
CHAPTER 3, *THE SOCIAL COST OF
OBESITY* OF THE 2023 REPORT

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CHAPTER 3: THE SOCIAL COSTS OF OBESITY

A critical element of stabilizing the debt-to-GDP ratio is reducing the primary deficit (see Chapter 2). This in turn requires decreasing mandatory spending, which accounts for almost two-thirds of annual Federal expenditures.¹⁷²

Medicare presents an opportunity for substantial savings without drastically changing the nature of the program. Federal healthcare spending totaled \$1.7 trillion in FY2022 and is expected to cost more than \$22 trillion over the next 10 years according to CBO's projections. Medicare and Medicaid account for most of these outlays, with Medicare spending alone projected to exceed \$1 trillion dollars in FY2023.¹⁷³ By FY2033, CBO projects that Medicare spending will nearly double, and annual Federal expenditures on healthcare are expected to approach \$3 trillion.¹⁷⁴

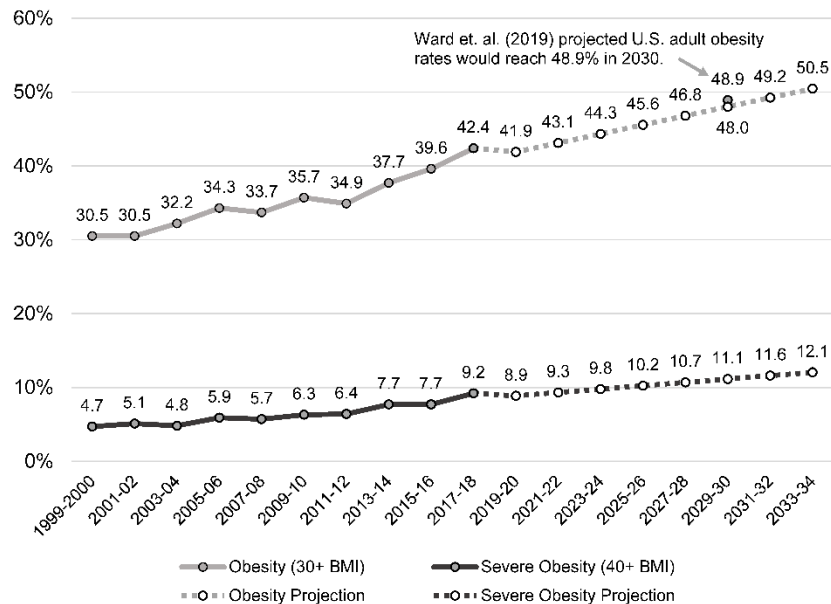
Obesity is a Major Driver of Federal Healthcare Spending

Addressing the acceleration in mandatory spending requires identifying those diseases that impose the largest financial burden, or which offer the most practical means of cost reduction. Obesity and obesity-related diseases fit both categories. Obesity is one of the largest contributors to Medicare and Medicaid spending, and recent medical innovations seem effective at reducing obesity.

Obesity is a causal risk factor for many other diseases, including (but not limited to) diabetes, cardiovascular disease (e.g., heart attack and stroke), sleep apnea, and cancer.¹⁷⁵ One out of every three heart attack or stroke deaths and one in twelve cancer deaths are associated with being overweight or obese.¹⁷⁶ It has also been linked to impaired mental health.¹⁷⁷ Obesity has been found to substantially reduce lifespan, with life expectancy decreasing as BMI (Body Mass Index) increases (see Box 3-1 for a discussion of BMI).¹⁷⁸ The share of American adults who qualify as being

Class 1 obese (BMI ranging from 30–35), Class 2 obese (BMI ranging from 35–40), and Class 3 obese (BMI above 40) has been rising steadily over the past two decades (see Figure 3-1).¹⁷⁹

Figure 3-1: Increasing Obesity Among Adults in the United States



Source: NCHS (*National Health and Nutrition Examination Survey: 1999-2018*), Ward et al. (2019). JEC calculations, see Box 3-2 for methodology.

