

THE OBESITY CRISIS

How to Fight a Scourge as Damaging to the Global Economy as War

By Richard Dobbs and James Manyika

Obesity has become one of our major global economic problems. Many people may be surprised to learn that obesity is jostling with armed conflict and smoking as a human activity with the greatest negative impact on the global economy. It imposes significant costs on healthcare systems; around the world, 2 to 7 percent of all healthcare spending relates to measures to prevent and treat this condition, with up to 20 percent of all healthcare spending attributable to obesity, through related diseases such as type 2 diabetes and heart disease. These healthcare costs place a burden on government finances. Furthermore, overall economic gains and employers are affected by impaired productivity.

The global economic impact of obesity is increasing. The prevalence of obesity is still rising in developed economies, and now, as emerging markets become richer, they, too, are experiencing rising prevalence. The evidence suggests that the economic and societal impact of obesity is deep and lasting. It may entrench social inequalities between generations; obesity in parents appears to increase the risk of obesity in their children through both physiological and behavioral mechanisms.

It is no exaggeration to say that across the globe, obesity and its associated medical conditions have reached crisis proportions. More than 2.1 billion people—nearly 30 percent of the global population—are overweight or obese. That's nearly two and a half times the number of people who are undernourished. Obesity, which should be preventable, is now responsible for about 5 percent of all deaths worldwide. If its prevalence continues on its current trajectory, almost half of the world's adult population will be overweight or obese by 2030.

▷ *Camp for overweight children, Beijing, July 15, 2014. Kevin Frayer/Getty Images*

Left unchecked, rising prevalence is very likely to have an even more significant economic impact than it does today—putting pressure on employers and the productivity of their companies and on healthcare systems, and



on the public purse. The urgent question is how best to combat it. Tackling obesity requires a comprehensive intervention strategy rolled out at scale.

Complex Causes

The root causes of rising obesity are highly complex, spanning evolutionary, biological, psychological, sociological, economic, and institutional factors. A Foresight project of Britain's Research Councils UK has identified more than a hundred variables that directly or indirectly affect obesity outcomes.

Because of centuries of food insecurity, human beings have evolved with a biological ability to cope with food scarcity rather than abundance. The human body seeks out energy-dense foods and tries to conserve energy as fat. Hormones that regulate hunger and satiety encourage people to seek extra food when food is scarce but do not seem to have the ability to prevent overconsumption or encourage extra calorie burning when food is abundant.

Modern life makes fewer physical demands on many people, who lead less active lifestyles as technology replaces the need for physical labor. With many jobs now sedentary, exercise is a conscious and optional choice. As an illustration of the change, in 1969 about 40 percent of schoolchildren in the United States walked or rode their bicycles to school; by 2001, only 13 percent did so. Over the past fifty years, it has been estimated that a reduction in occupation-related physical activity in the United States has reduced the daily net energy balance by one hundred calories per person, a significant share of the overall change in the energy balance during this period.

Mass urbanization in many regions—the global urban population is growing by sixty-five million a year, the equivalent of adding seven new cities the size of Chicago every twelve months—is boosting incomes but reinforcing a less physical lifestyle. One Chinese study found that urbanization reduces daily energy expenditure by 300 to 400 calories, and traveling to work by car or bus reduces it by a further 200 calories.

Human beings also have a psychological relationship with food that goes beyond a need for basic sustenance. Many of us use food as a reward or to relieve stress, or have a compulsive relationship with certain types of food. There is a correlation between obesity and high rates of some mental health conditions, including depression.

People are highly influenced by social norms and subtle social cues in their eating habits and their attitude toward weight. For instance, if they dine with other people who eat more, they eat more themselves; likewise, those who dine with people who eat less, eat less themselves. One study has shown that 35 percent more calories are consumed when having dinner with a friend than when eating alone, and 96 percent more if dining in a group of seven people. Another study has shown that a person is 57 percent more likely to become obese if a friend has also become obese—evidence of social normalization of the condition.

Food has become much more affordable over the past sixty years. In the United States, the share of average household income spent on food fell from 42 percent in 1900 to 30 percent in 1950 and to 13.5 percent in 2003. This is beneficial in welfare terms, reducing rates of undernutrition and freeing up disposable income.

