But what patients should most appropriately expect from their physicians is an informed judgment about their complaint and symptoms—and an honest acknowledgement that those judgments are limited and fallible. If both patients and physicians were able to accept the reality that sometimes medicine has nothing to offer to treat difficult and intractable conditions, then physicians would likely be less inclined to prescribe placebos.

SOCIAL CONTEXT

The Obesity Epidemic: Autonomy versus Public Health

There is broad consensus among medical researchers and clinicians that obesity is one of the most serious threats to public health in the United States and across the globe. Obesity is causally associated with the following disorders: type 2 diabetes, hypertension, heart disease, cancer, stroke, kidney failure, and blindness, not to mention slow-to-heal wounds that can lead to foot and leg amputations. Someone with a body mass index (BMI) of 30 or more is, by definition, obese. (BMI is the ratio of height to weight. Thus, someone who is six feet tall is obese when he reaches 221 pounds; someone five feet, six inches tall is obese when she reaches 186 pounds.) As the number of obese people in the population rises, the number of diseases caused by obesity also rises, and each disease is associated with high medical costs, disability, and death.

A Heavy Toll

The human cost of obesity is particularly dramatic in the United States and other industrialized nations. A 2005 *New England Journal of Medicine* study identified obesity as the primary cause of a trend by which, for the first time in America's history, life expectancy is growing shorter rather than longer. A 2009 study of nearly 900,000 individuals from North America and Western Europe found that obesity takes two to four years off of the average life span and that being severely obese (a BMI above 40) reduces life span by eight to ten years. A 2014 analysis of twenty health studies found that obesity costs individuals as much as fourteen years of life.

Researchers from Columbia University's Mailman School of Public Health estimate that obesity is responsible for 18 percent of the deaths of Americans aged 40 to 85, and many experts think obesity will soon overtake or already has overtaken tobacco as the leading cause of preventable death in the United States. (Obesity already accounts for more deaths than high cholesterol and alcohol abuse, not to mention suicide and homicide.) The number of cases of disability and sickness associated with obesity is estimated to be several times greater than the hundreds of thousands of deaths in America that are caused by obesity each year.

As disheartening as these statistics are, many experts think that the situation is likely to get worse before it gets better, mostly due to high levels of childhood obesity. "A 5-year-old growing up today is living in an environment where obesity is much more the norm than was the case for a 5-year-old a generation or two ago," said Bruce Link, one of the Columbia researchers. "Drink sizes are bigger, clothes are bigger, and greater numbers of a child's peers are obese. . . . And once someone is obese, it is very difficult to undo. So it stands to reason that we won't see the worst of the epidemic until the current generation of children grows old."

Good News and Bad News

The past decade has produced one piece of good news with regard to obesity in the United States: the average rate of obesity in the United States appears to have remained more or less constant since 2005. This obesity "plateau" initially gave public health experts hope that increased nutritional awareness had actually restrained Americans' consumption of high-fat, high-calorie foods. Nevertheless, Americans' waistlines continued to expand during the same period and the overall obesity rate remains extremely high, especially compared to that of previous generations. More than 34 percent of adults are now obese—a percentage that has doubled since 1980. During the same period, the percentage of obese children tripled, to reach 17 percent.

While the average rate of obesity may have leveled off in the United States, the numbers remain starkly different for different segments of the population. For example, children whose adult head of household didn't complete high school were twice as likely to be obese as those whose adult head of household completed college. In addition, African Americans and Hispanic Americans have significantly higher rates of obesity (47.8 and 42.5 percent, respectively), compared with European Americans (32.6 percent) and Asian Americans (10.8 percent). Perhaps the most striking differences with regard to obesity are geographic, with southern and midwestern states reporting obesity rates well over 30 percent, while coastal and mountain states reporting significantly lower obesity rates. Projections by the Trust for America's Health indicate that many states will have majority-obese populations by 2030.

