involve large settlement sums. In 2001, for example, a class action lawsuit was filed against an ice cream maker for understating the ice cream's fat

⁸⁶Anne Sacker, *Overweight Trucker Tests Tipping Point For Scales of Justice*, SUNDAY OREGONIAN, Nov. 6, 2005, at A1. McDuffy's lawyer, Michael Ross, informed me that the suit was brought under Oregon's disability statute, which closely tracks the provisions of the ADA.

and calorie content, resulting in a \$1.2 million settlement.⁸⁷ And in 2002, several class action lawsuits were filed against the producers of Pirates Booty for misrepresenting the fat content of the snack to make it seem healthier. This case settled for \$790,000 in attorneys' fees and \$3.5 million in coupons.⁸⁸

The third type of obesity litigation has drawn by far the most media attention, and is the most legally and politically controversial. It involves the novel claim that food companies are misleading consumers and thereby causing them to become obese. This type of litigation does not fit easily into well-developed law, but instead follows strategies developed in the context of tobacco litigation, in a conceptually parallel attempt to hold the food industry accountable for the rise of obesity. Indeed, the “founder” or “spear-header” of these lawsuits, George Washington University School of Law Professor John F. Banzhaf III, played a prominent role in the development of tobacco litigation.⁸⁹

The first of Banzhaf's well-publicized obesity suits began in 2002. Banzhaf assisted New York attorney Samuel Hirsch in filing a class action suit against McDonalds, Wendy's, Burger King, and Kentucky Fried Chicken. The case featured a 57-year old plaintiff named Caesar Barber, who claimed that his regular consumption of fast food made him obese. In their complaint, Barber's lawyers argued that the fast food industry had an obligation to inform consumers about the dangers of eating fast food and that the companies were negligent in selling food high in fat, salt, sugar, and cholesterol.⁹⁰

⁸⁷Meislik, *supra* note 83, at 813.

⁸⁸*Id.*

⁸⁹Matthew Salzmann, *More Than A Fat Chance for Lard Litigation*, 56 RUTGERS L. REV. 1039 (2004).

⁹⁰*Barber v. McDonald's Corp.*, (N.Y. Sup. Ct. 2002) (No. 23145/2002).

Banzhaf, however, decided to put the case on hold in order to pursue a more promising class action suit — one brought on behalf of minors against a single fast food franchise: McDonald's. Because minors are afforded more protection under the law, Banzhaf and Hirsch decided that a suit involving child plaintiffs offered a more promising test case for their novel theories.⁹¹

In *Pelman v. McDonald's Corp.*, parents of obese teens claimed that McDonald's violated New York's Consumer Protection Act by using false advertisements to mislead customers about the healthiness of foods, by failing to disclose potential dangers of eating fast food, and by gearing marketing techniques towards children.⁹² The parents also argued that McDonald's acted negligently (at least), by selling food products that cause obesity and its associated detrimental health effects, and that McDonald's failed to warn consumers that its food could lead to health problems. The complaint also alleged that McDonald's acted negligently in marketing food products that were physically and psychologically addictive.

Although Judge Robert Sweet initially dismissed the suit, he allowed the parents to amend and re-plead their case, and indeed many legal commentators noted that his opinion appeared to create a roadmap for plaintiffs looking to bring future cases of this type. The judge noted that “legal consequences should not attach to the consumption of hamburgers and other fast-food fare unless consumers are unaware of the dangers of

⁹¹ Meislik, *supra* note 83, at 791.

⁹² *Pelman v. McDonald's Corp.*, 237 F. Supp. 2d 512 (S.D.N.Y. 2003).

eating such food. If consumers know (or reasonably should know) the potential ill health effects of eating at McDonald's, they cannot blame McDonald's [for those effects]. On the other hand, consumers cannot be expected to protect against a danger that was solely within McDonald's knowledge. Thus, one necessary element of any potentially viable claim must be that McDonald's products involve a danger that is not within the common knowledge of consumers." The plaintiffs' original complaint had not made such an allegation. It had merely stated that the defendant's food was high in salt, fat, sugar, and cholesterol, and that these substances cause disease when consumed in large quantities on a regular basis. McDonald's had moved to dismiss on the grounds that the dangers of eating large quantities of these substances were well known. The court granted the motion, pointing out that "any liability based on over-consumption is doomed if the consequences of such over-consumption are common knowledge."

Judge Sweet then laid out exactly what the plaintiffs had to allege in order for their amended complaint to survive a motion to dismiss: "In order to state a claim, the Complaint must allege either that the attributes of McDonald's products are so extraordinarily unhealthy that they are outside the reasonable contemplation of the consuming public or that the products are so extraordinarily unhealthy as to be dangerous in their intended use." (The former requirement essentially embodies the Restatement (Second) of Torts consumer expectations test, while the concept of a product being "dangerous in its intended use" appears to be derived from contract principles reflected in such doctrines as the implied warranty of merchantability). Judge Sweet then noted that the complaint had not identified specific deceptive acts taken by McDonald's, and held

that advertising campaigns encouraging consumers to eat products every day were “mere puffery.”

In sum, the court held that the amended complaint could meet the requirements of the consumer expectations test if it alleged that the defendant’s food was so extensively processed, and thereby adulterated, that the plaintiffs could not have been reasonably expected to anticipate the food’s harmful effects. Such an amended complaint, Judge Sweet pointed out, “may establish that the dangers of McDonalds’ products were not commonly well known and thus that McDonald’s had a duty toward its customers.”

Finally, Judge Sweet addressed the causation issue. The judge noted that, in order to show that McDonalds’ actions were the proximate cause of their children’s injuries, the parents had to establish that the McDonald’s conduct was a substantial cause in bringing about the harm. Judge Sweet then noted that the parents had not specified how often their children had eaten at McDonald’s, and that the parents had not raised as a question of fact whether McDonald’s played a significant role in the children’s health problems. The judge also noted that McDonald’s had argued that obesity and any associated health problems are caused by a number of factors, and that the parents would have to address these claims if they were going to argue successfully that McDonald’s foods were a substantial factor in their children’s obesity. Judge Sweet then dismissed the claims, but gave the plaintiffs 30 days to amend their complaint.

After Judge Sweet issued this opinion, the parents amended their complaint to include only three causes of action.⁹³ First, they alleged that McDonald's misled the plaintiffs, through advertising campaigns and other publicity, that its food products were “nutritious,” by claiming that they could be easily part of a healthy lifestyle if consumed on a daily basis. Second, they alleged that McDonald's failed adequately to disclose the fact that some foods were substantially less healthy, as a result of processing and additives, than represented by McDonald's in its advertising campaigns and other publicity. Third, they alleged that McDonald's “engaged in unfair and deceptive acts and practices by representing to the New York Attorney General and to New York consumers that it provides nutritional brochures and information at all of its stores, when in fact such information was and is not adequately available to the plaintiffs at a significant number of McDonald's outlets.”

McDonald's then filed another motion to dismiss. When ruling on this motion Judge Sweet addressed (1) whether the plaintiffs had relied on the representations in McDonald's advertisements; (2) whether the relied-upon representations were objectively misleading; and (3) whether the consumption of McDonald's food products caused the plaintiffs' injuries. The judge did find that the plaintiffs could establish reliance on one particular advertising campaign, involving the oil used to cook McDonald's french fries, but he also found that this campaign was objectively non-deceptive. Most important, Judge Sweet found that the plaintiffs had not established causation for the injuries because they had not addressed or eliminated other factors that may have caused the plaintiffs to become obese and to experience health problems:

⁹³ Pelman v. McDonald's Corp., 2003 U.S. Dist. Lexis 15202 (S.D.N.Y. 2003).

Plaintiffs have not made any attempt to isolate the particular effect of McDonald's foods on their obesity . . . Information about the frequency with which the plaintiffs ate at McDonald's is helpful, but only begins to address the issue of causation. Other pertinent, but unanswered, questions include: What else did the plaintiffs eat? How much did they exercise? Is there a family history of the diseases which are alleged to have been caused by McDonald's products? Without this additional information, McDonald's does not have sufficient information to determine if its foods are the cause of the plaintiffs' obesity, or if instead McDonald's foods are only a contributing factor.

Judge Sweet then dismissed the complaint with prejudice.

In January of 2005, the Second Circuit reversed Judge Sweet's dismissal of the deceptive trade practices claim.⁹⁴ The appellate court ruled that, unlike the plaintiffs' claim under Section 350 of the New York General Business Law, which prohibits false advertising, (the dismissal of which the appellate court upheld) a claim alleging a deceptive trade practice under Section 349 does not require actual reliance on the part of the plaintiff. The appellate court acknowledged that the district court had recognized that Section 349 did not require actual reliance, but had nonetheless dismissed that claim because the plaintiffs had failed to establish causation for their injuries, even under the relaxed evidentiary standards applicable to a motion to dismiss. The appellate court then held that dismissal under such circumstances was inappropriate, given the limited pleading requirements of Rule 8(a), and that the causation issue should be subject to discovery. It further held that, although the district court had also dismissed the Section 349 claim on the grounds that it was overly vague and conclusory, "the cure for such deficiencies, in a claim not required to be plead with particularity, is a motion for a more definite statement under Rule 12(e)." Upon remand, McDonald's filed a motion for a more-definite

⁹⁴ Pelman v. McDonald's Corp., 396 F.3d 508 (2d Cir. 2005).

statement of the plaintiffs' claim. In November, Judge Sweet granted this motion in part. He ordered the plaintiffs to identify the specific advertisements that collectively amounted to the alleged deceptive nutritional scheme, and to provide a brief explanation of why these advertisements were deceptive to objective consumers.⁹⁵

Despite the significant legal hurdles such suits face, as illustrated by tangled procedural history of the *Pelman* case, other plaintiffs have been filing obesity-related lawsuits, in part no doubt because of the publicity that can be garnered from doing so. In 2003, for example, a nonprofit group called BanTransFat.com sued Kraft to block the sale of "trans fat-laden Oreo cookies" to children. This case departed from the theories pursued in the *Barber* and *Pelman* cases. Instead, the creator of the BanTransFat.com group claimed that the trans fats used in Oreo cookies were simply unfit for human consumption.

Although the group voluntarily withdrew the suit after three weeks -- they claimed the public's new awareness of the dangers of trans fats hindered their legal argument -- the negative publicity resulted in Kraft declaring they were "exploring ways to reduce trans fat in Oreos."⁹⁶ And in December 2005, the Center for Science in the Public Interest announced that it planned to soon file a lawsuit to ban the sale of sugary beverages in schools. The CSPI planned to name Coca-Cola, PepsiCo, and their local bottlers in the suit, which was slated to be filed in Massachusetts, to take advantage of that state's

⁹⁵ 396 F.Supp. 2d 439 (S.D.N.Y. 2005). Critics of the American legal system will notice that a case which as of this writing is three and a half years old, and which has undoubtedly generated millions of dollars in legal fees, has not yet proceeded past the pleadings stage.

⁹⁶ Meislik, *supra* note 83, at 792. In the context of the claim that Oreos are "unfit for human consumption," it is worth noting that, according to Kraft Foods, approximately 362 billion of the cookies have been consumed since their introduction in 1915. Diane Toops, *Oreo Nature or Nurture?*, FOOD PROCESSING, Oct. 1, 2005, at 66.

strong consumer protection laws. The CSPI announced that this would be the first of many such suits.⁹⁷

The future of obesity liability suits remains unclear. As we have seen, both federal and state legislatures have begun considering or enacting legislation protecting restaurants and the food industry from obesity-related tort damages. Some legal commentators have taken the view that these cases are unlikely to succeed, because it is difficult to find a plausible basis for them in current products liability law.⁹⁸ Yet just a few years ago similar predictions were being made about tobacco litigation – a fact that has not escaped the notice of the food, beverage and restaurant industries. There is no question that those industries are taking the threat of these suits very seriously. For example, in January 2006 the American Conference Institute held a conference entitled “Achieving Commercial Success in the Face of Food Regulation and Litigation,” at which, for a registration fee of \$2000, attorneys for the food and restaurant industry heard from, among others, the Director of the Office of Policy Planning at the Federal Trade Commission, regarding how to “structure your marketing efforts to children in a compliant and effective

⁹⁷ Melanie Warner, *Lines Drawn For Big Suit Over Sodas*, N.Y. TIMES, Dec. 7, 2005, at C1.

⁹⁸ Gail Appleson, *U.S. Lawyers Have Little Stomach For Obesity Cases*, REUTERS, Apr. 18, 2005, at 21. Tobacco litigation has faced serious doctrinal and practical difficulties, yet these difficulties seem minor in comparison to those generated by the claim that food companies are making Americans sick by making them obese. For one thing, the relationship between the consumption of particular foods and the development of obesity is much less clear than the relationship between smoking and health risk. *See infra* notes 165-170 and accompanying text. For another, the causal relationship, if any, between obesity and health risk is itself extremely problematic. *See infra* notes 105-132 and accompanying text. Perhaps the greatest conceptual difference between the two situations is that, while smoking is an optional activity, eating is not.

manner,” how to incorporate the federal government’s new food pyramid into marketing efforts, and how to “appraise and dispel a crisis through public relations strategies.”⁹⁹

II

The legalization of fat is going forward on the basis of several (usually unstated) assumptions. The various statutes, administrative regulations, and lawsuits that are addressing the so-called obesity epidemic are based on the following beliefs, which in turn form the basis of the recent spate of warnings issued by obesity researchers and the public health establishment – warnings which have been repeated countless times in the mass media:

- (1) A strong correlation exists between weight and health risk.
- (2) This correlation reflects a direct causal relationship. People within the narrow range of “ideal” weight are healthier than people who are not, because they avoid the detrimental causal effects of overweight and obesity.
- (3) Significant long-term weight loss is a practical goal, and will improve health.
- (4) The cost-benefit ratio involved in trying to make Americans thinner justifies using scarce public health dollars to pursue this outcome.¹⁰⁰

⁹⁹ AMERICAN CONFERENCE INSTITUTE BROCHURE, *ACHIEVING COMMERCIAL SUCCESS IN THE FACE OF FOOD REGULATION AND LITIGATION*, Oct. 2005.