Many of these factors underline the importance of the environmental context as a driver of obesity prevalence. A helpful lens for examining how the environment affects prevalence is looking at expatriate populations, transplanted from one context to another. For example, British expats who have settled in Abu Dhabi have diabetes prevalence rates of 18 percent, compared with a baseline prevalence of 8 percent in the United Kingdom. Physical environment is one factor, but it is likely that sociocultural variables are also relevant. Various studies suggest a correlation between Hispanic immigrants' obesity rate and the length of their stay in the United States and the depth of their cultural assimilation; the longer they are in the United States, the more prone they are to obesity as their eating habits change.

The Global Prosperity Factor

No country reduced its obesity prevalence between 2000 and 2013. During this period, prevalence grew by 0.5 percentage points or more a year in 130 of the 196 countries for which the Organisation for Economic Co-operation and Development (OECD) documents obesity prevalence data. Prevalence growth has momentum; countries with high prevalence in 2000 have continued to see the highest prevalence growth rates since then. There does not seem to be convergence to a stable obesity prevalence rate internationally. Recent data suggest a plateauing of prevalence in some developed markets, such as Italy, the United Kingdom, and the United States, while Australia, France, Switzerland, and other advanced economies experience continued growth.

Overall obesity prevalence does appear to be correlated with a country's wealth. It is striking how few countries escape the pattern. Among G-20 nations with per capita GDP exceeding \$8,000, only Japan and South Korea have prevalence rates lower than 16 percent. The majority of G-20 countries have rates of more than 20 percent. Looking at children specifically, the prevalence of obesity ranges between 5 and 20 percent.

China, Indonesia, and India currently have lower obesity prevalence rates than advanced economies. However, as rapid industrialization and urbanization boost incomes, the prevalence rates in these fast-growing emerging economies are rising quickly. In India and China, the prevalence of obesity in cities is three to four times the rate in rural areas, reflecting higher incomes in urban areas and therefore higher levels of nutrition and food consumption and often less active labor. The prevalence of obese and overweight people rose at 1.2 percent a year in Chinese adult males between 1985 and 2004 and 1 percent a year in adult females.

This is a pattern we observe across emerging markets. Many of these countries experienced a rise in prevalence of one percentage point a year between 2000 and 2008. Today, many countries have prevalence rates of 20 percent or even 30 percent and now have well-entrenched rising trends. A report from the Overseas Development Institute found that obesity and overweight rates in North Africa, Latin America, and the Middle East were on a par with Europe at 10 to 30 percent obesity in adults and at 30 to 70 percent overweight. Other regions, including South Asia and East Asia, are catching up with advanced economies in obesity prevalence.

All G-20 countries are experiencing year-on-year growth in prevalence of 0.5 to 1.5 percentage points. In the United Kingdom, for instance, more than 80 percent of the population aged 21 to 60 could be obese or overweight by 2030, according to the government's 2007 Foresight report. Breaking this down by gender, the report estimated that more than 60 percent of men and 50 percent of women would be obese. By 2050, the report estimated, one-quarter of children in the United Kingdom could be obese.

Developed economies have a clear inverse correlation between income levels and the prevalence of obesity, particularly in the case of women and children. Put simply, lower-income groups tend to have higher obesity prevalence. And it seems likely that causation works both ways. Across a range of developed markets, this inverse relationship is most acute for women.

A study conducted by the U.S. Centers for Disease Control and Prevention found that obesity prevalence is generally similar at all income levels for men in the United States (around 30 percent), while for women it was 42 percent at low-income levels versus 29 percent at high-income levels. In Australia the relationship holds across genders, with obesity prevalence ten percentile points higher for adults in the most disadvantaged quintile versus the least disadvantaged one. In several other countries, it has been observed that obesity prevalence for women ranges from 1.6 (United States) to 18.4 (South Korea) times as high at the lower end of the education spectrum as it is for those at the upper end. This relative index of inequality is lower on average for men.

Given that obesity has a higher incidence among disadvantaged households, it also imposes a disproportionate burden on these already disadvantaged households in terms of higher healthcare costs and reduced welfare. This entrenchment of inequalities operates both within countries and at the international level. In emerging economies where public health provision is nascent, these healthcare costs fall directly on households. In addition, there is some evidence that epigenetic factors may disproportionately increase the burden of obesity in emerging markets.

Moreover, it seems that obesity can be passed from generation to generation. There is evidence that obesity risk is tied to parental body mass index (BMI) through both physiological and behavioral mechanisms. Studies find that a mother with a high BMI is

a significant predictor of obesity in her children when they grow to adulthood because fetuses develop a compromised metabolism and a resistance to insulin. However, other sociocultural factors and genetic predisposition drive the onset of obesity, too. For instance, eating habits that confound adult eating patterns are typically passed along by parents in early life.