Soaring Costs

The costs of caring for America's obese population are steep, with as much as $147 billion estimated for 2008 alone, representing almost 10 percent of all medical spending. Other estimates have placed the cost of American obesity even higher. The American Diabetes Association estimates that diabetes costs Americans $245 billion a year, the vast majority of it for the type 2 diabetes commonly triggered by obesity and inactivity.

Diabetes is one of the most visible manifestations of the obesity epidemic. Almost 30 million adults and children (9 percent of the population) have diabetes, and 1.7 million new cases are diagnosed each year. Every twenty-four hours, the disease causes 48 people go blind, 120 to develop end-stage kidney disease, and 238 to lose limbs to diabetes-related amputations. The disease kills about 70,000 Americans a year, more than the combined death toll from AIDS and breast cancer. About 95 percent of diagnosed cases of diabetes are type 2. Although genetic factors clearly dispose some people toward developing diabetes, the immediate triggers for the disease are obesity and inactivity—and 85 percent of people with type 2 diabetes are overweight or obese. Researchers hope that the discovery, in 2006, of a variant gene that increases the risk of developing diabetes will eventually allow those who have it to get tested and make lifestyle changes long before they develop the disease.

One of the challenges of diabetes care is that people can suffer from prediabetic conditions for seven to ten years before the disease is finally diagnosed, and by that time, significant damage may already be occurring in the patient's body. Numbness and tingling in the hands and feet may signal damage to the nervous system, bleeding in the retina can cause significant vision loss, poor circulation can produce lingering wounds that are prone to infection and tissue death. (About 70 percent of limb amputations are due to diabetes.) High blood pressure caused by the disease can damage the kidneys, requiring dialysis or a transplant.

Given that twenty-one million people are now being treated for diabetes, it is not surprising that the annual medical costs add up to $245 billion. Common per-patient charges include such items as the following: stroke care, $100,000; limb amputation, $45,000; end-stage kidney disease, $87,000. With high obesity rates causing an increase in the number of type 2 diabetics, the annual cost of care for this group of patients can be expected to soar.

Public Health or Private Choice

Public health advocates have long argued that if we could keep people from becoming obese, the costs of health care would decrease and people would live longer and healthier lives. But what would we have to do to reduce the incidence of obesity? And how far are we as a society prepared to go in regulating the weight of our citizens?

Many medical ethicists regard obesity as an urgent public health issue that should be addressed by government policy. One of their core arguments is that the diseases caused by obesity—not unlike the diseases caused by smoking—impose significant costs on society as a whole. The resources we spend coping with type 2 diabetes and other obesity-related illnesses might be better spent on prenatal care, on providing health care for the poor or uninsured, or on education or scientific research. By preventing obesity-related illnesses before they develop, we could reduce the need for urgent (and often uncompensated) care at hospitals and emergency rooms—care that currently drives up the price of health care for everyone. Therefore, society is justified in taking measures to keep people from becoming obese.

One of the most famous recent efforts to combat obesity through public policy was New York City mayor Michael Bloomberg's efforts to ban the sale of foods containing trans fats and to cap the portion sizes of sugar-sweetened drinks. In 2005, Bloomberg and the NYC city council succeeded in prohibiting city restaurants and vendors from selling foods with artificial trans fats, manufactured lipids that have been shown to cause heart disease and obesity. Despite complaints from restaurant associations, the policy was successful and has served as a model for municipalities across the country. Bloomberg's efforts to ban sugar-sweetened drinks larger than sixteen ounces, however, proved much more controversial.

In the rollout of the latter policy, Bloomberg presented research findings that sugary drinks represent the largest single source of increased calories in the American diet over the past forty years. He also pointed to dramatic increases in the size of soda containers and evidence that consumers don't reduce their overall caloric intake to compensate for consuming such large quantities of sugar. (A *British Journal of Medicine* study found that consuming just one soda a day increases a child's risk of being overweight by 55% and an adult's risk by 27%.) Noting that a majority of New York's adults and 40 percent of its K–8 students were obese or overweight, Bloomberg presented the sugary drinks portion cap as a commonsense public health measure, not unlike popular bans on smoking in bars, restaurants, and most parks.