These trends are particularly concerning given that spending on obesity and obesity-related diseases is concentrated the most among individuals with Class 2 and 3 obesity.¹⁸⁰ Research suggests there is a dramatic increase in healthcare costs among those with BMIs above 35, even compared to those who qualify as overweight or Class 1 obese.¹⁸¹ A 10 percent reduction in BMI for a person with a starting BMI of 44 was associated with a \$10,992 annual reduction in medical care costs, while the same proportional reduction in BMI reduced medical costs by only \$629 for someone with a starting BMI of 34.¹⁸²

Based on recent research, JEC economists estimate that in 2023 obesity will cause \$5,155 in average excess medical costs per

person suffering from the condition.¹⁸³ This corresponds to \$520 billion in total additional healthcare costs in 2023 alone.¹⁸⁴ Over the 2024–2033 period, JEC economists project that the combined Medicare and Medicaid spending on obesity and obesity-related diseases will total \$4.1 trillion.

Box 3-1: Background on the Body Mass Index (BMI)

In 2023, an estimated 44.3 percent of American adults were classified as obese, defined as having a body mass index (BMI) greater than or equal to 30.¹⁸⁵ Within this definition there are further classifications that represent the degree of obesity. Class 1 is defined as having a BMI between 30 and 34.9, Class 2 is between 35 and 39.9, and Class 3 is 40 or higher.¹⁸⁶ These classes, while somewhat arbitrarily defined, are relevant because increasing BMI is causally linked to morbidity, mortality, and the associated healthcare costs.¹⁸⁷ The BMI categories are shown in Table 3-1.

Table 3-1: Body Mass Index (BMI) Categorical Information

Medical Classification	BMI Range
Underweight	Under 18.5
Normal Weight	18.5 – 24.9
Overweight	25 – 29.9
Obesity (Class 1)	30 – 34.9
Obesity (Class 2)	35 – 39.9
Obesity (Class 3) (also referred to as severe obesity)	Above 40

BMI provides a rough standardization of individual weight, but the crudeness of the metric (see Equation 3-1) does not account for individual variations in body composition, such as muscle mass. It was developed in the mid-1800s by Adolphe Quetelet, a Belgian statistician, as a population-level tool to assess obesity and

its associated health risks.¹⁸⁸ BMI rose to prominence in the 1990s when the World Health Organization adopted the metric as the official screening index for obesity.¹⁸⁹

$$BMI = \frac{\text{weight (kg)}}{\text{height}^2 \text{ (m)}}$$

$$\text{Imperial System: } BMI = \frac{\text{weight(lb)} \times 703}{\text{height}^2 \text{ (in)}}$$

Equation 3-1: Body Mass Index (BMI) Calculation

While BMI is insufficient as a sole measure of individual health, in the aggregate it serves as a valuable tool for analyzing public health. The CDC (Centers for Disease Control and Prevention) notes that while BMI “should not be used as a diagnostic tool” the “longstanding application of BMI contributes to its utility at the population level” and that “BMI should be used as a measure to track weight status in populations.”¹⁹⁰

The Elderly Suffer from Rising Obesity Rates

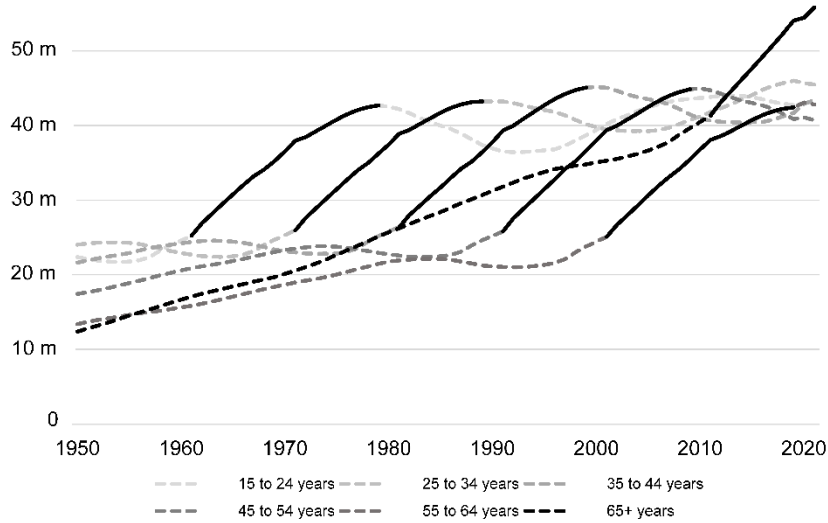
The rising rate of obesity among the elderly is another concerning trend that will likely have a substantial impact on mandatory spending. Approximately 35 percent of adults over the age of 65 were classified as obese in 2010.¹⁹¹ Similarly, the prevalence of moderate (Class 2) and severe obesity (Class 3) in nursing homes grew from 14.7 percent in 2000 to 23.9 percent in 2010.¹⁹² This increase may simply imply an increase in the existing population of obese persons over the age of 65 seeking care in nursing homes. However, it may also reflect a general demographic trend of rising rates of obesity among the elderly. That development would be concerning given the population bulge of the baby boom generation, which for most of the last 70 years has represented the largest age-identified subset of population (see Figure 3-2) and who started entering retirement age around 2010.