Economic Impact

The global economic impact of obesity is roughly \$2 trillion, or 2.8 percent of global GDP, according to our analysis, which reflects the fact that obesity places a burden on developed and developing economies alike. This is equivalent to the GDP of Italy or Russia. Obesity today has the same impact on the global economy as armed violence, war, and terrorism, and only a shade less than smoking. These three are far and away the largest global economic impact areas driven by human behavior.

We assessed the current impact to society of fourteen major problems that are caused by humans—that is, those that are the result of human decisions, are amplified by human or societal behavior, or depend on societal, legal, or infrastructural environments created by humans. These ranged from obesity, smoking, and alcoholism to armed violence, climate change, and unsafe sex. This analysis therefore excludes diseases such as malaria but includes the impact of diseases such as heart disease and type 2 diabetes whose prevalence lifestyle choices or other human decisions can drive. Our estimate of the global economic toll of obesity includes the cost of lost economic productivity through a reduction in productive life years, direct costs to healthcare systems, and the investment required to mitigate the impact of obesity.

Of the three sources of cost that we assessed, lost productivity is the most significant in our analysis, accounting for nearly 70 percent of the total global cost of obesity. Some critics may argue that lost productivity should not be included, as it does not generate a direct cost. However, we believe that, while not a direct cost to society, it should be included because it has a negative economic impact. In addition, it should be noted that our estimates are based on the current cost of these burdens. This means that burdens such as climate change and obesity, which result in a higher future cost, are ranked lower than if we had conducted these analyses on a net present value basis.

In most developed economies, obesity ranks among the top three human-generated economic burdens. In the United Kingdom, for instance, obesity has the second-largest impact after smoking, generating an economic loss of more than \$70 billion a year in 2012, or 3 percent of GDP. In the United States, armed conflict (and especially spending on the military) has the highest social and economic impact, and obesity is second; obesity generated an impact in the United States of \$663 billion a year in 2012, or 4.1 percent of GDP. In both countries, the prevalence and associated

cost of obesity are growing, albeit less steeply than in recent decades and in comparison with many emerging markets.

The economic toll of obesity varies more widely in emerging markets. In Mexico, obesity is the largest social impact at 2.5 percent of GDP. We observe comparable burdens in Morocco at 2.8 percent of GDP, in South Africa at 3 percent of GDP, and in Brazil at 2.4 percent of GDP. But in other emerging markets obesity is—as of now—a much less significant economic burden. In Nigeria, for instance, obesity’s impact on the economy is 0.7 percent of GDP, ranking as the thirteenth-largest economic burden; in Indonesia, it has a 1 percent impact, ranking eighth; and in China, the figure is 1.1 percent, ranking ninth.

Health Burdens

We assessed the productivity lost due to obesity using the standard measurement of disability-adjusted life years, or DALYs, which measure the number of years that are lost or rendered economically unproductive due to disease. Of the DALYs lost to obesity across the world, around 71 percent are due to premature mortality and 29 percent to disability that has prevented individuals from making their full economic contribution. The number of DALYs lost to obesity today is three times as high in developed economies as it is in emerging markets. However, that gap is narrowing. The rise in the number of DALYs per 100,000 people lost because of obesity slowed in developed economies between 1990 and 2010 but soared by 90 percent in emerging economies.

In Indonesia, for instance, the number of DALYs lost per 100,000 people due to obesity has risen from 184 in 1990 to 885 in 2010, a jump of nearly 400 percent. In South Africa, DALYs lost to obesity totaled 1,577 in 1990 and 2,659 in 2010, an increase of 69 percent. The 29 percent “disability” burden affects employers through lost employee productivity and healthcare costs. Employees with particularly high BMI can be less productive in the workplace due to the range of health problems that obesity can cause, including, for example, arthritis, fatigue, breathlessness, lack of concentration, and depression.

There is also a relationship between obesity and absenteeism from work for health reasons, including frequent medical checkups. In the United Kingdom, for instance, we estimate that the total impact on employers is \$7 billion. Of this, \$5 billion, or more than two-thirds, comes from decreased productivity in the workplace rather than outright absenteeism. In the United Kingdom, higher health insurance premiums are not a major issue for employers because of the central role of public health through the National Health Service (NHS). By contrast, in the United States higher insurance premiums could contribute as much as \$7.7 billion of our \$18.9 billion to \$21.9 billion overall estimate of the cost of obesity to employers.