But the soda industry—and many New Yorkers—didn't see it that way. In addition to a negative public relations campaign and lawsuits launched by PepsiCo Inc., the Coca-Cola Company, and the Dr. Pepper Snapple Group, the policy was also opposed by the New York State Conference of the NAACP and the Hispanic Federation (both of which, it should be noted, have strong ties to soda companies). In addition, many New Yorkers objected to the policy as an overreach by "Nanny Bloomberg" that interfered with their personal choices. Eventually, a state court agreed with them,

arguing that the city had overstepped its regulatory authority by wading into "complex value judgments concerning personal autonomy and economics."

Did the soda portion cap compromise New Yorkers' autonomy any more than the trans fat ban—or, for that matter, any more than the extensive regulations about how and where they could smoke or purchase cigarettes? Many critics said the only difference was that in this case the city took on a more powerful industry, one whose products are not as unpopular as tobacco but also pose serious health risks. (A 2010 meta-analysis published by the American Diabetes Association found that drinking one to two sweetened beverages a day increased diabetes risk by 26%.) Other critics suggested that by banning—rather than steeply taxing—large-portion sugary drinks, Bloomberg had moved beyond the legitimate sphere of public health incentives and into shaky ethical territory.

Determining where an incentive for better lifestyle choices becomes a violation of personal autonomy is one of the most ambiguous and vexing questions in public health. Take, for example, a wellness pilot program for Medicaid patients introduced in 2007 by West Virginia—a state with some of the country's highest rates of smoking, obesity, diabetes, and heart disease. The program asked Medicaid recipients to sign a pledge to do their "best" to stay healthy, to attend "health improvement programs as directed," to go for regularly scheduled preventative screenings, to take the medicines as prescribed, and to go to an emergency room only for an event like a heart attack, stroke, or seizure. Those who stuck to the plan received "enhanced benefits" such as diabetes management, cardiac rehabilitation, mental health counseling, more covered prescriptions, and home-health visits from a nurse as needed. Those who did not or who refused to sign up received only the benefits mandated by the federal government. (Medicaid is a joint federal–state program.) They were not eligible for the advanced benefits and their prescriptions were limited to four a month.

Critics of the West Virginia program argued that in attempting to reward some for health care success, the state was punishing others for health care failure—perhaps those who needed the extra benefits the most. They charged that it violated fundamental obligations of health care professionals to promote patient welfare and respect patient autonomy. Others, including officials in the federal Centers for Medicare & Medicaid Services, asked whether it was appropriate for the government to define and promote healthy behaviors. Based on these and other concerns, the program was eventually phased out, leaving a host of unresolved questions about how far Americans are willing to "incentivize" government benefit programs.

Information and Autonomy

A less controversial approach to improving public health involves providing the public with accurate information about the health impacts of various behaviors and letting them make their own decisions about whether or not to continue them. The United States was the first country to require warning labels about the serious health risks of smoking cigarettes, despite protracted efforts by the tobacco industry to oppose or water down such labels. (Studies suggest that warning labels have contributed to substantial reductions in U.S. smoking rates.) As research accumulates regarding the serious health risks associated with sugar-sweetened beverages, it seems possible that the soda industry may be forced to accept labels on its products regarding associated risks of obesity, diabetes, and tooth decay. (Legislation requiring such labels was introduced in the California legislature in 2014.)

In recent years, consumer groups have also succeeded in securing federal policies that mandate far more detailed—and accurate—nutritional information on food packaging and restaurant menus than was previously required. Knowing that a bacon double cheeseburger, fries, and a large milk shake usually contains more than half the calories an average person should consume in a day may help consumers make healthier choices. Similarly, new FDA standards require that food makers stop using notoriously unrealistic serving sizes for their products and instead base nutritional information on typical consumption. (Frosted Flakes, for example, lists its serving size as ¾ cup [110 calories], but two cups [293 calories] is more likely to be an actual serving.)