In 2019, 16 percent of the adult population were aged 65 or older, but that share is projected to rapidly increase, reaching almost 25 percent by 2060.¹⁹³ If both the share of the population that is over 65 and the rate of obesity continues to rise, Medicare and Medicaid expenditures will likely exceed CBO projections. Halting and reversing these trends is critical to reducing the primary deficit.

Obesity Reduces Life Expectancy

Obesity also imposes significant costs on the individual, most notably a shorter life lifespan. Medical research suggests that Class 1 and Class 2 obesity may reduce life expectancy by about 2–4 years, while Class 3 obesity can reduce it by up to 14 years.¹⁹⁴ It has been theorized that increases in obesity rates in the U.S. have been a major contributor to slowing improvements in the mortality rate in the U.S. over the past 20 years.¹⁹⁵ Increases in BMI from 1988 to 2011 are estimated to have reduced the average person's life expectancy at age 40 by almost a full year.¹⁹⁶ Since 2011, the prevalence of obesity among Americans has risen further, from 34.9 percent to 44.3 percent.¹⁹⁷

Figure 3-2: Illustrating the Baby Boom

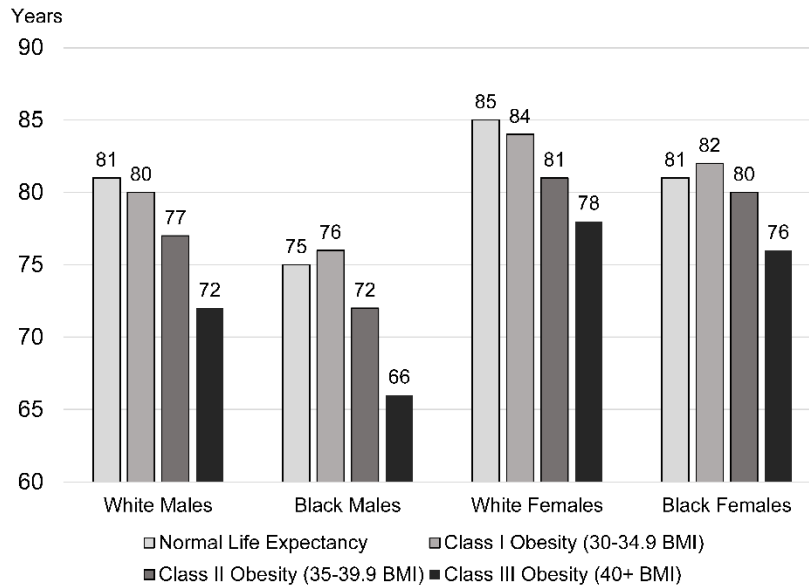


Source: Census Bureau (*National Intercensal Datasets 1900-2020*). Solid black lines indicate period when Baby Boomers (1946-1965) are comprising the age group.

Furthermore, the substantial increases in Class 3 obesity since 2011 has likely exacerbated the disease's reduction in life expectancy. Figure 3-3 illustrates the increased harm caused by increasing obesity.¹⁹⁸ Using recent research, JEC economists estimate that obesity is responsible for 4.7 YLL (years of life lost) for the average person suffering from the disease (see Box 3-2).¹⁹⁹

Much of the direct benefit of increased lifespan would go to women, as well as Black and low-income adults. Research by Ward et al. suggests that Class 3 obesity will be the most common BMI category for these three demographic groups by 2030.²⁰⁰ Because reducing obesity carries with it employment, productivity, and income benefits (see the following section), it might also contribute to reducing income inequality.

Figure 3-3: Life Expectancy for 18-Year Olds Given Their BMI Class



Source: Finkelstein et. al., (2012) *Individual and Aggregate Years-of-life-lost Associated With Overweight and Obesity*. The study only observed individuals who have never smoked.