McKinsey analysis on healthcare spending in the OECD group of countries has found that, without reform, healthcare spending could grow by 50 to 100 percent between 2007 and 2040. In the United Kingdom alone, the research found that health-care spending could account for 11 to 14 percent of GDP by 2040. Separately, the World Health Organization estimates that high BMI drives between 2 and 7 percent of global healthcare spending. We observe this correlation clearly in the United Kingdom.

The research found four major drivers of increased spending: an aging population, an explosion of so-called lifestyle diseases, a rise in public expectations, and a lack of value consciousness among healthcare consumers. We cannot address aging populations or rising public expectations of healthcare provision. However, we can tackle a lack of consciousness about value among citizens and a lack of efficiency within healthcare systems, as well as the burden of lifestyle diseases of which obesity is a major driver. Obesity contributes to cardiovascular disease, type 2 diabetes, and some cancers such as kidney, bowel, and breast. Mitigating or reversing the obesity crisis is a critical element of any strategy for achieving sustainable provision of healthcare and managing public budgets.

Today, one in twelve of the global adult population has type 2 diabetes, which is at least partly driven by obesity. In addition, a large number of people suffer from “impaired glucose intolerance,” a pre-diabetes condition that usually leads to the disease unless significant lifestyle changes are made. Type 2 diabetes is both preventable and reversible with lifestyle changes. A U.S. study found that a 7 percent weight loss accompanied by moderate physical activity decreased the number of new diabetes cases by 58 percent among the high-risk population. In the United States, the direct cost of obesity to the healthcare system is estimated to be between \$147 billion and \$190 billion a year—or about 7 percent of total annual healthcare spending. Per capita medical spending is 24 percent higher for obese individuals than for those who are not obese. Some estimates put the future cost to U.S. healthcare from obesity as high as \$344 billion by 2018, or approximately 20 percent of total healthcare spending that year. To put the figure into context, this cost would be greater than the GDP of South Africa today.

In the United Kingdom, the government currently spends about £6 billion (\$9.6 billion) a year on the direct medical costs of conditions related to being overweight or obese. That is 5 percent of the entire budget of the NHS. It spends a further £10 billion on diabetes. The cost of obesity and diabetes to the healthcare system is equivalent to the United Kingdom’s combined “protection” budget for the police and fire services, law courts, and prisons; 40 percent of total spending on education; and about 35 percent of the country’s defense budget. The £6 billion cost has increased since 2007, when it was £4 billion to £5 billion. On current projections of rising prevalence of

obesity and overweight conditions, the cost to the NHS could increase from between £6 billion and £8 billion in 2015 to between £10 billion and £12 billion in 2030.

Only a small share of the overall cost of obesity comes from investment to mitigate or prevent it, compared with other health- or non-health-related burdens. We estimate that the global investment to prevent obesity is about \$5 billion, or only 0.25 percent of the total economic impact of obesity. In comparison, investment in prevention of traffic accidents accounts for about 1.2 percent of the overall cost of such accidents. Instead, obesity spending is weighted toward treatment. For example, the United Kingdom's largest prevention outlay is £11 million a year through the Change4Life campaign. This is equivalent to only 0.18 percent of what the NHS spends on obesity- and overweight-related conditions. Part of the reason for this is that the effectiveness of preventive approaches is difficult to assess.

Grasping the Nettle

Obesity is the result of a multitude of factors, and therefore no single solution is likely to be effective in tackling it. A range of interventions that encourage and empower individuals to make the required behavioral changes will be necessary. These interventions need to be systematic, not only aiming for an immediate impact on the net energy balance but also making sure that change is sustained. A comprehensive portfolio of interventions is also required to target the different needs and responsiveness of various population segments. Governments, healthcare systems, employers, retailers, consumer-goods companies, and consumers themselves all need to play their part.

We set out to develop a comprehensive catalog of interventions that could be used to reduce obesity. Working in conjunction with policy advisors, population-health academics, and individuals from companies, and drawing on an extensive review of research, we have identified seventy-four intervention levers that are being discussed or piloted around the world. The levers fall broadly into eighteen groups, including:

Active Transport

Facilitating and encouraging walking, cycling, and public transport, which engender more physical activity.

Healthcare Payors

Providing incentives or support to encourage healthy behavior. These can include general financial incentives, such as premium rebates or reward points, or more targeted facilitating incentives such as free gym membership. Payors can also deliver other interventions such as parental and weight-management programs.

Healthy Meals

Improving the health quality of meals in controlled settings such as schools and workplaces.