¹⁰⁰ For an in-depth analysis of these claims, see CAMPOS, *THE OBESITY MYTH*, *supra* note 23. *See also* Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43. As scholars from a variety of disciplines have become increasingly critical of the claim that higher than average weight represents a major health risk, some obesity researchers have raised the objection that law professors, political scientists, sociologists, anthropologists, etc., have no business criticizing their work, because such critics are not medical professionals. The reply to this objection is twofold. First, critiquing epidemiological studies is a matter primarily of statistical analysis – something in which, ironically, many obesity researchers, unlike most of their academic critics, have little or no formal training. More fundamentally, a central argument made by these critics is that distortions of the medical evidence have produced an

Note that all four of these assertions must be true in order to justify current attempts to use the legislative, administrative, and judicial powers of our federal and state governments to try to make Americans thinner. Obviously if the correlation between weight and health turns out to be weak, then making weight a focus of public health policy makes no sense. Yet even if the correlation is strong, making fat a major public health issue is rational only if higher than average weight is a direct cause of ill health, rather than merely a marker for other risk factors. Otherwise, the attempt to produce weight loss will involve the treatment of a symptom rather than a cause. Still, even if both these conditions are met, making weight loss a subject of public health remediation will be advisable only if there is some reliable and relatively safe way of producing that result. Finally, even if all the foregoing can be shown to be the case, spending public health resources on making people thinner, or keeping them thin, is justified only if the relative cost-benefit ratio of doing so is sufficiently positive that it justifies spending scarce resources on such interventions, rather than on other pressing public health needs that will as a consequence remain relatively under-funded (consider, in this context, the fact that approximately 46 million Americans have no health insurance of any kind).¹⁰¹

In fact, the evidence for all four of these propositions is weak to non-existent. The current fat panic,¹⁰² and the outburst of legal activity it has inspired, has very little to do with science, and everything to do with the economic and professional motivations of obesity

inappropriate medicalization of an issue that is largely cultural, economic, and political. In other words, to claim that only obesity researchers should address the extent to which “obesity” ought to be considered a public health issue is to beg the precise question at hand.

¹⁰¹ U.S. Census Bureau Report, 2004.

¹⁰² The phrase “fat panic” was suggested to me by Abigail Saguy.

researchers, eating disordered thinking, and anxieties about class, race, and social over-consumption in general. But before turning to the real sources of the moral panic over fat, let us examine the scientific claims that help fuel it.

(1) A Strong Correlation Exists Between Weight and Health Risk

The truth status of this claim depends on the body mass level that is being referenced. In regard to so-called “overweight” the claim is completely false; in regard to obesity it is mostly false (on the other hand in reference to underweight, that is, a BMI of less than 18.5, it is clearly true).¹⁰³ Before turning to epidemiology of so-called “overweight” and “obesity,” we should recall that the obesity epidemic itself is a statistical artifact of the decision to define overweight and obesity at such low weight levels that even a small increase in average weight in the population will produce tens of millions of newly overweight and obese individuals. When people hear the word “obesity,” they tend to conjure up images of enormously fat individuals for whom even basic mobility is compromised. But the vast majority of people who our public health authorities claim weigh too much weigh no more, or only a little more, than the average American.

Biologist Jeffery Friedman offers a useful analogy: “Imagine that the average I.Q. was 100 and that five percent of the population had an I.Q. of 140 and were considered to be geniuses. Now let’s say that education improves and the average I.Q. increases to 107 and ten percent of the population has an I.Q. of above 140. You could present the data in two ways. You could say that average I.Q. is up seven points or you could say that because of improved education the number of geniuses has doubled. The whole obesity

¹⁰³ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 10-13.

debate is equivalent to drawing conclusions about national education programs by saying that the number of geniuses has doubled.”¹⁰⁴

Also, to properly interpret the meaning of the statistical associations between weight and health, we should keep in mind how observational medical studies work. Epidemiologists follow a group of subjects for a certain time, and note what changes occur in the health of the subject population over the course of the study. These studies are observational rather than clinical in that they do not attempt to determine directly the effects of various risk factors on health. Instead, they observe what correlations appear among the study’s subjects in terms of relative risk for dying or developing particular diseases. For example, consider a study that followed 2,000 middle-aged people for fifteen years, half of whom had the government approved BMI of 18.5 to 24.9 at their time of entry into the study, and half of whom were obese, i.e., they had a BMI of 30 or higher. Suppose that, at the end of the study, ten out of one thousand people in the former group have died of cardiovascular disease, compared to fifteen out of one thousand in the latter group. The relative risk ratio observed between obesity and death from cardiovascular disease in this study would then be 1.50, in that obese people had a relative risk of cardiovascular death that was 50% higher than the referent group made up of supposedly ideal weight subjects.

Note that such an observation falls far short of proving that this increased risk was *caused* by the associated characteristic: it merely notes the association. Epidemiologists are usually careful to point out that it’s very difficult to draw causal inferences from mere associations, unless those associations are extremely powerful (for example, heavy

¹⁰⁴ Kolata, *supra* note 20.

smokers are 30 times more likely to die of lung cancer than non-smokers) and/or the study controls rigorously for large numbers of potentially confounding variables. (Perhaps the obese subjects in the study above had a higher rate of cardiovascular death because they were on average poorer, or more sedentary, or had higher rates of dieting and the resultant weight cycling, or were more likely to use diet drugs, or were discriminated against by health care providers, or for some combination of these and other reasons.)¹⁰⁵

With these caveats in mind, let us look at the association between mortality risk and weight. Perhaps the most careful and methodologically rigorous observational study published to date in regard to the association between weight and mortality risk in the American populace appeared in the *Journal of the American Medical Association* in March of 2005.¹⁰⁶ Lead author Katherine Flegal and her colleagues used three nationally representative cohorts of U.S. adults, who had been followed between 1970 and 1998. Flegal and her colleagues used the government's 18.5 to 24.9 normal or "ideal" weight category as their baseline referent group, and compared the relative risk of premature mortality in this group to that of people defined as underweight (<18.5 BMI), overweight (25 to 29.9 BMI), moderately obese (30 to 34.9 BMI), and very obese (>35 BMI). The authors found that, in the United States as a whole, the lowest mortality risk was in the overweight category. They calculated that, in comparison to people in the overweight category, Americans in the "normal weight" category suffered approximately 86,000 excess deaths per year. In comparison to the normal weight category, people in the

¹⁰⁵ CAMPOS, THE OBESITY MYTH, *supra* note 23, at 25-28.

¹⁰⁶ Flegal et al., *Excess Deaths*, *supra* note 42.

moderately obese and very obese categories suffered approximately 112,000 excess deaths per year, with the great majority (82,000) of these excess deaths taking place among the very obese. And, in comparison to the normal weight category, underweight people suffered approximately 34,000 deaths per year (in their analysis, the authors controlled for smoking and pre-existing disease, in anticipation of the common claim that the high mortality rates seen among the underweight are products of smoking and reverse causation, i.e., the idea that such people are thin because they are sick rather than vice versa).

Consider what these numbers mean. First, Flegal's analysis indicates that more Americans who are not overweight or obese die prematurely every year than Americans who are overweight and obese, even though there are more Americans in the latter category than in the former. Second, the risk of premature death associated with obesity was negligible or non-existent until one reached a BMI of 35 (indeed in the study's most recent data, the relative risk of premature death among the moderately obese – BMI 30-34.9 -- was less than 1.00, meaning that it was lower in this group than it was among so-called "normal weight" people). Only six per cent of the study's subjects had a BMI of 35 or higher, indicating that the government's claim that approximately 60% of the populace is at increased risk for premature mortality because of their weight is exaggerated by a factor of at least ten. And this remains true even if one makes the highly implausible assumption that 100% of the premature deaths associated with obesity were actually caused by obesity. Third, the risks associated with underweight were very high. Only 2.7% of the study's subjects were underweight, meaning that the 34,000 annual

premature deaths among such persons represents a relative risk that was, in most of the study's cohorts, actually higher than that found among the very obese (>35 BMI). To put these figures into concrete terms, the authors found that the risk of premature death was higher among women who look like Kate Moss (BMI 15.7) or Gwyneth Paltrow (BMI 16.1) than the combined premature death risk found among average-height (5'4") women at *all* weight levels above 203 pounds.¹⁰⁷ Fourth, the authors' data illustrates why the government's official "overweight" category is nonsensical: if a certain weight level is associated with the lowest risk of premature death, what does it mean to label such people "overweight?" Indeed, if the authors had used only the top third of the so-called "normal" weight category (23.0 to 24.9 BMI) as their referent group, this would have produced a total of 82,000 annual premature deaths among the newly defined "underweight" (BMI < 23).¹⁰⁸

Although Flegal's study caused something of a media furor, the only unusual feature of her results was that the media actually paid attention to the fact that a large-scale study had found that there was no risk of excess death associated with "overweight" (quite the contrary), that there was little risk of excess death associated with obesity until one reached extremely high weight levels, and that there was a high risk of premature death associated with weight levels just a few pounds below the government's "recommended" ideal weight.¹⁰⁹ Far from being unusual, these results are very much in line with what large-scale observational studies of the relationship between weight and mortality risk

¹⁰⁷ A 5'4" woman with a BMI of 35 weighs 204 pounds. Paltrow's BMI is taken from a July 23, 2002, Wall Street Journal story, where her height was given as 5'11" and her weight as 112 pounds. Moss is 5'7" and weighs 95 pounds according to various media reports.

¹⁰⁸ Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

¹⁰⁹ Nancy Hellmich, *Obesity: Time Bomb or Dud?*, USA TODAY, May 26, 2005, at 4D.

generally find. For example, data from the National Health and Nutrition Examination Survey (NHANES) – an ongoing large-scale survey that reflects the composition of the American population as a whole -- published in 1998 found essentially the same thing as the 2005 Flegal study: a very shallow U-shaped curve describing the relationship between BMI and mortality.¹¹⁰ Significantly increased mortality was only associated with either extreme of BMI: the underweight and the very obese. For the more than 90% of the population outside these extremes, body mass had no significant relationship with increased mortality risk. As the authors noted, “the resulting empirical findings from each of four race/sex groups, which are representative of the U.S. population, demonstrate a wide range of BMIs consistent with minimum mortality and do not suggest that the optimal BMI is at the lower end of the distribution for any subgroup.”

Another compelling illustration of this point is provided by a 1996 study undertaken by scientists at the National Center for Health Statistics and Cornell University.¹¹¹ This study is particularly suggestive because it involved a meta-analysis of dozens of previous studies, involving a total of more than 600,000 subjects with up to a 30-year follow-up, making it, in the words of one scientist, “one of the most comprehensive analyses of the relationship between mortality and body weight published to date.”¹¹² This meta-analysis found that among non-smoking white men the lowest mortality rate was found between a BMI of 23 and 29 – a weight range that overlaps with almost all of the government’s definition of overweight, and which is higher than two-thirds of the government’s

¹¹⁰ Ramon Durazo-Arvizu et al., *Mortality and Optimal Body Mass Index in a Sample of the U.S. Population*, 147 AM. J. EPIDEMIOLOGY 739 (1998).

¹¹¹ Richard P. Troiano et. al., *The Relationship Between Body Weight and Mortality: A Quantitative Analysis of Combined Information From Existing Studies*, 20 INT’L J. OBESITY 63 (1996).

¹¹² GAESSER, *supra* note 10.

recommended weight range. The mortality rate for white men in the supposedly “ideal” weight range of BMI 19 to 21 was the same as that for those with a BMI of 29 to 31, most of whom would be categorized as obese. The researchers were sufficiently struck by this to point out that since their analysis of existing studies had found “increased mortality at moderately low BMI for white men comparable to that found at extreme overweight, which does not appear to be due to smoking or existing disease,” it followed that “attention to the health risks of underweight is needed, and body weight recommendations for optimum longevity need to be considered in light of these risks.” The results for non-smoking white women were even more striking: for such women, the authors found that the BMI range correlating with the lowest mortality risk was extremely broad, from around 18 to 32, meaning a woman of average height could weigh anywhere within an 80-pound weight range without seeing any statistically significant change in her risk for premature death.

Dozens of other studies illustrate the same basic point: for the vast majority of people, including the vast majority of people whom the government classifies as weighing “too much,” body mass has little or no association with mortality risk.¹¹³ Given our current cultural hysteria about weight, it’s important to emphasize that studies such as Flegal’s do not demonstrate that the “overweight” range is really optimal, and that the current official ideal weight range is really underweight. What such studies show is that tiny variations in relative risk can generate impressive-sounding numbers of premature deaths when applied to very large populations. In some of these studies, such as Flegal’s, there is a slightly increased risk associated with the so-called “normal” weight range. In others,

¹¹³ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 10-20.

there is a slightly increased risk associated with the so-called “overweight” range. But the fundamental point is that large-scale studies of the issue feature no socially meaningful variation in mortality risk across a very broad range of weights.¹¹⁴ Yet if the relative risks in Flegal’s study had been reversed, and “overweight” rather than “normal weight” had been associated with 86,000 excess deaths, we can be sure this would have been presented by many obesity researchers and public health authorities as definitive proof that even being slightly “overweight” is supposedly deadly. Indeed, they have often exploited such trivial variations in relative risk for just this purpose.¹¹⁵

- (2) The correlation between weight and health risk reflects a direct causal relationship. People within the narrow range of “ideal” weight are healthier than people who are not, because they avoid the detrimental causal effects of overweight and obesity.

As we have seen, the relationship between weight and mortality risk is, except at statistical extremes, weak or non-existent. While mortality risk is not identical to health risk in general, it is a good proxy for it. (It is true that the heavier than average are at significantly increased risk for some diseases, most notably type 2 diabetes and osteoarthritis, but it is also true that they are at significantly decreased risk for others,

¹¹⁴ A risk can be statistically meaningful yet socially meaningless. For example, researchers in a particular study might note that so-called “overweight” people between the ages of 30 and 39 have a 10% greater risk of premature death than so-called “normal weight” people, based on a 95% statistical confidence interval (or, as in the Flegal study, researchers might note that “normal weight” people were at increased risk in comparison to “overweight” people). This increased risk is socially meaningless, both because such a weak association could be accounted for completely by a wide range of confounding variables, and because a 10% increased risk of premature death is practically meaningless among cohorts that already have an extremely low baseline risk. In other words, 10% more than almost nothing is still almost nothing.

¹¹⁵ See, e.g., Manson et al., *supra* note 23; CAMPOS, OBESITY MYTH, *supra* note 23, at 14-17.

including lung cancer, osteoporosis, and most of the major respiratory ailments.)¹¹⁶ But the more fundamental point is that the correlations between increased overall health risk and higher than average weight, weak as they generally are, do not in themselves demonstrate a causal relationship. Before we conclude that epidemiological associations signal such a relationship, we must consider confounding variables that might explain some, most, or all of the associated risk between a particular level of body mass and an increased risk of mortality and morbidity, as well as the extent to which non-observational clinical work has produced a causal explanation for the observed association.¹¹⁷

Although it is almost impossible to discover the fact if one relies on quotations from obesity researchers in the mass media, very little evidence has emerged regarding the question of how exactly either higher than average weight or high percentages of body fat are supposed to cause disease.¹¹⁸ With the exception of osteoarthritis, where increased body mass contributes to wear on joints, and a few cancers where estrogen originating in

¹¹⁶ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 20-25; GAESSER, *supra* note 10, at 5.

¹¹⁷ Consider this unusually candid quote from obesity researcher Charles Hennekens: “Epidemiology is a crude and inexact science . . . we tend to overstate findings, either because we want attention or more grant money.” Lena Williams, *Stalking the Elusive Healthy Diet; In Scientific Studies, Seeking the Truth in a Vast Gray Area*, N.Y. TIMES, Oct. 11, 1995, at C1.