While the prospect of eliminating or substantially curtailing obesity may seem unrealistic right now, so did the idea of moving U.S. culture away from smoking in the 1960s. Rates of adult smokers in the mid-1960s parallel current rates of obesity.²⁰¹ Moving away from that unhealthy paradigm took decades of concerted effort but was worth it for the number of lives saved.²⁰²

The comparison between obesity and smoking is even more apt because the harm caused by obesity is like the harm caused by smoking. A recent long panel study suggests that the Years of Life Lost (YLL) due to smoking corresponds to a 4.3-year decrease in life expectancy for the smoker.²⁰³ If there were a way to eliminate obesity, it would add the equivalent of 515 million person-years of additional life for those with the disease. Expressed another way, the additional life expectancy gained from eliminating obesity is equivalent to the entire expected lifetimes of the population of Indiana (about 6.75 million people).²⁰⁴

Box 3-2: Ending Obesity Would Raise Life Expectancy

Several high-quality studies have evaluated the effect of obesity on YLL. A 2009 collaborative analysis of 57 studies covering nearly 900,000 participants published in *The Lancet* found that moderate obesity (which they characterize as BMI between 30 and 35—Class 1 obesity) is associated with 2–4 YLL, while severe obesity (which they characterize as BMI between 40 and 45) is associated with 8–10 median YLL.²⁰⁵ The authors suggest that the mortality effect of severe obesity is comparable with that of smoking, and that the progressively higher mortality for overweight and obese individuals (BMI greater than 25) is “mainly due to vascular disease and is probably largely causal.”²⁰⁶

A 2014 *PLOS-Medicine* (Public Library of Science) journal article by Kitahara et al. examined severe obesity more closely, finding that mortality continues to increase as BMI increases.²⁰⁷ They find that a BMI falling in the range from 40–45 is associated with 6.5 YLL, while a BMI falling between 45–50, 50–55, and 55–60 is associated with 8.9 YLL, 9.8 YLL, and 13.7 YLL, respectively. They calculate the weighted average decrease in life expectancy for severe obesity as 7.2 YLL for BMI greater than 40.

JEC economists elected to use the upper estimate of 4 YLL from the *Lancet* research for persons qualifying as Class 1 and Class 2 obese, and 7.2 YLL for Class 3 obesity, owing to Kitahara et al.’s more nuanced approach. Given the proportion of people projected to qualify as Class 1 and 2 obese (34.6 percent) and Class 3 obese (9.7 percent) in 2023, they estimate that obesity in the U.S. is currently responsible for 4.7 YLL for obese persons specifically and 2.1 YLL across the entire population, similar to previous estimates.²⁰⁸ Combining these estimates with the relevant projected populations of Class 1, 2, and 3 obesity suggests that obesity is currently responsible for 515 million years of life lost. Dividing this aggregate estimate by the CDC’s current estimate of

life expectancy (76.4 years) transforms this estimate into the number of person-lives to provide a relevant comparison: 6.75 million, equivalent to the entire population of Indiana.²⁰⁹

Obesity Carries High Economic Costs

The public health research on obesity generally separates the costs associated with obesity into the healthcare costs directly associated with treatment of obesity-related illnesses, and the indirect costs that obesity imposes on labor supply, labor productivity, and human capital. The following discussion of the costs imposed by obesity should be regarded as a starting point, because it is likely that there are other costs created by obesity than those listed here.

Direct Costs: Healthcare Expenditures

There is a large public health literature that addresses government spending on healthcare attributable to obesity. Box 3-3 briefly reviews the literature and provide projections of the future rates of adult obesity and the likely future government share of per-person obesity-related medical expenditures. JEC economists project that the share of U.S. adults who qualify as obese will rise from around 44 percent in 2023 to 50.5 percent in 2033. Similarly, JEC economists also project that the excess annual healthcare cost (expressed in current dollars) attributable to obesity will rise from \$3,919 for non-severe obesity and \$9,591 for severe obesity in 2023 to \$5,790 for non-severe obesity and \$14,168 for severe obesity in 2033. In turn, projected government expenditures attributable to obesity will sum to \$4.1 trillion over 2024–2033.