High-Calorie Food and Drink Availability

Reducing the ready availability of high-calorie foods to help control impulse consumption, including removing vending machines from schools and workplaces, high-calorie foods from supermarket checkouts, and fast-food retailers from locations outside schools.

Labeling

Providing calorie and other nutritional labeling so that consumers can understand the content of their food. Labels can be plain text or “engaging”—an easy-to-interpret assessment of the health of the product (for example, traffic lights).

Media Restrictions

Restricting high-calorie food advertising to reduce exposure to marketing that is proven to promote consumption.

Parental Education

Empowering and educating parents to promote a healthier lifestyle for their children through regular parental guidance sessions.

Pharmaceuticals

Intervening with drugs to reverse obesity rapidly in cases where it is creating immediate health risks.

Portion Control

Encouraging appropriate consumption through incremental (for example, 1 to 5 percent) reductions in portion sizes and designing packaging to better delineate portion size to help consumers moderate their consumption.

Price Promotions

Restricting promotional activity in high-calorie impulse foods to decrease consumption.

Public Health Campaigns

Delivering a public health campaign through multiple media outlets to promote healthy eating and physical activity habits.

Reformulation

Incrementally reducing calories in food products to drive subconscious reduction in consumption; introducing new product ranges with improved nutritional profiles.

School Curriculum

Introducing additional hours of physical education and healthy nutrition in school curricula to encourage healthier habits.

Subsidies, Taxes, and Prices

Changing agricultural policy or regulatory policy to adjust consumer prices and the supply of select food and/or beverage categories.

Surgery

Scaling up delivery of bariatric surgery to reduce stomach capacity and deliver immediate change in food consumption.

Urban Environment

Making changes to physical spaces and food access to facilitate and encourage healthy habits, such as increasing the walkability of cities and green space, furthering access to community sports facilities, and improving access to grocery stores.

Weight-Management Programs

Educating and empowering individuals to change key weight behavior through counseling, physical activity programs, and education.

Workplace Wellness

Offering programs and engaging employees to encourage healthy behavior, for example through financial and non-financial incentives, team competitions, and the provision of education and self-management tools such as personal tracking devices.

Based on existing evidence, any single intervention is likely to have only a small overall impact on its own. A systemic, sustained portfolio of initiatives, delivered at scale, is needed to address the health burden. Almost all the identified interventions are cost-effective for society—savings on healthcare costs and higher productivity could outweigh the direct investment required to deliver the intervention when assessed over the full lifetime of target population. In the United Kingdom, such a program could reverse rising obesity, saving about \$1.2 billion a year for the NHS.

Education and personal responsibility are critical elements of any program to reduce obesity, but not sufficient on their own. Additional interventions are needed that rely less on conscious choices by individuals and more on changes to the environment and societal norms. Such interventions “reset the defaults” to make healthy behaviors easier. They include reducing default portion sizes, changing marketing practices, and restructuring urban and education environments to facilitate physical activity.

No individual sectors in society—whether they are governments, retailers, consumer-goods companies, restaurants, employers, media organizations, educators, healthcare providers, or individuals—can address obesity on their own. Capturing the full potential impact requires engagement from as many sectors as possible. Successful precedents suggest that a combination of top-down corporate and government interventions with bottom-up community-led ones is required to change public health outcomes. Moreover, some kind of coordination is likely to be required to capture potentially high-impact industry interventions, given that there are market share risks facing any first mover.

Implementing an obesity abatement program at the required scale will not be easy. We see three important elements to consider: 1) deploy as many interventions as possible at scale and delivered effectively by the full range of sectors in society; 2) understand how to align incentives and build cooperation; and 3) do not focus unduly on prioritizing interventions because this can hamper constructive action.

The evidence base on the clinical and behavioral interventions to reduce obesity is far from complete, and ongoing investment in research is imperative. However, in many cases this is proving a barrier to action. It need not be so. We should experiment with solutions and try them out rather than waiting for perfect proof of what works, especially in the many areas where interventions are low risk. We have enough knowledge to be taking more action than we currently are.

A challenge of this magnitude requires an ambitious set of solutions—and the diffuse range of the many sectors of society relevant to this issue makes it even harder to achieve progress. We need to improve our ability to motivate action across such a diverse set of sectors. We believe that research and trial and error in how to deliver a cross-societal response are as important as research in specific intervention areas.