¹¹⁸ When the weakness of the epidemiological link between BMI and health risk is pointed out, it is sometimes argued that BMI is an inexact measure of body fat, and that high levels of body fat, rather than high body mass per se, represent the real health risk. Yet when epidemiological studies have compared BMI to percent body fat as a marker for disease risk, BMI is consistently superior to percent body fat. This suggests that body build rather than fatness may be the source of some of the risks associated with high BMI. Noriyuki Nakanishi et. al., *Associations of Body Mass Index and Percentage Body Fat By Bioelectrical Impedance Analysis With Cardiovascular Risk Factors in Japanese Male Office Workers*, 38 IND. HEALTH 273 (2000); Donald K. Warne et. al., *Comparison of Body Size Measurements As Predictors of NIDDM in Pima Indians*, 18 DIABETES CARE 435 (1995); D. Spiegelman et. al., *Absolute Fat Mass, Percent Body Fat, and Body Fat Distribution: Which is the Real Determinant of Blood Pressure and Serum Glucose?* 55 AM. J. CLINICAL NUTRITION 1033 (1992). Furthermore, some body fat depots, particularly subcutaneous fat on the hips and thighs, may actually provide significant health benefits. Thigh and hip fat in particular have been reported to be associated with lower plasma triglycerides and higher HDL-cholesterol levels. See Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

fat tissue may contribute, causal links between body fat and disease remain hypothetical.¹¹⁹ This is all the more problematic when one considers the host of confounding variables that may account for some or all of whatever increased health risk is observed among the very obese (it is worth repeating that the 75 million adult Americans who are currently classified as “overweight” face no increased health risk at all, and that the large majority of obese Americans, that is, those with BMIs under 35, face negligibly increased risks).

Factors that may account for associations between high levels of obesity and increased health risk include sedentary lifestyle, poor nutrition, lower socio-economic status, discrimination in the provision of health care, social discrimination generally, weight loss cycling brought on by chronic dieting, and diet drug use, as well as a host of other, largely unmeasured, variables. When one or more of these variables are controlled for in a rigorous fashion, the already weak association between higher body mass and increased mortality and morbidity tends to be greatly attenuated or disappear altogether.¹²⁰ For example, one of the most commonly cited collections of data for the proposition that obesity is a serious health risk comes from the well-known Framingham study (this is a group of several thousand residents of Framingham, Massachusetts, that have been followed by epidemiologists for more than 50 years). Yet all of the excess mortality associated with obesity in the Framingham cohort can be accounted for by the impact of weight cycling, which is to say by the adverse health impact of dieting. (Almost all

¹¹⁹ Marc C. Hochberg et. al., *The Association of Body Weight, Body Fatness and Body Fat Distribution With Osteoarthritis of the Knee: Data From the Baltimore Longitudinal Study of Aging*, 22 J. RHEUMATOLOGY 488 (1995); B. Anderson et. al., *Obesity and Prognosis in Endometrial Cancer*, 174 AM. J. OBSTETRICS & GYNECOLOGY 1171 (1996).

¹²⁰ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 25-38.

dieters weight cycle, and most people who weight cycle are dieters). Obese Framingham residents with stable body weights are not at increased risk.¹²¹ Indeed, numerous studies suggest that weight cycling increases mortality risk, which is tantamount to saying that the weight loss industry may to a significant extent be causing the health risks it claims to be ameliorating.¹²²

Many common weight loss treatments generate particularly problematic confounding variables. For example, over-the-counter diet pills used by millions, including phenylpropanolamine and herbal ephedra, have been linked to heart attack and strokes and recently banned. In a recent study, the adjusted odds ratio for stroke in women taking phenylpropanolamine for weight loss was 16.6, many times higher than the relative risk for stroke associated with a BMI over 30, which in one typical study was 1.29 (indeed, this level of increased risk was not statistically significant).¹²³ And the higher a person's BMI, the more likely they are to use these and other hazardous weight loss methods. One study found that 22% of weight loss clinic clients surveyed used phenylpropanolamine for weight loss. If only one in 13 obese persons were exposed to over-the-counter diet pills containing phenylpropanolamine, then all of the excess risk associated with obesity

¹²¹ Lauren Lissner et. al., *Variability of Body Weight and Health Outcomes in the Framingham Population*, 324 NEW ENG. J. MED. 1839 (1991). See also Vanessa A. Diaz et. al., *The Association Between Weight Fluctuation and Mortality: Results From a Population-Based Cohort Study*, 30 J. COMMUNITY HEALTH 153 (2005).

¹²² Peggy Hamm et. al., *Large Fluctuations in Body Weight During Young Adulthood and Twenty-Five Year Risk of Coronary Death in Men*, 129 AM. J. EPIDEMIOLOGY 312 (1989); Carlos Iribarren et. al., *Association of Weight Loss and Weight Fluctuation with Mortality Among Japanese American Men*, 333 NEW ENG. J. MED. 686 (1995); Lauren Lissner et. al., *Body Weight Variability and Mortality in the Gothenburg Prospective Studies of Men and Women*, OBESITY IN EUROPE, 55-60 (Bjorntorp & Rossner, eds.) (1989); K.D. Brownell & J. Rodin, *Medical, Metabolic, and Psychological Effects of Weight Cycling*, 154 ARCHIVES INT'L MED. 1325 (1994).

¹²³ Walter N. Kernan et. al., *Phenylpropanolamine and the Risk of Hemorrhagic Stroke*, 343 NEW ENG. J. MED. 1826 (2000); Susan P. Walker et. al., *Body Size and Body Fat Distribution as Predictors of Stroke Among U.S. Men*, 144 AM. J. EPIDEMIOLOGY 1143 (1996).

could be accounted for by increased diet pill use. No epidemiological study to date has assessed relative mortality risks after taking the known hazards of stimulant diet pills into account.¹²⁴

Aerobic fitness and the activity levels that promote it appear to have a much more profound effect on health than body mass. Steven Blair, who is widely recognized as the world's leading authority on the relationship between fitness, health risk, and weight, has published numerous studies indicating that obese people who maintain a quite moderate level of aerobic and cardiovascular fitness – the sort of fitness level that most people can maintain by the physical activity equivalent to 30 minutes of brisk walking per day – have a far lower mortality rate than thin unfit people and the same mortality rate as thin fit people.¹²⁵ This level of fitness among obese people is not, as is often claimed, rare. For example, in Blair's Aerobics Center Longitudinal Study, which is the oldest and most comprehensive data pool measuring the effects of fitness on health, half of the subjects with a BMI of 30 have been found to be fit, while one third of those with a BMI of 35 maintain aerobic fitness. Similar results have been obtained by other researchers. Indeed, the Harvard Alumni Study has found the lowest mortality rates in men who have *gained* the most weight since college, while also expending at least 2000 calories per week in vigorous physical activities.¹²⁶ The Behavioral Risk Factor Surveillance System, a large-

¹²⁴ Campos et al., *The Epidemiology of Overweight and Obesity*, supra note 43.

¹²⁵ Steven N. Blair et. al., *Physical Fitness and All-Cause Mortality: A Prospective Study of Healthy Men and Women*, 262 JAMA 2395 (1989); Chong Do Lee et. al., *Cardiorespiratory Fitness, Body Composition, and All-Cause and Cardiovascular Disease Mortality in Men*, 69 AM. J. CLINICAL NUTRITION 373 (1999); Carolyn E. Barlow et. al., *Physical Fitness, Mortality and Obesity*, 19 INT'L J. OBESITY S41 (1995); Stephan W. Farrell et. al., *The Relation of Body Mass Index, Cardiorespiratory Fitness, and All-Cause Mortality in Women*, 10 OBESITY RES. 417 (2002).

¹²⁶ Ralph S. Paffenbarger Jr. et. al., *Physical Activity, All-Cause Mortality, and Longevity of College Alumni*, 314 NEW ENG. J. MED. 605 (1986).

scale study from the 1990s, found that a lack of physical activity was a much better predictor of cardiovascular disease mortality than BMI.¹²⁷ And a 2002 study of nearly 10,000 Puerto Rican men found that even modest amounts of physical activity had profound health benefits for men across all weight ranges. This study found that “the likelihood of premature death among men who were obese (BMI >30) did not reach statistical significance, especially after adjusting for other risk factors,” such a sedentary lifestyle.¹²⁸

A particularly striking illustration of the severe health risks associated with sedentary lifestyle is provided by a 30-year University of Texas study, in which five undergraduate men remained in bed for 20 days, and then had their vital statistics measured. 30 years later, after participating in a six-month exercise program, the men were tested again. The results: the five men had better aerobic capacity and cardiovascular fitness at age 50 than they had displayed after the 20 days spent in bed as undergraduates. In other words, 20 days of complete inactivity seems to have been worse for their health than 30 years of aging.¹²⁹ And while it is true that the fatter a person is the less likely he or she is to be fit, focusing on fatness rather than fitness seems perverse, given that we know how to get unfit fat people fit (get them to become moderately physically active), while, as we shall see, we have no way of making fat people thin.

¹²⁷ Robert A. Hahn et. al., *Cardiovascular Disease Risk Factors and Preventative Practices Among Adults – United States 1994: A Behavioral Risk Factor Atlas*, 47 MMWR CDC SURVEILLANCE SUMMARY 35 (1998).

¹²⁸ Carlos J. Crespo et. al., *The Relationship of Physical Activity and Body Weight With All-Cause Mortality: Results From the Puerto Rico Heart Health Program*, 12 ANNALS EPIDEMIOLOGY 543 (2002).

¹²⁹R. Winslow, *Study Shows Even Moderate Exercise Can Reverse Effects of Aging by Years*, WALL ST. J., May 8, 2002.

Type 2 diabetes provides a particularly compelling example of why it is important to consider confounding variables, rather than merely assuming that fat is the cause of disease, and that therefore producing weight loss is the appropriate cure. Unlike most diseases that are blamed on fatness, there actually is a strong correlation between type 2 diabetes and increasing weight. Type 2 diabetes arises among people who become insulin resistant. Insulin transports glucose in the blood to cells. When people become insulin resistant their bodies absorb less glucose, and their pancreases have to produce more insulin. This eventually can lead to a systemic breakdown that produces type 2 diabetes. Research has demonstrated that as much as half of a person's risk for developing insulin resistance is purely genetic. This "thrifty gene hypothesis," which has been confirmed by molecular genetics, holds that mutations favoring fat storage and the ability to survive famines also confer a significantly increased risk of developing diabetes. Thus obesity may be an early symptom of diabetes rather than an underlying cause.¹³⁰

More important, intervention studies that attempt to lessen the risk for developing diabetes among the obese produce consistent results: if sedentary people become moderately physically active and eat a lower-fat, lower-sugar diet, they greatly decrease their odds of developing diabetes, even though these interventions typically produce little or no weight loss. This suggests strongly that, along with genetic predisposition, lifestyle

¹³⁰ James V. Neel et. al., *Type II Diabetes, Essential Hypertension, and Obesity as "Syndromes of Impaired Genetic Homeostasis: The "Thrifty Genotype" Hypothesis Enters the 21st Century*, 42 *PERSP. ON BIOLOGICAL MED.* 44 (1998).

factors, rather than weight, are the key variables in both the development and prevention of Type 2 diabetes.¹³¹

Obese people are far more likely to be poor and members of ethnic minority groups than thin people.¹³² They are thus subject to multiple forms of social discrimination, both from medical system in particular and society in general. Such discrimination has been shown to have a profound effect on health – indeed, something as relatively straightforward as not having health insurance is a vastly more powerful predictor of risk than body mass – yet epidemiological studies that both attempt to measure the effects of weight on health and control for socio-economic status are rare.¹³³ This is yet another compelling reason to be skeptical about the causal significance of those associations that do exist between obesity and increased health risk.

In sum, the weak association between body mass and health tends to disappear altogether when factors other than weight are taken into account. Fat active people are healthier than thin sedentary ones, and just as healthy as thin active persons. Dieting, diet drugs, poverty, and social discrimination all have profound effects on health risk, and all

¹³¹ J. Tuomilhto et. al., *Prevention of Type II Diabetes Mellitus by Changes in Lifestyle Among Subjects With Impaired Glucose Tolerance*, 344 NEW ENG. J. MED. 1343 (2001); Benoit Lamarche et. al., *Is Body Fat Loss a Determinant Factor in the Improvement of Carbohydrate and Lipid Metabolism Following Aerobic Exercise Training in Obese Women*, 41 METABOLISM: CLINICAL & EXPERIMENTAL 1249 (1992); Diabetes Prevention Program Research Group, *Reduction in the Incidence of Type 2 Diabetes With Lifestyle Intervention or Metformin*, 346 NEW ENG. J. MED. 393 (2002).

¹³² Ali H. Mokdad et. al., *Prevalence of Obesity, Diabetes, and Obesity-Related Health Risk Factors, 2001*, 289 JAMA 76 (2003). Furthermore, epidemiological data indicate that the lowest mortality risk for African-Americans is found at higher weight levels than among whites, i.e., in the middle of the so-called “overweight” range, and that among African American women in particular it is difficult to document any increased risk of mortality associated with even very high levels of obesity. See, e.g., J. Weinpahl et. al., *Body Mass Index and 15-Year Mortality in a Cohort of Black Men and Women*, 43 J. CLINICAL EPIDEMIOLOGY 949 (1990).

¹³³ Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

disproportionately affect the heavier than average. Under such circumstances, trying to make fat people healthier by making them thinner can be analogized to trying to prevent lung cancer by whitening the teeth of smokers.

(3) Significant long-term weight loss is a practical goal, and will improve health.

In fact the current legalization of fat is even more misguided than all the foregoing suggests. Although a program to prevent lung cancer by whitening teeth is nonsensical on its face, it is true that we know how to whiten teeth. What we do not know how to do is how to make fat people thin.

This statement is in one sense shocking, even though there are few better-established empirical propositions in the entire field of medicine. Yet the empirically absurd assertion that all, or almost all, Americans could have a BMI of between 18.5 and 24.9 if they tried hard enough is repeated over and over again by researchers and public health authorities, in the face of overwhelming evidence to the contrary.¹³⁴ It is an apparently unshakeable bit of folk wisdom masquerading as science that, if people simply undertake a regimen of attempting to eat less and exercise more, they will lose significant amounts of weight and keep it off permanently. For most of the past century, medical and public health authorities have been telling Americans that they can become “ideally” thin by restricting caloric intake and increasing activity levels. Hundreds of millions of

¹³⁴ Indeed, some prominent obesity researchers are now suggesting that people ought to try to maintain a BMI of between 18.5 and 21.9. This represents a weight range of 108 to 127 pounds for an average-height woman. Alison E. Field et. al, *Impact of Overweight on the Risk of Developing Common Chronic Diseases During a 10-Year Period*, 161 ARCHIVES INTERNAL MED. 1581 (2001); Nanci Hellmich, *Is Fat Getting a Bum Rap?*, USA TODAY, May 4, 2004, at 7D.

Americans have attempted to follow this advice – and we see the result. As was pointed out nearly 25 years ago by William Bennett and Joel Gurin, “the standard ‘sensible’ recommendations to change eating habits and diligently use caloric charts are no more than elaborate folklore, expressions of faith in a world that ought to exist, but in fact does not.”¹³⁵

Indeed, if the public health establishment’s advice on this issue was sound, there would be almost no fat people in America (the government’s own statistics indicate that around 90% of all obese people diet regularly. In other words, almost all fat Americans are undertaking the cure that obesity researchers and the weight loss industry have provided for their “disease”).¹³⁶ The vast majority of people who attempt to lose weight eventually gain all the weight they lose back. A significant percentage of them gain back more than they lost: at least a third of such people who have been followed for at least five years.¹³⁷ Ironically, this suggests that a significant portion of the weight gain observed in the American population over the course of the past century is attributable to dieting.