Finally, public health advocates can turn to an obvious avenue for educating the public about obesity, exercise, and nutrition: the public schools. Since 2003, the Arkansas State Board of Education has required that schools provide parents with a (confidential) health evaluation for their children, in addition to an academic report card. The goal is that when the report is accompanied by nutritional counseling and information, children and their parents will be able to make informed choices to avoid childhood obesity. Local school districts in a number of states—California, Massachusetts, and Oregon among them—have initiated similar programs.

Perhaps the most important factor in avoiding obesity—regular exercise—can also be emphasized through public education. For decades, budget cuts at the state and local level have decreased the amount of physical activity in the school day, shortening or eliminating recess and PE classes. To help address this issue and the broader epidemic of childhood obesity, programs such as First Lady Michelle Obama's "Let's Move!" campaign have promoted physical education programs in public schools, along with healthier food in school lunches, and better nutritional labeling on vending machines and food packaging. While the voluntary aspects of the campaign have proved popular, such as inviting local chefs to schools to teach kids about nutrition and incorporating movement into classroom activities, the administration's new nutritional requirements for school lunches have generated partisan conflict in Washington. Republican critics charged the administration with making school lunches too bland and too small, while Democrats accused Republican legislators of classifying pizza tomato sauce as a "vegetable" at the behest of the frozen foods industry. The political scuffle is a reminder that almost every public health decision involves value judgments about how to define such concepts as *health*, *sickness*, and *freedom of choice*.

How Far Is Too Far?

Examples such as the soda portion cap and West Virginia's wellness program raise important questions about how far we would like our government to go in the name of protecting the public health. Was the Bloomberg administration justified in banning unhealthy trans fats from restaurant meals and attempting to limit soda container sizes? If we categorize this as an example of excessive government interference, how do we distinguish it from other examples—such as smoking bans and limits on drug and alcohol use—where we seem to have accepted a fairly high degree of government regulation of our personal choices? If soda were definitively shown to be as harmful to public health as cigarettes, would this justify greater government intervention? Following the model of smoking, should foods that contribute to obesity and diabetes be heavily taxed to discourage their consumption and promote alternatives?

Similarly, we can ask whether West Virginia was justified in rewarding Medicaid beneficiaries for enrolling in programs to control their weight and help them quit smoking. Is it acceptable for a government benefit program to reward some choices it defines as healthy with better benefits? What about punishing choices it considers unhealthy with reduced benefits? These questions become even more vexing when the definitions of healthy and unhealthy choices are not made by a representative government, but instead by private corporations and individuals. Are insurance companies justified in charging higher premiums to tobacco smokers? What about soda drinkers or motorcyclists? Should employees be required to maintain their weight within specified limits, or suffer a penalty, or even lose their jobs? What if their employers consider all alcohol consumption unhealthy and make temperance a condition of employment?

These questions should remind us that definitions of healthy and unhealthy behavior often shift over time, reflecting different states of democratic consensus. In the early 1910s, for example, a significant portion of Americans decided that use of cocaine (an original ingredient in Coca-Cola) was too addictive and deadly for society to tolerate its legal consumption. They decided that restrictions on individual liberty were worth the public health benefits. Americans reached a similar conclusion about alcohol in 1920, with prohibition, only to change their minds thirteen years later. Increased restrictions on the sale and consumption of tobacco products suggest that Americans are increasingly willing to give up some autonomy to reduce the death toll from lung cancer, emphysema, and the other diseases that make smoking the single largest cause of preventable death in America. It remains to be seen whether the high death toll from obesity will eventually elicit a similar response.