Some experts are questioning whether the net energy balance—that people are eating too much and exercising too little—is the appropriate lens to examine root causes. There is growing interest in the role that different nutrients such as carbohydrates, proteins, and fats play in our metabolism and in hormones that regulate satiety and hunger. Many leading scientists support the view that refined carbohydrates promote weight gain and inhibit weight loss. The science to date on this is inconclusive, and we do not include it in the assessment here without further evidence. However,

it is an important area for further research and could refocus the design of obesity interventions. Similarly, there is increasing interest in the role of the microbiome—our intestinal bacteria ecosystem. Scientific evidence from controlled trials suggests that individuals whose bodies contain a greater diversity of bacterial species are less prone to high body BMI and less likely to gain weight. This also is too inconclusive for us to include at this stage. Some commentators take the causal complexity of the problem as a predetermined defeat. They say, “If the causes are so complex, where do we begin?”

We do have a good understanding of the proximate causes, even if the background causes are complex. We know that over the past fifty years, individuals’ daily energy balance equation has changed; physical activity has declined, and energy consumption has increased. Even though there are important outstanding questions about diet composition, gut microbiome, and epigenetics, we are not walking blind with no sense of what to address. However, interventions to increase physical activity, reduce energy consumption, and address diet composition cannot just seek to reverse the historical trends that have left the population where it is today. For example, we cannot, nor would we wish to, reverse the invention of the Internet or the industrialization of agriculture. We need to assess what interventions make sense and are feasible today.

Four Imperatives for Progress

As many interventions as possible must be delivered to have significant impact. A holistic approach by the public, private, and third sectors is the best way forward. A program that succeeds in reversing obesity prevalence is likely to require as many interventions as possible to be deployed at scale and with high-quality delivery, our research finds. Deploying a comprehensive set of interventions would need the full set of societal sectors we have identified—local and national government, healthcare payors and providers, schools, employers, food and beverage manufacturers, retailers, restaurants, and food-service providers—to play a role. Coordination will be crucial. Today, government efforts to tackle the obesity issue seem too fragmented to be effective. In the United Kingdom, fifteen central government departments; all local authorities with responsibility for health, education, and local planning; sixteen European Union directorates general; and a wide range of non-governmental organizations all have a significant impact on the major intervention areas that we have identified.

Understanding how to align incentives and build cooperation is critical to success. Some attempts to overcome obesity failed because they did not align with the incentives of the required participants. An example of this was the attempt by Michael Bloomberg to ban supersize beverages when he was mayor of New York. This change

was blocked in the courts after extensive lobbying and legal action by the soft drink and retail industries. Other initiatives such as EPODE, which originated in France, and the Healthy Weight Commitment Foundation in the United States are leading the way in delivering integrated responses to the issue. If society is to succeed in tackling obesity, it will be necessary to find ways to build on such initiatives, to overcome misaligned incentives, and to coordinate action across a diverse set of societal sectors. The same is true of many of the public health and environmental challenges facing us in the twenty-first century. In the case of regulation to reduce the incidence of smoking, it was not possible to align incentives; in the case of obesity, we believe that it might be possible.

Government, healthcare systems, and private and social-sector organizations and entities should not focus overly on prioritizing interventions because this could hamper constructive action. Only a holistic, broad, and multipronged approach can be successful in reversing the obesity crisis. Interventions in the hands of all relevant societal sectors need to be deployed. Prioritization based on potential impact, cost-effectiveness, and feasibility is always important when making investment decisions. However, in the case of obesity, focusing unduly on priority interventions could be unhelpful given the need for a holistic response. A search for the “best” interventions or a single solution could delay action and displace responsibility. Given the seriousness of the obesity issue, the aim should be to do as much as possible as soon as possible.

While investment in research should continue, society should also engage in trial and error. Given the scale of the obesity crisis and its economic impact, investment in research, innovation, and experimentation is relatively low. For instance, in total the United Kingdom invests less than \$1 billion a year in prevention activities such as weight-management programs and public health campaigns. To put that in perspective, that is only about 1 percent of the social cost of obesity in the United Kingdom. More investment is required, especially in understanding the effectiveness of intervention measures when they are applied as part of a comprehensive program. But society should also be prepared to experiment with possible interventions. In many intervention areas, impact data from high-quality, randomized control trials are not possible to gather. So, rather than waiting for such data, the relevant sectors of society should be pragmatic with a bias toward action, especially where the risks of intervening are low, using trial and error to flesh out their understanding of potential solutions.

This essay is adapted from “Overcoming obesity: An initial economic analysis,” a November 2014 discussion paper by the McKinsey Global Institute