Another ironic consequence of the almost complete failure to find effective weapons of body mass destruction is the remarkable fact that the central premise of the war on fat – that turning so-called overweight and obese people into so-called normal weight individuals will improve their health – remains an untested hypothesis. We simply do not

¹³⁵ WILLIAM BENNETT & JOEL GURIN, *THE DIETER’S DILEMMA* 283 (1982).

¹³⁶ Mary K. Serdula et. al., *Prevalence of Attempting Weight Loss and Strategies for Controlling Weight*, 282 JAMA 1353 (1999).

¹³⁷ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 29; Maija Korkeila et. al., *Weight Loss Attempts and Risk of Major Weight Gain: A Prospective Study of Finnish Adults*, 70 AM. J. CLINICAL NUTRITION 965 (1999); D.M. Garner & S.C. Wooley, *Confronting the Failure of Behavioral and Dietary Treatments for Obesity*, 11 CLINICAL PSYCHOL. REV. 729 (1991).

know if significant long-term weight loss is medically beneficial, because no one has ever been able to produce this result in statistically significant groups of people. It is true that various studies indicate improved health is associated with small amounts of weight loss, and obesity researches seize on this fact when they claim that it's beneficial for overweight and obese people to lose even 5% or 10% of their body mass. Yet note that this outcome has been observed only in contexts in which subjects undertake lifestyle changes – specifically, increased activity levels and improved nutrition – that have been shown to have striking health benefits completely independent of whether or not such changes produce any weight loss.¹³⁸ It is particularly striking that intervention studies that find associations between improved health and weight loss generally record no dose response: in other words, people who lose small amounts of weight, or even gain weight, get as much health benefit from the intervention as those who lose larger amounts.¹³⁹

Data from the recent National Health Interview Survey are typical in this regard. Among overweight and obese men and women, with and without type 2 diabetes, those who reported trying to lose weight (but without success) experienced a reduction in mortality rate that was the same as, or greater than, those who reported that they successfully lost weight. In other words, weight loss itself did not appear to be beneficial. Indeed, in this same study, weight loss was associated with a mortality hazard ratio of 3.36 (i.e., people who lost weight were more than three times more likely to die over the course of the study than people who didn't), and weight cycling with a hazard ratio of 1.83. By

¹³⁸ See *supra* note 131 and accompanying text.

¹³⁹ Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

contrast, obese people with stable body weights had no increase in mortality.¹⁴⁰ Similar results were obtained in the Iowa Women's Health Study and a major American Cancer Society study from the 1990s, which represent the only two large studies to date that have attempted to measure the health effects of intentional weight loss.¹⁴¹

The failure to demonstrate that weight loss in itself is medically beneficial is particularly disturbing given the hazards associated with many of the techniques employed by people trying to lose weight. It is estimated that approximately eight million Americans have active diagnosable eating disorders such as anorexia and bulimia (anorexia has the highest fatality rate of any mental illness), while tens of millions of others engage in episodic eating disordered behavior.¹⁴² As we have seen, diet drugs are associated with a host of serious health risks. For instance ephedra, which was recently banned by the FDA after, among other things, the deaths of several high-profile athletes who were found to have the stimulant in their blood, was known among college students as "legal speed."¹⁴³ The story of how fen-phen and its pharmacological cousin Redux ended up getting FDA approval, even though they were known to have serious potential side effects up to and including death, and even though fen-phen produced an average of only seven pounds of weight loss in comparison to a placebo, is a classic tale of what happens when

¹⁴⁰ E. W. Gregg et al., *Trying to Lose Weight, Losing Weight, and 9-Year Mortality in Overweight U.S. Adults With Diabetes*, 27 DIABETES CARE 657 (2004); V. A. Diaz, A. G. Mainous, III, & C. J. Everett, *The Association Between Weight Fluctuation and Mortality: Results From a Population-Based Cohort Study*, 30 J. COMMUNITY HEALTH 153 (2005).

¹⁴¹ Simone A. French et. al., *Prospective Study of Intentional Weight Loss and Mortality in Older Women: The Iowa Women's Health Study*, 149 AM. J. EPIDEMIOLOGY 504 (1999); Elsie R. Pamuk et. al., *Weight Loss and Subsequent Death in a Cohort of U.S. Adults*, 119 ANNALS OF INTERNAL MED. 744 (1993).

¹⁴² M. Makino et. al., *Prevalence of Eating Disorders: A Comparison of Western and Non-Western Countries*, 6 MEDSCAPE GEN. MED. 49 (2004).

¹⁴³ Guy Gugliotta and Amy Shipley, *Ephedra Controversy Nothing New in Sports; Dietary Supplement Linked to Other Deaths*, WASH. POST, Feb. 20, 2003, at D4.

administrative agencies are captured by the industries they are supposed to regulate (At the FDA approval hearings for the drug, obesity researcher Judith Stern, who serves on the board of the American Obesity Association, a drug industry lobbying group that presents itself as a disinterested scientific organization, opined that any expert who opposed the approval of Redux “should be shot.”)¹⁴⁴

Given that the associations between weight and health are weak or non-existent outside of statistical extremes, that even these associations disappear when confounding variables are considered, that there is both no method available to produce significant long-term weight loss in the vast majority of people, and that there are still no clinical trials demonstrating the health benefits of long-term weight loss, how do obesity researchers and public health authorities manage to continue to sell their message that even modest amounts of overweight kill, and that achieving thinness is the key to good health? The answer to that question will be explored in detail later in this article, when we will see that our obsession with weight has almost nothing to do with science. Still, the conventions of public discourse require some sort of at least superficially scientific response to those who keep pointing out that the medical literature fails to support the current fat panic.

When confronted with powerful evidence that, except at statistical extremes, weight is a very poor predictor of mortality risk, orthodox obesity researchers fall back on various rhetorical strategies. First, they make methodological objections, the most common of

¹⁴⁴ ALICIA MUNDY, *DISPENSING WITH THE TRUTH: THE VICTIMS, THE DRUG COMPANIES, AND THE DRAMATIC STORY BEHIND THE BATTLE OVER FEN-PHEN* (2001).

which is that studies fail to control for risks such as pre-existing disease.¹⁴⁵ Second, they make certain marginal concessions. Perhaps, they say, being overweight doesn't increase one's mortality risk, but it puts one closer to being obese, which does increase mortality risk.¹⁴⁶ Given this, they argue, isn't it better to be in the normal weight category? Third, it's often argued that, in the words of one prominent obesity researcher, "even if positive energy imbalance rather than excess adiposity is the cause of some morbidity, the solution will be the same: increased activity and reduced energy in the diet."¹⁴⁷ Finally, they will talk about "quality of life." Even if mortality risk isn't actually increased by being fat, isn't one's quality of life improved by not having to employ the medicines, such as statins, that are keeping all these surprisingly tenacious fat people alive for as long, or longer, than the "ideal weight" among us?¹⁴⁸

The responses to these strategies are straightforward. Studies such as the 2005 Flegal article do control, rigorously, for pre-existing disease and smoking, as anyone can verify by looking at their data. The veritable obsession some prominent obesity researchers seem to have with making picayune and ill-founded methodological objections to studies that contradict their claims about the risks of overweight is all the more striking, given that these researchers remained completely silent about – or indeed were co-authors of -- highly-publicized studies that were riddled with far worse methodological problems and outright errors (see below), but which appeared to support their point of view.¹⁴⁹ The

¹⁴⁵ Bonnie Liebman, *The Weight Debate*, NUTRITION ACTION HEALTHLETTER, Oct. 1, 2005, at 1.

¹⁴⁶ For example, Professor David Katz of the Yale Medical School made this argument when I debated him on a Minnesota National Public Radio broadcast in March, 2005.

¹⁴⁷ June Stevens et. al., *Obesity Claims and Controversies*, 35 INT'L J. EPIDEMIOLOGY 55 (2006).

¹⁴⁸ Sally Squires, *Middle Ground on BMI*, WASH. POST, May 17, 2005, at F01.

¹⁴⁹ For specific examples, see CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 13-19.

claim that it's better to be normal weight than overweight because that puts one farther away from being obese ignores that being normal weight puts one closer to being underweight, which as we have seen is associated with a far higher mortality risk than all but the most extreme levels of obesity.¹⁵⁰ In statistical terms, the average overweight person is perhaps 75 pounds away from being dangerously heavy, while the average normal weight person is perhaps 20 pounds away from being dangerously thin. The argument that everyone agrees physical activity and balanced nutrition are good things, and that therefore the disagreement between those who advocate weight loss via these methods and those who advocate these things for their own sake turns on a semantic quibble ignores the practical effects of our national obsession with thinness. Specifically, such arguments overlook that becoming more active and adopting a healthy diet does not result in significant weight loss for most people, and that there are many so-called overweight and obese people who already have healthy lifestyles and therefore do not need "treatment" (conversely many lean persons have unhealthy lifestyles in need of improvement). And it is even more crucial not to ignore the social reality that many people pursue weight loss through harmful methods such as smoking, purging, chronic weight cycling, fad diets, diet drug use, and weight loss surgery. Given the demonstrable health damage that such weight loss practices inflict, it is not merely a matter of semantics whether the public health establishment and the legal system choose to focus on lifestyle or weight loss.¹⁵¹ As for "quality of life," it simply isn't true that obese people are being kept alive by drugs and other therapies that are comparatively rare among thin people. For example, in Flegal's data, 3.5% of the obese subjects were using statins, as

¹⁵⁰ See *supra* notes 106-114 and accompanying text.

¹⁵¹ Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

opposed to 2% of the “normal weight” subjects.¹⁵² Obviously, excluding all these people from the subject pool would have almost no impact on Flegal’s observed correlations. (If obesity researchers really want to improve the quality of life of the heavier than average, they could start by dropping claims that millions of perfectly normal and healthy people have a disease simply because their body mass is above an arbitrary definitional line.)

In short, both the scholarly work and the public positions of many obesity researchers are riddled with the sort of selective citation of evidence and egregious double standards that we may take for granted when employed by, say, political spin doctors or particularly brazen litigators, but which are supposed to be anathema to genuine science. Examples of this can be found almost at random: indeed on the day I am writing this sentence a study has been published in the *Journal of the American Medical Association* that illustrates this strategy perfectly. An MSNBC article describing the study – probably derived from the press release the authors of such articles helpfully provide the media – is entitled “Study Confirms You Can’t Be Fat – And Healthy.” The article goes on to describe the study’s conclusions: obese middle-aged subjects without high blood pressure or high cholesterol at the time of entry into the study had a 43% increased risk for coronary heart disease mortality in comparison to normal weight persons, over the course of a 32-year follow-up. The article quotes the study’s lead author: “The take-home message would be pay more attention to your weight even if you don’t have an unhealthy risk factor profile yet.” The article contrasts the study’s findings with what it describes as the “controversial” Flegal 2005 JAMA study, which in a considerable understatement the

¹⁵² Flegal et al., *Excess Deaths*, *supra* note 42.

article describes as “suggest[ing] that excess weight might not be as deadly as previously thought.”¹⁵³

Anyone who bothers to actually look at the study will find the following data: the 43% increase in relative risk for coronary heart disease mortality among obese people was based on a 95% confidence interval stretching from a relative risk of 0.33 to 6.25. In lay terms, this means the researchers could state with 95% confidence that, in this data, the associated risk between dying from heart disease and obesity lay somewhere between obese people having one third as much associated risk as normal weight people, and six times as much associated risk. In other words, the 43% increase in relative risk cited by the article fell radically short of having anything like statistical significance. Even more remarkably, the study’s authors assumed, in their methodology and statistical analysis, that diet, physical activity, and fitness play no role in health or mortality.¹⁵⁴ As we have seen, this is the epidemiological equivalent of assuming the Earth is flat -- and yet it is a common assumption in studies that claim to find a significant link between body mass and health risk.

Two particularly notable examples of this kind of thing – notable because these studies have been cited thousands of times in the media for the proposition that fat kills -- are provided by the 1999 JAMA study that supposedly found 300,000 excess deaths caused every year by obesity and overweight, and the 2004 JAMA study that raised that

¹⁵³ Associated Press, *Study Confirms That You Can’t Be Fat – And Healthy*, <http://www.msnbc.msn.com/id/10792368/> (last visited Feb. 24, 2006).

¹⁵⁴ Linjing L. Yan et. al., *Midlife Body Mass Index and Hospitalization and Mortality in Older Age*, 295 JAMA 190 (2006).

impressive figure to 410,000.¹⁵⁵ The 1999 study has the following the sentence in its statement of methods: “Our calculations assume that all (controlling for age, sex and smoking) excess mortality in obese people in due to their adiposity.” By this same method, one can prove that wearing clothes that smell of tobacco causes 120,000 lung cancer deaths per year, and that national elections significantly increase mortality among domestic turkey populations. The 2004 study featured, if anything, even more dubious calculations. Besides containing basic mathematical errors (errors that were brought to the attention of the authors, who included Julie Gerberding, the Director of the CDC, by other researchers within CDC, but which produced no public correction from the agency until the media learned of the errors months later),¹⁵⁶ the 2004 study assumed that 410,000 annual deaths were a consequence of sedentary lifestyle and poor nutrition, and that overweight and obesity served as perfect proxies for these risk factors. In other words, they assumed that 100% of overweight and obesity is caused by sedentary lifestyle and poor nutrition, and that no one with a BMI under 25 is sedentary or eats poorly. Even more remarkably, the only citation the authors provided for this assumption was to a study by Steven Blair that stands for almost precisely the opposite proposition. When I asked Blair what he thought about this use of his work, he told me he “was astonished to see my work cited in that manner.”¹⁵⁷

Yet the most questionable practices of obesity researchers who seek to prove that “overweight” and “obesity” in America today represent a deadly epidemic may go well

¹⁵⁵ See *supra* notes 24-25 and accompanying text.

¹⁵⁶ David Wahlberg, *CDC Apologizes for Mixed Messages On Obesity*, ATLANTA-J. CONST., June 3, 2005, at 1A.

¹⁵⁷ Personal communication with the author, April 17, 2004.

beyond exaggerating the significance of weak associations and ignoring confounding variables. Indeed, there is evidence to suggest that certain prominent researchers engage in what is known among scientists and statisticians as “data trimming.” One particularly invidious form of data trimming involves testing different exclusionary criteria on a subject base until the desired correlations appear, and then using those criteria because they produce the desired outcome. A medical school professor who has studied the obesity literature for more than twenty years described for me what he considers the highly suspicious statistical analyses employed by some obesity researchers:

I was first clued into this subject in the context of the famous Framingham study. Two reports on the impact of weight from Framingham appeared in *JAMA*. One showed no impact from overweight and only a slight effect from obesity, but a strong risk associated with underweight. I have a copy of some of raw data tables from the government printing office, and they support this interpretation. The second paper appeared a couple of years later. It showed mortality risk increasing linearly with BMI. Why the differing conclusion? The answer, I believe, lies in a subtle statistic: the number of subjects. The data showing no harmful effect from overweight used all five thousand subjects. The later report used less than half the total number of subjects, and was very fuzzy regarding why it excluded the majority of the data pool. It’s almost as if the authors excluded most of the “fat and healthy” and “sick and thin” subjects, leaving only “fat and sick” and “thin and healthy.”