But while it seems possible that Americans might eventually embrace some restrictions on the most "drug-like" and addictive causes of obesity, such as high-fructose corn syrup and trans fats, it seems unlikely that majorities of Americans would ever accept more extensive government or corporate management of their dietary and exercise choices. Few Americans would tolerate a government agency taking on the difficult task of getting them to lose weight or even "incentivizing" them to do it on their own. For most citizens in democratic societies, what people eat, how much they eat, how much or how little they exercise, and how fat or thin they become is a purely private matter. In their view, government is not justified in interfering with the nutritional aspect of their lives, any more than it would be justified in interfering with the religious aspect. While the examples of illegal drugs and smoking restrictions make it clear that most Americans are not libertarians—which is to say they accept government limitations on personal autonomy for some public health goods—it is clear that such acceptance has limits. Talk of penalizing or firing individuals for conditions such as obesity that are already highly stigmatized runs counter to most Americans' sense of fairness—not least because genetic, socioeconomic, and other arbitrary factors clearly make losing weight more difficult for some than for others.

A Treatable Epidemic

Ultimately, obesity is better regarded as a treatable medical problem than a moral one caused by a lack of willpower. Without encroaching on personal autonomy, government can help people acquire a better understanding of nutrition and can make it easier for people to seek medical advice regarding weight reduction. Most obese

people aren't happy with their condition and would welcome appropriate help in changing it. They would not welcome being threatened with losing their jobs if they don't lose weight.

One of the most perverse aspects of the American health care system in past decades was that insurance providers tended to pay for expensive obesity-related treatments (e.g., stroke care, laser therapy for retinal bleeding, and foot amputations), while paying little or nothing for preventative care that might have helped patients avoid obesity and diabetes in the first place. One of the most hopeful developments in American health care is a new emphasis on preventative care, in part generated by requirements in the 2010 Affordable Care Act (which we will discuss in greater detail in Chapter 9). Better coverage for nutritional counseling, exercise programs, monitoring by a specialist in metabolic medicine, or care of the feet by a podiatrist are all modest forms of government intervention that are likely to pay off not just for patients, but for insurers and for society as a whole.

CASE PRESENTATION

The Psychology of Torture

In the spring of 2002, the Central Intelligence Agency hired two clinical psychologists to design and implement what would become one of the most important—and infamous—interrogation programs in American history. Developed for use on suspects detained after the 9/11 terrorist attacks, the program was unprecedented both in its methods and in the backgrounds of the men who designed it.

Bruce Jessen and James Mitchell were retired military trainers who had never carried out a field interrogation nor were they experts on interrogation science. (Their psychology dissertations were on family therapy and hypertension, respectively.) They lacked language skills and specialized cultural knowledge for working with suspected members of Al Qaeda and the Taliban. What distinguished them, however, was a willingness to employ interrogation tactics that Americans had once assumed would be used only by their most brutal enemies. Drawing on techniques developed by the Nazi and Chinese Communist regimes of the 1940s and 1950s, along with a psychological theory of "learned helplessness," Jessen and Mitchell went on to develop "enhanced interrogation" methods that were used in Guantanamo Bay, Cuba, and secret CIA detention facilities, as well as in military prisons in Afghanistan and Iraq. When the details of the program emerged in the mid-2000s and early 2010s, they generated worldwide outrage and raised serious questions about the participation of health care professionals in coercive interrogations. After reviewing the evidence, most congressional committees, medical societies, and media outlets found there was a much simpler name for "enhanced interrogation." It was called torture.

Theory

For decades before September 11, 2001, skilled intelligence officers and FBI agents had generally employed a "rapport building" approach to interrogation, one which prompts suspects to talk, lower their guard, and inadvertently disclose vital information. This is the psychological approach that American intelligence services had successfully used on thousands of high-level Nazi and Japanese prisoners of war during World War II, eliciting key data on troop movements, military leadership, and weaponry. The CIA's 1963 interrogation manual had rejected the infliction of pain as "quite likely to produce false confessions" and the 1992 Army Field Manual dismissed the use of force because it "yields unreliable results, may damage subsequent collection efforts, and can induce the source to say whatever he thinks the interrogator wants to hear."

But in the highly emotional and chaotic aftermath of the 9/11 terrorist attacks, some in the CIA and the