This professor then went on to critique the methods of two of the most prominent people in the field:

[These two researchers] always exclude a large proportion of their study subjects. When they give a reason, it’s usually that the subjects have a particular disease, or they have lost weight in the past ten years. Another favorite is to exclude current smokers, conveniently overlooking the fact that ex-smokers are still at increased risk, and are almost invariably fatter than never smokers. But excluding certain subjects from consideration undermines the ability to *generalize* the results (anybody remember Statistics 101?). If you exclude everyone who has disease, your conclusions apply only to healthy people, and not to anyone who is ill. If you exclude everyone who has lost weight recently, then your conclusions apply only to weight-stable people. This means that [these two researchers’] weight guidelines, if they apply to anyone, only apply to people who are in perfect health

and have a stable weight. The problem is that the guidelines are mainly applied to people who are not healthy, because these are the people coming into the doctor's office and getting the "lose weight or die" lecture. [Also] the list of diseases used as grounds for exclusion ends up being unique for every paper [these authors publish]. The amount of weight loss, and the number of years in the study prior to death as a ground for exclusion also vary from report to report. Why does this trouble me? What do I imagine is behind this "custom tailoring" of the data analysis? Well, imagine that your boss has demanded that you return a particular result from the data. You would run many different analyses. "Let's try excluding people with disease X. Is obesity harmful yet? No? Let's try excluding people with disease Y. Does omitting people who have lost 50 pounds give us our answer? No? Let's try 25 pounds, or ten." By running hundreds of different possible combinations of exclusion criteria, it's possible to edit your subject base in such a way as to support almost any result. Whatever happened to reporting the results from the group you originally enlisted in the study? In clinical trials, this sort of data trimming would get you in real trouble! Why is it tolerated only for studies of obesity? At the very least, these authors should be required to provide the results from their excluded subjects.¹⁵⁸

Such observations may help explain the curious fact that, even as we are deluged with claims from obesity researchers that fat kills, evidence for that proposition ends up being conspicuously absent from large-scale epidemiological studies, and seems to be directly contradicted by the continuously improving overall health and life expectancy of the American people, in a nation in which supposedly at least half the populace has been dangerously overweight since the middle of the previous century.¹⁵⁹

- (4) The cost-benefit ratio involved in trying to make Americans thinner justifies using scarce public health dollars to pursue this result.

¹⁵⁸ CAMPOS, THE OBESITY MYTH, *supra* note 23, at 47-49.

¹⁵⁹ U.S. Centers for Disease Control and Prevention: *Life Expectancy Hits Record High*, MED. & L. WKLY., Mar. 2005, at 387.

Assume for the purposes of argument that the foregoing critique is simply wrong. Assume, in other words, that there is a strong correlation between weight and health risk; that this correlation is causal; and that it has been demonstrated significant long-term weight loss will make “overweight” and “obese” people healthier. The final irony of the ongoing legalization of fat is that one could assume all these things, and yet there would still be little or no reason to assume that the initiatives currently being undertaken by our legislatures, agencies, and courts represent a sensible use of government resources. This is because even if you assume higher weight is a significant independent health hazard, and that losing weight will in and of itself improve health, undertaking interventions designed to produce these results will make sense only to the extent that there is actually good evidence that these interventions will work.

Consider the various attempts to attack childhood obesity through the schools. As we have seen, many of these policies are largely symbolic. But it’s very unclear that even the most aggressive intervention policies would produce any weight loss among children. For example, perhaps the largest and most comprehensive school-based anti-obesity initiative yet undertaken in America was the five-year Pathways program, sponsored by the Johns Hopkins School of Public Health from 1997 through 2002. Pathways involved putting children in seven largely Native American elementary schools in New Mexico (many Native American groups in the Southwest feature high rates of obesity) on specially designed diets, rich in highly nutritious yet low-calorie food. The schools instituted extensive physical education programs, and the children were given a great deal of counseling regarding nutrition and physical activity, while a family involvement initiative

tried to ensure that the children's parents supported the broader program's goals. In short, Pathways did almost everything that anti-fat warriors want done in American schools in order to make the nation's youth slimmer. Yet at the program's conclusion the researchers found that, while the children were eating a more nutritious diet and exercising more, and could "recite chapter and verse on the importance of activity and proper nutrition,"¹⁶⁰ they had lost no weight in comparison to a control group of students who were not enrolled in the program. Essentially the same results were obtained in a similar recent study, the Child and Adolescent Trial for Cardiovascular Health, which involved more than 5,000 children in nearly 100 schools in California, Louisiana, Minnesota and Texas. Here too, exceptionally aggressive anti-obesity measures produced no weight loss.¹⁶¹

Or consider recent legislative attempts to impose special taxes on "junk food," and to make such food ineligible for purchase through government poverty programs. Snack taxes are highly controversial, in part because proposals to enact them draw enormous opposition from the food and beverage industry, but also because such taxes are fraught with definitional and pragmatic difficulties. Economists note that the demand for food tends to be insensitive to price: it is estimated that a 10% tax on a particular food will on average produce a less than one per cent drop in demand. Translated into practical terms,

¹⁶⁰ Gina Kolata, *Thinning the Milk Does Not Mean Thinning the Child*, N.Y. TIMES, Feb. 12, 2006, § 4, at 3. In this story Gina Kolata, one of America's best journalists covering issues of weight, health, and nutrition, observes that the Pathways Study has literally never been cited in the medical literature since its publication three years ago. She quotes David Freedman, a University of California statistician: Scientists and the public, Freedman says, "have this wonderful capacity for ignoring negative evidence." *Id.*

¹⁶¹ Benjamin Caballero et. al., *Pathways: A School-Based Randomized Controlled Trial for the Prevention of Obesity in American Indian Schoolchildren*, 78 AM. J. CLINICAL NUTRITION 1030 (2003); J. T. Dwyer et al., *Prevalence of marked overweight and obesity in a multiethnic pediatric population: findings from the Child and Adolescent Trial for Cardiovascular Health (CATCH) study*, 100 J. AM. DIETETIC ASS'N 1149 (2000).

this means that one would have to double the price of soda to produce a 10% drop in the levels at which it is currently consumed.¹⁶²

Furthermore, defining what sorts of foods are “healthy” and “unhealthy” is extremely difficult, and indeed some nutritionists reject that distinction altogether.¹⁶³ Such controversies are reflected in Minnesota’s recent petition to get the Department of Agriculture to remove certain “unhealthy” foods, such as candy and soda, from the list of what can be bought with food stamps. Leaving aside the controversial assumption that poor people should be required to eat more virtuously than everyone else, the Minnesota proposal illustrates the definitional difficulties that beset such “sin taxes.” For instance, under the proposal a Nestle Crunch bar could not be bought with food stamps, but a Nestle Kit Kat bar could, because it contains flour. For this and other reasons the USDA turned down the state’s petition.¹⁶⁴

The bottom line is that the legalization of fat is proceeding in the face of the fact that the specific causal pathways that are producing weight gain in contemporary America remain largely unknown – and as long as this remains the case, attempting to produce weight loss through legislative and judicial intervention will remain the equivalent of shooting at a moving target in a pitch-dark room. There is little evidence that different weight levels among children or adults are products of different levels of fast food consumption, TV

¹⁶² James Seale, Jr., et al., *International Evidence On Food Consumption Patterns*, ERS PUBLICATION (2003); www.ers.usda.gov/publications/tb1904.

¹⁶³ A recent \$410 million government study, described as “the Rolls Royce” of epidemiological studies, failed to find any health benefit associated with maintaining a low-fat diet, after decades worth of claims that such diets lessen the risk of heart disease and cancer. See Gina Kolata, *Low-fat Diet Does Not Cut Health Risk, Study Finds*, N.Y. TIMES, Feb. 8, 2006, at A1.

¹⁶⁴ *USDA Rejects Restrictions on Food Stamps in Minnesota*, ORLANDO SENTINEL, May 8, 2004, at A14.

watching, video game playing, or any of the other villains that both the public health establishment and our popular culture blame for the “obesity epidemic.”¹⁶⁵ We do not even know if Americans are more sedentary, on average, than they were in previous generations, because there are no reliable statistics on overall activity levels prior to about two decades ago. The most that can be said is that the evidence suggests Americans expend fewer calories in their jobs and in getting from place to place than they have historically, while at the same time engaging in a good deal more voluntary exercise. For instance, health club memberships have nearly doubled over the past 30 years: the number of Americans who currently belong to health clubs is approaching 35 million. As Eric Oliver points out, “while it seems perfectly clear that our lives are less physically demanding than they were in the 1950s, it is not necessarily the case that we are cumulatively burning fewer calories.”¹⁶⁶

As for attempting to regulate what Americans eat this is, if anything, an even more daunting task than attempting to get us to become more active. The assumption that we are getting fat because we are eating too much “junk food” is again, like so many other verities of the war on fat, largely unsupported by any data. For instance, the largest per capita consumers of fast food are single men in their twenties, who have a lower average BMI than the populace as a whole, while tens of millions of “overweight” and “obese” white women are constantly dieting and rarely if ever eat fast food (the typical American dieter – approximately 70 million Americans are dieting on any particular day – is a

¹⁶⁵ For a detailed discussion of how scarce and contradictory the evidence on these issues actually is, see OLIVER, *supra* note 11, at 122-180.

¹⁶⁶ *Id.* at 134.

white woman in her thirties or forties who weighs between 145 and 175 pounds).¹⁶⁷

Recent claims that the government's food pyramid has made people fat because it over-emphasized carbohydrates or dairy products ignore the fact that only 12% of Americans say that they even try to follow the government's dietary recommendations.¹⁶⁸ And government programs designed to get people to walk and bike more and drive less fly in the face of an economy and social structure that is more profoundly committed than ever to the automobile.

Americans love the freedom of being able to drive almost anywhere, the convenience of fast food, and the seemingly endless number of choices in regard to both entertainment and eating that our consumer economy provides us. Eric Oliver puts it well:

The American credo of "life, liberty and the pursuit of happiness" is about giving us the freedom to individually pursue our own gratification to the extent we see fit, the very thing that snacks, cars, and television provide . . . But this is also why all the public health pronouncements about dieting and nutrition, such as "eat less and exercise more," are so ineffective. Although such simple advice may seem reasonable, it flies in the face of a consumer economy that is constantly expanding our choices and freedom. Asking an American to "eat less and exercise more" is like asking an Eskimo not to fish or a devout Muslim not to say daily prayers – it runs afoul of the dominant logic of our very culture.¹⁶⁹

¹⁶⁷ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 137-152. The common belief that weight gain and loss are determined by a simple mechanical relation between caloric intake and activity levels is belied by experiments demonstrating that changes in body metabolism vary enormously between individuals when caloric intake is either increased or decreased. *See, for example*, Claude Bouchard et. al., *The Response to Long-term Overfeeding in Identical Twins*, 322 *NEW ENG. J. MED.* 1477 (1990). A simple thought experiment illustrates the same point: if changes in body mass were regulated by nothing more than changes in caloric intake, then the following outcome would result. A and B have identical initial BMIs, diets, and activity levels, except that A eats one apple per day, and B does not. This minuscule difference would result in A weighing 120 pounds more than B after a decade, if one held everything else constant (one apple contains 125 calories, and 3600 excess calories will produce one pound of weight gain assuming a constant metabolism and activity level). Obviously human bodies regulate body mass far more effectively than such a simplistic model predicts.

¹⁶⁸ USDA Nutrition Insights No. 19 (June 2000), *available at* <http://www.cnpp.usda.gov/Insights/Insight19.PDF>.

¹⁶⁹ OLIVER, *supra* note 11, at 10.

In short, if the legalization of fat represented a response to a genuine health crisis, then we would indeed be in serious trouble. We don't know to what extent the increasing weight of Americans is a product of lower activity levels, greater caloric intake, lower rates of smoking, or the increasing average age of the population, to name just the most likely factors.¹⁷⁰ Nor do we have any idea how to reverse this trend. There is little reason to believe that less candy and more physical education in the schools, more bike paths in our neighborhoods, or more fruits and vegetables in inner city neighborhoods would make Americans appreciably thinner. There is, however, some reason to think that such initiatives could make Americans somewhat healthier. Eating fruits and vegetables and being physically active are beneficial to people of all shapes and sizes, whether or not they lead to any weight loss. So is having access to health care, not being discriminated against in one's job, and not being subjected to the stress of having one's body labeled as diseased because it is among the 57% of American bodies that have a BMI of over 25.

The legalization of fat obscures all this, by expending social resources on something that we can't do anything about, instead of spending scarce public health dollars on interventions that have demonstrable benefits. Public health interventions designed to lessen rates of obesity and overweight are striving to achieve a presently unachievable goal of unknown medical efficacy. In other words, even if all the dire warnings of obesity researchers and public health authorities were true, it still wouldn't make sense for the government to try to make Americans healthier by making them thinner. Fortunately, as we have seen, these warnings are either greatly exaggerated or wholly false.

¹⁷⁰ Campos et al., *The Epidemiology of Overweight and Obesity*, *supra* note 43.

The remainder of this article addresses the question of what factors have led the American public health establishment, and, increasingly, the American legal system, to behave in such irrational ways in regard to questions of weight and health. Given that outside of true extremes weight seems to have little to do with health, that we don't know how to make people thin or even if doing so would be in itself beneficial, and that attempts to produce weight loss often do considerable harm, how did both American public health policy and American law come to be committed to pursuing a pointless and potentially devastating war against the bodies of the 135 million Americans who the federal government currently classifies as weighing "too much?"

III

How the very weak scientific case for the claim that not being thin is a significant independent health risk became the explicit justification for so many dubious public policies is, of course, an enormously complex question. I believe the beginnings of an answer can be found by focusing on three important sources of the current fat panic: the economic and professional interests of obesity researchers; the fact that, in regard to food, weight, and health, much of American culture should be considered eating disordered; and the projection of anxieties about over-consumption in general onto the concept of obesity, which is then employed as a symbol for a "super-sized" culture.

(A) The Economic Psychology of Obesity Research

The creation of public health policies regarding overweight and obesity has been marked by a widespread failure to take into account the particularly severe conflicts of interest that mark obesity research. Consider that the average American woman is 5'4" and weighs approximately 150 pounds.¹⁷¹ Then consider what the market value of a drug might be that, if taken daily, would produce a permanent 20% loss of body mass in this woman, thus allowing her to maintain a weight of 120 pounds. Note that the medical literature completely fails to support the notion that such a reduction in body mass would be anything but cosmetic: women with BMIs of 26 do not have worse health or life expectancy than women with BMIs of 21.¹⁷² Yet the former women have been labeled "overweight" by our public health authorities, while the latter are supposedly "ideally thin." In fact, 51% of American adults currently have a BMI between 25 and 34.9, while only 6% are at weight levels at which a significant association begins to appear between weight and health.¹⁷³ Clearly, the nation's multi-billion dollar pharmaceutical industry has an enormous economic interest in pathologizing the 110 million adults who have been categorized as overweight or mildly obese. This because all drugs have side effects, and, all other things being equal, a drug whose use is considered largely or wholly cosmetic will have much more difficulty gaining regulatory approval than one that promises to save hundreds of thousands of lives per year, by eliminating a supposedly deadly epidemic of overweight and obesity.

Now consider the history of how a BMI of 25 ended up becoming the official definition of what constitutes "overweight." Arguably the single most crucial event in that history

¹⁷¹ Flegal et al., *Overweight and Obesity*, *supra* note 14.

¹⁷² See *supra* notes 106-114 and accompanying text.

¹⁷³ Flegal et al., *Excess Deaths*, *supra* note 42.

was the publication of a 1995 World Health Organization report that recommended this definition be adopted. This report has been cited over and over again by public health authorities in the United States and Europe for the proposition that, as Walter Willett and Meir Stampfer of the Harvard Medical School put it, there is “a strong international consensus among scientists” that a BMI of 25 is a “major contributor to morbidity and mortality.”¹⁷⁴ And where did this “strong international consensus among scientists” officially manifest itself? Principally, in the much-cited WHO report, that was drafted and written by the International Obesity Task Force.¹⁷⁵ The IOTF presents itself as a collection of disinterested research scientists, who see their mission as “inform[ing] the world about the urgency of the problem and persuad[ing] governments that the time to act is now.” (This statement comes from the group’s website, which displays the logo of the WHO). But the reality of the situation is rather more complicated. Readers of the WHO report written by the IOTF are not informed that the IOTF is funded primarily by the makers of two of the world’s most-prescribed weight-loss drugs, Xenical (made by Hoffman-LaRoche) and Meridia (brought to us by the good people at Abbot Laboratories). The IOTF, in short, is a drug-industry lobbying group. As Eric Oliver points out, “few realize that the effort to establish a worldwide standard for what is overweight and obese was sponsored primarily by a company that makes a weight-loss pill.”¹⁷⁶

Within the context of the ongoing medicalization and legalization of weight, this event was typical of how “expert opinion” has concluded that the definitions of overweight and

¹⁷⁴ Walter Willett and Meir Stampfer (letter), *NEW REPUBLIC*, Feb. 15, 2003, at 4.

¹⁷⁵ OLIVER, *supra* note 11, at 28-29.

¹⁷⁶ *Id.*

obesity should be set at such low levels. “The WHO panel,” Case Western Reserve University Medical School professor Paul Ernsberger pointed out to me, “consisted entirely of physicians who run weight loss clinics. Many of these clinics are largely dedicated to prescribing weight loss pills.” As for the role American public health agencies have played in a definitional process that has ended up with more than half the nation’s populace categorized as diseased, Ernsberger notes that “the N[national] I[institutes of] H[ealth] Obesity Task Force, as I pointed out in a letter published in *JAMA*, consisted almost entirely of people running weight loss clinics. This is a more fundamental conflict of interest than taking a few drug company checks. This is a conflict involving livelihood. The NIH and WHO assemble panels of doctors and psychologists who have dedicated their clinical practices to promoting weight loss. Indeed, in their reply to my letter in *JAMA*, the NIH explained that their very definition of an obesity expert is ‘someone who runs a weight loss clinic.’ These people,” Ernsberger points out, “are then asked to objectively evaluate the threat posed by obesity and the benefit provided by the clinics they run. In no other area of medicine are practitioners of a completely unrecognized specialty given such free rein to set their own ground rules.”¹⁷⁷

Eric Oliver notes that “most of the top obesity researchers in the United States, including David Allison, George Blackburn, Tom Wadden, James Hill and Judith Stern, are financially tied to diet and pharmaceutical companies.”¹⁷⁸ A striking example of how some prominent obesity researchers combine the role of research scientist with that of diet pitchman (or woman) is provided by George Bray, who is one of the most cited

¹⁷⁷ CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 44.

¹⁷⁸ OLIVER, *supra* note 11, at 30.

scholars in the discipline, and the editor of *Obesity Research*, the field's top journal. Not only does Bray sport an impressive academic curriculum vita: he is also the developer and marketer of a thigh cream he claims produces weight loss, although statistical evidence for that proposition is hard to find. Indeed, as Oliver points out, "it is difficult to find *any* major figure in the field of obesity research or past president of the North American Association for the Study of Obesity who does not have some type of financial tie to a pharmaceutical or weight-loss company."¹⁷⁹ (When Laura Fraser, author of *Losing It*, an expose of the weight loss industry, asked an obesity researcher who has condemned dieting as ineffectual and psychologically damaging to comment on the policies of a well-known weight loss company that pays him to sit on his board, he replied -- not for attribution -- "What can I say? I'm a consultant for them."¹⁸⁰

Still it would, I think, be a mistake to assume that organizations like the IOTF -- and the American Obesity Association, which is essentially the American version of the same thing¹⁸¹ -- are involved in nothing more than a simple and cynical swindle. One should never underestimate what people are capable of believing with the utmost sincerity when their income depends on it. (On the other hand it's also important to acknowledge that scientists and public health authorities, like other human beings, will sometimes lie when they believe it is in their interest to do so. For instance, consider the set of "talking points" the CDC issued to state health agencies in the wake of the 2005 Flegal study. These talking points asserted that "we know obesity causes about 2/3 of diabetes, 2/3 of heart disease, 20 percent of cancer in women, and 15 percent of cancer in men." Any

¹⁷⁹ *Id.*

¹⁸⁰ FRASER, *supra* note 15, at 212.

¹⁸¹ CAMPOS, THE OBESITY MYTH, *supra* note 23, at xi.

scientist or academic familiar with the relevant data would recognize this statement to be nothing more than an outright fabrication. As Eric Oliver points out, “in the name of sustaining its own political agenda, the nation’s leading health agency was issuing statements about health that were patently false.”¹⁸²

Yet as important as economic motivations undoubtedly are, I believe a more powerful force than straightforward economic interest keeps orthodox obesity researchers from considering any serious critique of their discipline’s orientation. This force might be called the will to maintain one’s professional identity. Indeed, having read a good part of their literature, and having interviewed quite a few of them, I would venture to speculate that, for mainstream obesity researchers as a class, the idea that weight in and of itself is rarely a significant medical issue is literally an unthinkable thought.

Only the most naïve sort of rationalist imagines that science takes place in some kind of pure inductive vacuum, untroubled by prior theoretical commitments, let alone by broader sociological considerations. Thoughts are thinkable only to the extent that they do not contradict one’s fundamental world view -- and an orthodox obesity researcher’s fundamental world view is structured around the axiom that small deviations from a narrow norm of body mass are primary causes of death and disease. It is true that this axiom appears to be false; but to assume that a vigorous, well-funded, and politically influential academic field cannot continue for decades even when it is based on demonstrably false assumptions is to treat the sociology of knowledge as being considerably less complicated than it in fact is. When an academic field has managed to

¹⁸² OLIVER, *supra* note 11, at 50.

organize itself into durable institutional forms – when it has become a separate department in research universities, when it publishes scholarly journals, when it pulls in large grants for conducting research, when it organizes conferences, puts together consensus panels, and advises the government on matters of urgent social policy, etc., -- it can take a very long time for the process of empirical and theoretical debunking to catch up with social reality.

For the orthodox obesity researcher, obesity must be a significant health risk, if only because if it were not then it wouldn't make any sense for obesity research to exist in anything like its present form -- which is to say that the researcher's professional identity would then be rendered absurd. Since a willingness to consider seriously the proposition that one's professional identity is absurd is, among the sorts of people who join professions, an unusual character trait, it follows that for most obesity researchers the proposition that weight is mostly irrelevant to health is literally incredible. By "incredible" I am not using that word, as it is often used, to signify "improbable" or even "undesirable." I mean to say that, for many obesity researchers, their minds will not entertain that idea *at all*. It is ruled out of bounds prior to any interpretation of the evidence.¹⁸³

I base this conclusion partly on reading literally hundreds of studies that display elements of what heterodox obesity researcher Susan Wooley calls the "P.S. phenomenon." These are the conclusions that are presented at the end of a study that has just found a weak correlation between weight and health, a strong correlation between weight loss and

¹⁸³ CAMPOS, THE OBESITY MYTH, *supra* note 23, at 222-23.

increased health risk, and yet more evidence (as if any were needed) that dieting doesn't work. Despite the study's data, its authors will conclude that people ought to keep trying to lose weight anyway. Such conclusions, Wooley says, can be interpreted as a coded message to the drug and weight loss industries: "P.S. Fund me again."¹⁸⁴ I also base it on my interactions in professional settings with obesity researchers. When I point out that many scholars from a variety of academic disciplines are coming to the conclusion that weight is a poor proxy for health, that the evidence for the causal role of excess weight in regard to health risk is weak, and that attempts to make people thinner seem on the whole to do more harm than good, the reaction I get tends to run from incredulity to outrage. (this experience may well parallel that of skeptics at phrenology conferences in the 1850s, or eugenics conferences in the 1920s).¹⁸⁵

B. Anorexic Ideation and the War on Fat

In its attempt to create a precise enough description of the syndrome to allow for an accurate diagnosis, the *Diagnostic and Statistical Manual of Mental Disorders* notes that "anorexic individuals often engage in compulsive rituals, strange eating habits, and the division of food in good/safe and bad/dangerous categories." Another word for this sort of behavior is "dieting." Of course most dieters will never be diagnosed with anorexia, although all anorexics are dieters; indeed, if not for the awkward statistic that somewhere

¹⁸⁴ FRASER, *supra* note 15, at 221.

¹⁸⁵ See, e.g., Pierre Schlag, *Law and Phrenology*, 110 HARV. L. REV. 877 (1997). For example, after I presented a draft of this paper at a law school faculty workshop, with a talk that emphasized why reporting on this issue in the mainstream media is highly unreliable, the first comment from the audience was from a public health law scholar who informed me that my thesis couldn't possibly be correct because it contradicted a series of stories she had just read in the New York Times.

between 5% and 25% of them eventually die from their syndrome, people (overwhelmingly women) suffering from anorexia nervosa might be counted as among the few successful dieters.¹⁸⁶

Dieting, when maintained for any length of time, tends to devolve into a ritualistic and indeed obsessive-compulsive attitude toward food and eating. Given how widespread the diet culture has become in contemporary America (it's estimated that at any particular time about 70 million Americans are on a weight loss diet of some sort),¹⁸⁷ it was perhaps inevitable that the diet mentality – which, as many critics have pointed out, has much in common with eating disordered frames of mind – would affect our ability to make rational judgments about what constitutes a dangerously fat body. As Naomi Wolf put it in her book *The Beauty Myth*, “women’s magazines report that 60 percent of American women have serious trouble eating. The majority of middle-class women in the United States, it appears, suffer a version of anorexia or bulimia; but if anorexia is defined as a compulsive fear of and fixation upon food, perhaps most Western women can be called mental anorexics.”¹⁸⁸

Feminist critics have pointed out that we are bombarded with media images of extraordinarily thin female bodies, to the point where someone like Jennifer Aniston (BMI 18.3, and therefore officially “underweight”) is not considered especially thin – and indeed she isn’t in comparison to many women celebrities, who maintain BMI figures

¹⁸⁶ AMERICAN PSYCHIATRIC ASSOCIATION, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (4th ed. 2000).

¹⁸⁷ GAESSER, *supra* note 10, at 177.

¹⁸⁸ NAOMI WOLF, *THE BEAUTY MYTH* 77 (1991).

well below that.¹⁸⁹ For example, it is fairly unusual to see a white woman on television whose BMI would put her above the tenth percentile of body mass for the population as a whole (Aniston, by way of comparison, is in the third percentile). Meanwhile many if not most male celebrities, including people such as Michael Jordan, Brad Pitt, George W. Bush, Mel Gibson, and George Clooney are either technically overweight, or, in the case of men such as Tom Cruise and Sylvester Stallone, obese.¹⁹⁰ This is just one way in which the current fat panic deeply implicates gender politics. While it is true that most Americans (with significant exceptions among some ethnic minority groups) value thinness and despise fatness, the impact of these preferences affects different people in radically different ways. In particular, America's war on fat has a profoundly negative effect on white women.

Controlling for other factors, heavier white women earn much less and are much less likely to be promoted than women with the same qualifications who happen to be thin. The economist John Cawley has calculated that excess weight alone will cost a woman who is considered 65 pounds overweight by our public health agencies six percent a year in income.¹⁹¹ Researchers have also found that, controlling for other factors, heavier white women are less likely to be rich, and more likely to be poor.¹⁹² Meanwhile, none of these effects are observed among women of color or men of any race (of course people in these groups are subject to various forms of social discrimination, but researchers have

¹⁸⁹ For feminist critiques see, among others, SUSAN BORDO, *UNBEARABLE WEIGHT* (1993); CHERNIN, *supra* note 7; SUSIE ORBACH, *FAT IS A FEMINIST ISSUE* (1978); CHARISE GOODMAN, *THE INVISIBLE WOMAN* (1995).

¹⁹⁰ WALL ST. J., July 23, 2002, at A1.

¹⁹¹ John Cawley, *The Impact of Obesity on Wages*, 39 J. HUMAN RESOURCES 451 (2004).

¹⁹² Peter B. Goldblatt et. al., *Social Factors in Obesity*, 192 JAMA 1039 (1965).

not found evidence that they face additional discrimination because of their weight).¹⁹³ White women, in other words, pay an enormous and concrete price for America's obsession with thinness. Indeed, that obsession is so powerful that most white women see themselves as overweight, even when they are below the government's (absurdly low) official definition of BMI 25. Again, this outcome is not seen among white men or people of color.¹⁹⁴

Over the course of the last century, what has been considered the ideal body weight for American women has been drifting constantly downward. The Gibson Girl was thinner than the voluptuous ideal of the 1890s, while the Flapper was thinner than the Gibson Girl, and so on and on, reflecting a long-term trend that has produced the age of Calista Flockhart and Kate Moss.¹⁹⁵ (By way of contrast, at the height of the Flapper fashion trend, the reigning Miss America was 5'7" and 140 pounds – almost zaftig by today's emaciated standards.)¹⁹⁶ This aesthetic trend has played a key role in transforming the average American's weight into an officially pathological condition, which in turn is now inspiring increasingly elaborate legal interventions.

One clue to why there is such a radical mismatch between the (lack of) evidence for the proposition that we are threatened by a calamitous obesity epidemic and the moral panic that has gripped our public health policymakers regarding this issue is found in the reactions one gets when the subject is fat. When I have presented talks and participated in

¹⁹³ *Id.*

¹⁹⁴ OLIVER, *supra* note 11, at 80.

¹⁹⁵ See generally SEID, *supra* note 7; SCHWARTZ, *supra* note 7.

¹⁹⁶ SEID, *supra* note 7, at 97.

debates regarding this topic, a reaction I often get from those who disagree is not something along the lines of “that’s interesting, but I think you’re wrong, and here’s why,” but rather shock, horror, outrage, and disgust. In other words, those who are invested in the war on fat, either literally or psychologically, tend to react to dissent in the same way Americans in general are socialized to react to a fat body. Time and again, I have been accused of “giving people permission to be fat” (imagine being told that one’s arguments were “giving people permission” to be female, or black, or short), and of conveying a deadly message that will, if heeded, unleash untold devastation on the American populace. I mention these accusations not because I believe my own experiences are of any special interest -- anyone who has questioned the orthodoxy regarding weight and health can tell similar stories -- but because of the glimpse they give into the psychology that underlies America’s intense fear and hatred of fat.¹⁹⁷

That psychology is in many ways a form of anorexic ideation. Anorexic ideation is what causes an emaciated teenage girl, on the verge of starving herself to death, to look in a mirror and see a fat body. A form of anorexic ideation, I believe, also causes certain prominent obesity researchers to claim that most people would be healthier if they maintained a BMI of between 18.5 and 21.9 (for an average height woman, this is between 108 and 127 pounds).¹⁹⁸ This claim has been put forth repeatedly by researchers at America’s most prestigious medical school, which does change the fact that it is insane. I am aware that calling a proposition “insane” is not considered the sort of

¹⁹⁷ Eric Oliver reports a similar set of experiences. When attending the annual meeting of the North American Association for the Study of Obesity in 2004, he found that “in more than a dozen conversations with participants, when I pointed out how the scientific evidence linking obesity to many diseases and deaths was weak, I was either attacked or simply given a befuddled look.” OLIVER, *supra* note 11, at 50.

¹⁹⁸ See *supra* note 134 and accompanying text; *infra* note 201 and accompanying text.

judicious, measured judgment that is supposed to mark academic debate, but in this context it is merely descriptive of a remarkable situation. To claim that the average American woman would be healthier if she somehow forced herself to maintain a weight of between 108 and 127 pounds is every bit as bizarre as claiming that the average American woman would be healthier if she forced herself to maintain a height of between 5'9 and 5'11." Yet this is certainly not the first time that a complex combination of economic, psychological, and political factors have combined to produce the sort of widespread panic that leads society's most trusted authority figures to make claims that have no basis in reality.¹⁹⁹ Properly interpreting that panic will require a nuanced, methodologically rich engagement with the details of the particular social contexts in which those claims are made -- what anthropologists call "thick description."²⁰⁰ For example, it may well be that an adequate account of the radical mismatch between the non-existent evidence for the claim that most people will maximize their health by trying to be extremely thin, and the confidence with which this claim is put forward by certain authority figures would involve, among other things, a careful ethnography of the Harvard Medical School, in an attempt to determine what personal, institutional, and cultural factors are producing such extreme distortions of the available data.

In short, much of the advice Americans get about weight can be compared to getting advice about drinking from people who are alcoholics and don't know it. At times this parallel can be quite literal. I was told by an eating disorders expert that he could with a

¹⁹⁹ Some other examples from recent American history include the claim that marijuana is an extremely dangerous drug; that the Department of State was full of communist agents; and that satanic ritual abuse of schoolchildren by their teachers was commonplace. CAMPOS, *THE OBESITY MYTH*, *supra* note 23, at 235.

²⁰⁰ On "thick description," see CLIFFORD GEERTZ, *THE INTERPRETATION OF CULTURES* (2000).

fair degree of confidence diagnose a particularly well-known and influential obesity researcher with whom he had had a good deal of professional contact as anorexic, “on the basis of her history, body habitus and ideation.” Translated into English, this means she was an extraordinarily thin, high-achieving upper class white woman who regularly exhibited an extreme fear and loathing of body fat. A related phenomenon is the number of (almost always) male obesity researchers who are either “overweight” or “obese” according to their own definitions. For instance, Walter Willett of the Harvard Medical School, who is the best-known proponent of the idea that people should try to remain in the bottom half of the government’s recommended weight range, i.e., that they should try to maintain a BMI of 18.5-21.9, is himself around 30 to 45 pounds above that range.²⁰¹ Willet, a trim, physically active 60-year-old man, is certainly nowhere close to being considered “fat” in cultural terms, yet he apparently believes that it makes sense to recommend that Americans try to maintain a weight range far below the one that he, an immensely privileged person, has been able to achieve.

Interestingly, it is almost impossible to find, among the thousands of stories that have appeared in the media quoting obesity researchers about the deadly consequences of overweight and obesity, journalists who ask these researchers if they have been able to follow their own advice, even when it is obvious that they haven’t. This is more or less

²⁰¹ Willett’s BMI can be estimated as between 25 and 26 based on information he conveyed recently to journalist Nanci Hellmich. See Hellmich, *Is Fat Getting a Bum Rap?*, USA TODAY, May 4, 2004, at D7. This same story noted that, at five foot eight inches tall and 165 pounds, I have a BMI of 25, and am therefore technically “overweight” even though I run 30 miles per week, and am, like Willett, culturally typed as thin, or at least not fat. An amusing glimpse into the psychology of certain obesity researchers was provided by Willett’s colleague JoAnn Manson, who, when she read that I am technically overweight according to government guidelines, claimed that my criticism of her work was motivated by “an egregious effort to justify” my “own general physical appearance and body build.” JoAnn Manson, *Obesity Column a Disservice to the Public*, ROCKY MOUNTAIN NEWS, May 17, 2002, at 58A.

the equivalent of constantly quoting medical experts and public health officials about the supposed dangers of marijuana smoking, and never mentioning that these experts were puffing on joints (and inhaling) throughout the interviews.

C. Super Sized Nation

Produced on a budget of \$65,000, Morgan Spurlock's 2004 documentary *Supersize Me* grossed \$28.5 million worldwide, making it one of the most financially successful documentaries of all time. Interestingly, a film in which a previously unknown American moviemaker documented the results when he ate three super-sized meals per day at McDonald's for a month made nearly two thirds of its box office revenue outside of North America.²⁰² Clearly, the film – during the course of which Spurlock supposedly gained 26 pounds and saw a serious spike in his blood pressure and cholesterol levels – touched a chord both in the United States and elsewhere. This may well have been because, although *Supersize Me* is putatively about the evils of fast food, its real underlying theme is American excess in general.

Originally coined by McDonald's to describe their largest meals (the company phased out the category two years ago, supposedly because of low profit margins, although critics suspected the decision may have had more to do with bad publicity and potential legal liability) "super-size" have become common adjective for everything from SUVs to gigantic tract houses -- also known as "McMansions" -- to shopping malls, churches, and American foreign policy. Consider a 2000-word story published in December of 2005 in

²⁰² Box office figures are taken from the website Box Office Mojo, www.boxofficemojo.com.

the *Washington Post*, about increasingly lavish bar and bat mitzvahs. Inspired by the bat mitzvah of the daughter of David H. Brooks, the CEO of a maker of body armor for the military, the story describes how Brooks reportedly spent millions of dollars on a six-hour party for a group of 13-year-olds and their parents. Brooks rented out the chic Rainbow Room atop Rockefeller Plaza, and flew in various high-profile entertainers, including the rapper 50 cent, the rock group Aerosmith, and singers Tom Petty and Stevie Nicks. The story notes that Brooks' fete was a "statistical outlier," yet it goes on to describe how every year the cost of hundreds of New York bar and bat mitzvahs runs well into six figures. "By general consensus," the *Post* reports, "this whole bar mitzvah thing started to supersize about 25 years ago."²⁰³ Before that, it was possible to celebrate this rite of passage with a modest affair, perhaps a cocktail party followed by dinner . . . The grandiose bar mitzvah – here's a shocker – seems to be an American invention. It isn't hard to find rabbis who worry about this arms race to ever-flashier fetes, [and] who think parents are driven by the need to publicly demonstrate their affluence."²⁰⁴

Indeed, the super-sizing of America appears to have a great deal to do with what Thorstein Veblen identified a century ago as the practice of "conspicuous consumption." For example, a story in the on-line magazine *Salon* explores the ironies that mark the movement to build "environmentally correct" housing: residences that use energy efficiently and minimize environmental degradation. The story's theme is that "even the most eco-friendly home may do more harm than good when it is super-sized." The story notes that "green building is one of the fastest-growing sectors in the exploding market

²⁰³ Perhaps not coincidentally, this is also when "by general consensus" the "obesity epidemic" began.

²⁰⁴ David Segal, *In N.Y., Bar and Bat Mitzvahs Add Up to Lavish, Theatrical Events*, WASH. POST, Dec. 13, 2005, at C01.

for environmentally friendly materials and technologies.” Such technologies can lessen the “ecological footprint” of a house by between 10 and 50 percent per square foot. The irony is that many of these residences are so large that the gains in ecological efficiency are more than offset by the ever-expanding size of the average American home (50 years ago, the average house was 1100 square feet, and contained 4.2 residents. Today, the average house is nearly twice as large – 2150 square feet -- and the average household is nearly twice as small, containing 2.3 residents). The story quotes an architect who specializes in building “green” housing: He points out that a 4000-square foot eco-friendly house is essentially an oxymoron, like a fuel-efficient SUV: “My clients want to build green, but they want to build bigger. It’s a contradiction in our culture.”²⁰⁵

As for SUVs, no consumer good has come to be more symbolic of American size and excess. Thus an essay in the *New York Review of Books* manages to touch on anxieties about American body fat, conspicuous consumption, and imperial hubris in one paragraph:

If you want to understand the way America appears in the world today, consider the sports-utility vehicle. Oversized and overweight, the SUV disdains negotiated agreements to restrict atmospheric pollution. It consumes inordinate amounts of scarce resources to furnish its privileged inhabitants with supererogatory services. It exposes outsiders to deadly risk in order to provide for the illusory security of its occupants. In a crowded world, the SUV appears as a dangerous anachronism. Like U.S. foreign policy, the sports-utility vehicle comes packaged in sonorous mission statements, but underneath it is just an oversized pickup truck with too much power.²⁰⁶

²⁰⁵ Linda Baker, *Great Big Green Monster Mansions*, Salon.com, July 7, 2004.

²⁰⁶ Tony Judt, *Anti-Americans Abroad*, N.Y. REV. BOOKS, May 1, 2003.

A newspaper story about manufacturers who market products designed for larger people makes the obesity-SUV connection even more explicit, without bothering to hide the disgust the writer feels for both phenomena: “Plus sizes are openly marketed as glamorous, not shameful. Hulking SUVs rule the road, at least in part because they can comfortably accommodate bulky people.”²⁰⁷ And the metaphorical connection between gas-guzzling vehicles and junk-food addicted Americans is exploited by an op-ed writer for the *Atlanta-Journal Constitution*, who, when commenting on an energy-conservation measure that will save the United States 100,000 barrels of oil a day over a four-week stretch every year, notes that since America “uses about 21 million barrels of oil a day, that’s like trying to cure obesity by forcing McDonald’s to serve diet sodas with its Big Macs and supersize fries.”²⁰⁸

In Great Britain, anxieties about over-consumption have inspired a nascent movement among younger fashion-forward (anti)consumers that has been given a title by trend forecasters: New Puritan. According to the *Guardian*, “a New Puritan does not binge drink, smoke, buy big brands, take cheap flights, eat junk food, have multiple sexual partners, waste money on designer clothes, grow beyond their optimum weight, subscribe to celebrity magazines, drive a flash car, or live to watch television.” The paper notes “the list is likely to grow longer: research . . . has found that 80 per cent of people agreed that alcohol should not be allowed at work at all; 25 per cent said snack products should not be offered at business meetings; more than a third agreed that we should think twice

²⁰⁷ Lillian Thomas, *Should We Be Making More Room For Bigger People?*, PITTSBURGH POST-GAZETTE, Nov. 9, 2003, at A1.

²⁰⁸ Cynthia Tucker, *With Leaders in Denial, Our Destructive Appetite For Oil Remains Unchecked*, BALTIMORE SUN, Aug. 1, 2005, 9A.

before giving sweets and chocolates as gifts to family and friends, and a further 25 per cent that that ‘the government should start a campaign to discourage people from drinking alcohol on their own at home (this rises to 41 per cent in Scotland).’ Perhaps the most prominent New Puritan is celebrity TV chef Jamie Oliver, who has led an apparently successful campaign to remove “junk food” from British schools (the government has announced a nationwide ban on junk food in British school cafeterias and school vending machines, effective September 2006). The *Guardian* sums up the New Puritan movement this way: “Think of it as the dieticians’ favourite adage, ‘a moment on the lips, a lifetime on the hips,’ given socio-economic resonance.” And an American professor of medicine is quoted as advising Britons to “use America as a cautionary tale, ‘an indication of what happens when citizens turn into consumers, solely driven by immediate reward.’”²⁰⁹

Americans worry that we have become too big for our own good: that we consume too much, too quickly; that our cars, our houses, and our shopping malls are too large; that our ambitions to make the world safe for democracy and McDonald’s (not necessarily in that order) are too grand. Under these circumstances, obsessing about the ten to fifteen pounds the average American has gained over the course of the last generation has become a convenient way of avoiding a more direct engagement with any number of issues regarding America’s size, excessiveness, and extraordinarily high rate of consumption.

²⁰⁹ Lucy Siegle, *Just Say No: They’re the New Puritans*, THE GUARDIAN, Oct. 23, 2005, at 18.

One way of understanding America's current obsession with 'obesity' is as a symptom of a deeper fear that we are threatening to consume the whole planet. Bulimia, for example, can be taken as a metaphor for the excesses of consumer capitalism. 50 years ago, marketing analyst Victor Lebow pointed out that "our enormously productive economy demands that we make consumption a way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction in consumption . . . We need things consumed, burned up, worn out, replaced, and discarded at an ever-increasing rate."²¹⁰ In such a culture, the binge-purge rituals of bulimics mirror our acquisitive frenzy, in which we purchase far more than we need, only to purge ourselves as a host of new items is added to consumer capitalism's endless buffet, in its doomed quest to satisfy our insatiable appetites.

For upper class Americans in particular, it's easier to deal with anxiety about excessive consumption by obsessing about weight, rather than by actually confronting far more serious threats to our social and political health. Upper-class Americans are much thinner than their working-class and poor brethren, and they consume much more (in contemporary America there is an inverse relationship between body mass and income, and income levels largely determine overall levels of consumption). We may drive environmentally destructive SUVs that do long-term damage to the atmosphere; we may consume a vastly disproportionate share of the world's scarce resources; we may live in 4000-square foot houses with one other person and a dog; we may support foreign policy initiatives that require the nation to throw its military weight around – but at least we don't eat that extra cookie when it's offered to us.

²¹⁰ MICHAEL F. JACOBSON & LAURIE ANN MAZUR, *MARKETING MADNESS* 191 (1995).

IV

In his book *The Culture of Fear: Why Americans Are Afraid of the Wrong Things*, sociologist Barry Glassner explores why particular fears and anxieties capture our collective imagination. Glassner demonstrates that it isn't merely a matter of being afraid of big risks and indifferent toward small ones. Drawing upon the work of anthropologist Mary Douglas, Glassner argues that certain (often quite small) risks get selected for special emphasis "either because they offend the basic moral principles of society or because they enable criticism of disliked groups." Glassner also argues that another reason why Americans "harbor so many misbegotten fears is that immense power and money wait those who tap into our moral insecurities."²¹¹ These insights have considerable relevance to America's ongoing legalization of fat.

The intense fear and hatred that Americans have of body fat, and the enormous anxiety the thought of becoming even mildly "overweight" triggers in many Americans (more than one quarter of college students say that becoming fat is the worst thing that could happen to a person)²¹² are products of factors that have little or nothing to do with the health risks associated with higher than average weight. Consider, for instance, the health risks associated with being male. These are far greater than the health risks associated with higher weight; in most epidemiological studies, the mortality rate observed among so-called "morbidly" obese women (BMI >40, a body mass that includes the 98th

²¹¹ BARRY GLASSNER, *THE CULTURE OF FEAR* xxvi-xxvii (1999).

²¹² Rebecca Puhl & Kelly D. Brownell, *Bias, Discrimination, and Obesity*, 9 *OBSESITY RES.* 788 (2001).

percentile and up of the population) is lower than that associated with being an “ideal weight” man. Yet no one speaks of a masculinity epidemic. The instinctive response to this point is to claim that while fat people can become thin, men cannot become women - - yet both these claims are inaccurate. It is not that much less likely, statistically speaking, for a man to undergo a sex change operation than for an obese person to become thin. And indeed castration extends life expectancy, as was first observed by Arab physicians in the Middle Ages. So perhaps there actually is a cure for the masculinity epidemic, although the costs of pursuing it seem rather high.

Another sociologist, Abigail Saguy, has suggested that current fears that America is in the midst of a potentially devastating obesity epidemic can be understood as part of what social scientists call a “moral panic.”²¹³ Moral panics often occur during times of rapid social change, and involve an exaggeration or fabrication of risks, the use of disaster analogies, and the projection of societal anxieties onto stigmatized groups. According to Stanley Cohen, who coined the term, moral panics tend to follow a stylized pattern. First, a behavior or group is categorized as dangerously deviant. Members of this group are perceived as “folk devils,” that is, people who are thought to be engaged in evil behavior that represents a serious threat to social order. Demands are made for the authorities to take steps to neutralize the threat posed by these people, so that society may return to the “normal” conditions that prevailed before the folk devils began to wreak havoc. Cohen argues that a moral panic reaches its peak when discussion of the issue becomes dominated by a “disaster mentality,” which resembles the state of mind that occurs

²¹³ Abigail Saguy, *Fat Devils and Moral Panics: News Reporting on Obesity Science* (forthcoming) [hereinafter Saguy, *Fat Devils*].

“before, during, and after a natural disaster.” This is marked by “predictions of impending doom,” media exaggerations and overreactions, the “institutionalization of threat,” and even mass delusions.²¹⁴

Despite the very weak evidence that obesity represents a health crisis, scientific studies and media reports alike continue to treat the American population’s weight gain as a current or impending disaster. Saguy recently undertook a content analysis of 221 press articles discussing scientific studies of obesity, and found that over half employed alarming metaphors such as “time bomb.” She also found that over 60% of the news stories blamed obesity on individual choices, while only about 30% discussed any structural factors that might influence weight gain. Saguy’s findings regarding the ways obesity is discussed in conjunction with race and economic status are particularly striking and suggestive. She found that articles that reported on African Americans or Latinos were over eight times more likely to blame obesity on bad food choices, and over thirteen times more likely to blame it on sedentary lifestyles. Articles reporting on the poor were four times more likely to blame obesity on sedentary lifestyles. Yet articles referencing minority groups and the poor were also more likely to mention the role of structural factors, such as the food and restaurant industries, in the creation of an obesity epidemic. Saguy suggests this pattern indicates that when obesity “is presented as a particular concern for the poor and minorities, it is more likely to lead to discussions of how these fat individuals suffer from both their own moral failings and exploitation by the food and restaurant industries. The fat, poor, and minority population is thus represented as both

²¹⁴ STANLEY COHEN, *FOLK DEVILS AND MORAL PANICS* (1972).

‘demon users’ (of food and sedentary leisure) and victims of the ‘demon (food) industry.’²¹⁵

An especially vivid example of the transformation of Americans who are both fat, poor, and members of minority groups into classic folk devils is provided by this passage from a cover story in *Harper’s* magazine:

Places like McDonald’s and Winchell’s Donut stores, with their endless racks of glazed and creamy goodies, are the San Francisco bathhouses of [the obesity] epidemic, the places where the high-risk population engages in high-risk behavior. Although open around the clock, the Winchell’s near my house [in Pasadena, California] doesn’t get rolling until seven in the morning, the Spanish-language talk shows frothing in the background while an ambulance light whirls atop the Coke dispenser. Inside, Mami placates Miguelito with a giant apple fritter. Papi tells a joke and pours ounce upon ounce of sugar and cream into his 20-ounce coffee. Viewed through the lens of obesity, as I am inclined to do, the scene is not so *feliz*.²¹⁶

The intense disapproval and even disgust that runs throughout this *Harper’s* story indicates that the fat non-white people who are its subject are perceived by the writer to be violating some crucial cultural norms. Indeed, as Eric Oliver points out, the unexceptionable scientific observation that one’s weight is to a significant extent outside of one’s control contradicts certain basic tenets of American culture and ideology.

Listen closely to how Americans criticize fat people and you’ll find rationalizations that are remarkably similar to those historically used to justify negative attitudes toward all marginalized groups in America. Fat people are thought to be gluttonous, lustful, greedy, lazy, weak-willed, and lacking any kind of self-control. If fat people are targets of our contempt, it is only because they have brought this on themselves with their unwillingness to take responsibility for

²¹⁵ Saguy, *Fat Devils*, *supra* note 213.

²¹⁶ Greg Critser, *Let Them Eat Fat: The Heavy Truths About American Obesity*, HARPER’S, Mar. 2000, at 41.

their own actions. The ideology that underscores this prejudice is an ethos of individualism and self-reliance. As with blacks and the poor, fat people are thought to violate some of the most fundamental tenets in American political culture: that all people are fundamentally responsible for their own welfare; that control and self-restraint are the hallmarks of virtue; and that all Americans are obliged to work at improving themselves.²¹⁷

Studies of moral panics also suggest that such panics often displace broader anxieties about changing gender roles.²¹⁸ Given the complex gender politics that regulate the issue of who, culturally speaking, counts as fat in America, and in particular the extraordinarily negative impact that being heavier has on white women, it should not surprise us to see purveyors of the fat panic accusing women who transgress traditional gender roles of being responsible for the obesity epidemic. For example, an advertisement that ran recently in a major American newspaper displayed a photograph of a slim white woman in business dress, rushing down a city street clutching a large briefcase, apparently late for an important meeting. The ad's copy blamed "30 years of feminist careerism" for an epidemic of childhood obesity and diabetes: "With most mothers working, too few adults and children eat balanced, nutritious, portion-controlled home cooked meals. Within a generation 50% of Americans will become diabetic, creating a medical and financial nightmare likely to crush our healthcare system."²¹⁹

We can begin to see how the insight that societies sometimes focus on certain risks "either because they offend the basic moral principles of society or because they enable criticism of disliked groups," may have particular relevance to the war on fat. Indeed, in

²¹⁷ OLIVER, *supra* note 11, at 73.

²¹⁸ See generally NICOLA KAY BEISEL, *IMPERILED INNOCENTS: ANTHONY COMSTOCK AND FAMILY REPRODUCTION IN AMERICA* (1997); JAMES MORONE, *HELLFIRE NATION* (2003).

²¹⁹ WASH. TIMES, May 24, 2005.

America today fat has become a synecdoche – that is, a metaphorical part that represents the whole – for a host of things that Americans fear. Fat symbolizes poverty, non-whiteness, loss of social and economic status, lack of self-discipline and the out of control over-consumption it leads to, and loss of control in general. As the *Harper's* story quoted above puts it: “In upscale corporate America, being fat is taboo, a sure-fire career-killer. If you can’t control your own contours, goes the logic, how can you control a budget and staff? Look at the glossy business and money magazines with their cooing profiles of the latest genius entrepreneurs: To the man, and the occasional woman, no one, I mean *no one*, is fat.”²²⁰

In short the “logic” of the war on fat is the logic of a moral panic rather than of disinterested scientific judgment. Ultimately, everything that enables that war -- the greatly exaggerated claims about the health risks associated with higher than average weight; the credulity of journalists who seldom ask hard questions of researchers whose work is riddled with serious conflicts of interest; the willingness of the American public to continue to swallow weight loss prescriptions that have never worked; the eagerness with which politicians and lawyers enact policies that there is no reason to believe could accomplish what they are supposed to accomplish – is driven by the fact that this war resonates with deeply held beliefs across the political and ideological spectrum. For many conservatives, the “obesity epidemic” is a symptom of general moral laxness and decline, and especially the loss of the ability to defer gratification that has always been the key to

²²⁰ Critser, *supra* note 216.

what Max Weber identified as the Protestant work ethic.²²¹ From this point of view, overweight and obesity are prime examples of the importance of individual responsibility, or rather the lack of it. The political conclusions that flow from such an interpretation include the idea that, while holding corporations responsible for making Americans fat is preposterous, recognizing that fat Americans are driving up healthcare costs helps explain why there is nothing fundamentally wrong with the healthcare system. On this view, exploding healthcare costs are not caused by a dysfunctional market in need of regulatory correction, but rather by irresponsible people who increasingly burden our system with illnesses they have brought on themselves. Thus a focus on obesity can, among other things, help disarm calls for governmental intervention in the healthcare market.

For many toward the left of the political spectrum, the folk devils of the obesity epidemic are greedy corporations and the rampant over-consumption they encourage. From this perspective, the “obesity epidemic” is a symptom not of a loss of moral fiber, but of deep structural dysfunctions in the American economic and class system. Yet although this point of view is in theory committed to seeing heavier Americans as victims of largely irresistible structural forces, much liberal commentary on fat in America is riddled with the sort of overt prejudice toward the heavier than average that marks the *Harper’s* article quoted above. Indeed, the sort of person who would no doubt be horrified by the idea that the sight of poor, or black, or Hispanic, or gay people might fill him with disgust is, as long as the subject is supposedly fatness, capable of writing passages like this:

²²¹ Max Weber, *Protestant Asceticism and the Spirit of Capitalism*, in WEBER: SELECTIONS IN TRANSLATION 138-173 (Walter Garrison Runciman ed., 1978). See also CAMPOS, THE OBESITY MYTH, *supra* note 23, at 218-237.

What do the fat, darker, exploited poor, with their unbridled primal appetites, have to offer us but a chance for we diet-and-shape-conscious folks to live vicariously. Call it boundary envy. Or rather boundary-free envy . . . Meanwhile, in the City of Fat Angels, we lounge through a slow-motion epidemic. Mami buys another apple fritter. Papi slams his second sugar and cream. Another young Carl [the 500-pound man whose medical crisis opens the article; it is never noted that he is in the 99.99th percentile of body mass] supersizes, and double supersizes, then supersizes again. Waistlines surge. Any minute now, the belt will run out of holes.²²²

This is the essentially apocalyptic vision that underlies all the exaggerated statistics and alarmist headlines and dubious initiatives. It is an over-simplification to say that the current fat panic is driven by an urge, even if repressed and largely unconscious, to round up the usual suspects: the poor, non-white, and socially marginal people who will never be seen smiling at us from the glossy pages of the magazines that represent what a “normal” American is supposed to look like. It is much too simple – but there is some truth to it as well.

Conclusion

The legalization of fat represents another journey down a well-trodden path. A visceral reaction is transformed into an aesthetic and moral judgment, which transfigures the subject of judgment into a medical risk factor, which in turn over time becomes a full-fledged “disease,” all of which eventually inspires bureaucratic regulation in general, and legal sanction in particular. Thus, for example, smoking marijuana went from being something exotic and *déclassé*, to being considered disgusting and wrong, to being a

²²² Critser, *supra* note 216.

serious health risk, to being categorized as a Class I drug, to becoming an activity that led to over seven million arrests between 1993 and 2004.²²³ Higher than average body fat, which for thousands of years has been a sign of status and power in countless cultures, has over the course of a few decades in America gone from being merely unfashionable, to being a deadly epidemic disease that threatens to destroy our economic and social order. And, like reefer madness, the moral panic surrounding fat promises to linger for some time.

What then should we be doing about the fact that approximately 57% of Americans have a BMI of 25 or above? The short answer is: nothing.²²⁴ After all, the first principle of medical ethics is “first, do no harm” – a wise dictum that ought to be applied to the ongoing legalization of fat with special force. Making body mass a subject of rational bureaucratic intervention would require that we had tolerably accurate answers to at least the following questions:

- (1) What proportion, if any, of the health risk associated with obesity is actually caused by obesity?
- (2) Would turning fat people into thin people in and of itself improve their health?

²²³ Federal Bureau of Investigation, Uniform Crime Reports, *Crime in the United States, 2003* (2004).

²²⁴ The longer answer, the details of which are beyond the scope of this paper, involves a growing movement among health professionals and others known as Health at Every Size, or HAES. HAES is based on the core principle that focusing on body weight when attempting to improve health is at best useless and often harmful. Those who advocate a HAES approach emphasize intuitive eating and pleasurable physical activity, not for the sake of weight loss, but rather for health enhancement. HAES practitioners also emphasize that while permanent weight loss is out of the reach of most people, improvements in health are within the reach of almost everyone, and that good health can be achieved by people of all shapes and sizes. HAES advocates point to both the inevitability of body diversity (the idea that everyone or even a large majority of people can be thin is completely unscientific), and the harmful health effects of size discrimination. For introductions to the HAES philosophy, see HEALTH AT EVERY SIZE, a peer-reviewed medical journal that brings together academics and practitioners interested in the HAES approach to questions of health and weight.

- (3) What are the odds of being able to do this at any point in the foreseeable future?
- (4) What percentage of Americans would be “overweight” or “obese” if everyone in America had an optimal lifestyle?

The honest answer to all of these questions is, “we don’t know” – which is precisely what no policymaker or academic ever wants to admit.

What we do know is that people who have access to decent medical care are healthier than people who don’t. We know that people who are not discriminated against in education and employment are healthier than people who are. We know that people who are physically active are healthier than people who aren’t. We know that people who have reasonable access to fresh fruits and vegetables eat a healthier diet than people who don’t. We know that people who do not suffer from high levels of stress are healthier than people who do. Government policies that address these issues have a reasonable prospect of helping Americans improve their already excellent health. Statutes, agency rulings, and lawsuits designed to make Americans thinner are at best a waste of scarce resources, and at worst exacerbate the considerable social disadvantages that burden tens of millions of Americans who are not thin. (Indeed, given what they are currently subjected to, it’s remarkable that heavier Americans are not nearly as unhealthy as obesity researchers claim they are).

The focus of health law and policy should be on improving health, not on pursuing a scientifically bogus, practically unachievable, and socially destructive ideal of thinness. In the end, the way to win the war on fat is to call off the fruitless search for weapons of body mass destruction, declare victory, and go home.