Indirect Costs: Labor Supply, Productivity, and Human Capital

Using their projections of future obesity rates (see Box 3-3) and their estimation of obesity's reduction of life expectancy, JEC economists also estimated the decrease in labor supply attributable

to obesity (see Box 3-4). This occurs as workers afflicted with obesity and obesity-related illnesses drop out of the labor market, retire, or die earlier than they would have otherwise.

JEC economists estimate that current obesity rates are responsible for a 2.5 percent reduction in aggregate labor supply, which corresponds to a 2.0 percent reduction in the level of real GDP. From 2024–2033, this labor supply reduction represents a potential GDP loss of \$5.6 trillion, which corresponds to a \$1.0 trillion reduction in Federal tax receipts over the same period.

For workers suffering from obesity, public health research has frequently documented obesity-caused reductions to their labor productivity. The effects are separated into “absenteeism” (missing work due to obesity-attributed illness) and “presenteeism” (reduced output on the job attributable to obesity).

JEC economists assume that each is responsible for approximately a 1 percent decrease in labor productivity for obese workers on average, leading to a loss of \$2.6 trillion in potential GDP over the 2024–2033 budget window (see Box 3-5). This corresponds to a \$470 billion reduction in Federal tax receipts over the same period.

In future work, JEC economists anticipate investigating the effect of obesity on the accumulation of physical and human capital. However, such a long-run effect would generally be outside the typical 10-year budget period. Nevertheless, over decades, even “small” increases in the growth rate of the economy can dramatically increase real GDP. For example, a longer life expectancy would incent workers to save more for retirement, increasing the supply of savings available for investment in the size and quality of the capital stock. Also, a longer life expectancy would also incent workers to develop more human capital because the returns would accumulate over a longer career. The improvements to the labor supply and capital stock would tend to

raise the level of real GDP. Moreover, insofar as some of the improvements to the labor supply and capital stock were dedicated to R&D, they would tend to raise the growth rate of real GDP.

Box 3-3: Government to Spend \$4.1T on Obesity from 2024–2033

JEC economists use a variety of academic research and government data sources to construct a projection of current and future obesity-related government spending (such as by Medicare and Medicaid). According to these estimates, the government will spend approximately \$283 billion on obesity-related direct health costs in 2023, rising to \$526.5 billion by 2033. As a result, the total projected government expenditure on obesity-related direct health costs over the 2024–2033 10-year budget window is \$4.1 trillion.

These estimates suggest that obesity-related direct health care costs will constitute 12.3 percent of the \$33.0 trillion in total spending on major health programs projected CBO over 2024–2033.²¹⁰ In other words, obesity is responsible for about 1 out of every 8 government healthcare dollars.

This amount is comparable to previous estimates of the proportion of obesity-related Medicare and Medicaid expenditures, and to the increase of those costs as the rate of obesity has risen. Finkelstein et al. and Wolf and Colditz estimate that in the late 1990s aggregate obesity-attributed medical expenditures accounted for around 5.5 percent of total national health expenditures.²¹¹ Finkelstein et al. estimate that in 2008 obesity-related healthcare costs accounted for almost 10 percent of all medical spending, and for 8.5 percent and 11.8 percent of Medicare and Medicaid spending, respectively.²¹² That was slightly higher than data analyzed by Biener et al., which found that from 2010–2015 an average of 6.86 percent of national Medicare expenditures and 8.48 percent of Medicaid expenditures were attributable to obesity-related illness.²¹³ Using Biener et al.’s 2001–2015 data to

forecast future expenditures suggests that obesity-related healthcare costs should account for 9 percent of all medical spending in 2023 and almost 11 percent in 2034.²¹⁴

A review of the body of research estimated that obesity-related direct healthcare costs had already reached \$98 billion by 2008. However, another research paper by Biener et al. (which uses different data) suggests that as of 2013 28.2 percent (\$342 billion) of total health care spending was already devoted to treating obesity-related illnesses.²¹⁵ It is fair to say that there does not yet seem to be a consensus—even within research teams—regarding the share of total medical costs that are attributable to obesity.

Prescription drugs have been found make up the largest portion of obesity-related direct health costs. Biener et al. estimated that from 2010–2015 13 percent of all prescription drug costs were attributable to obesity-related illness.²¹⁶ Finkelstein et al. similarly estimate that in 2008 15 percent of all prescription drug costs were obesity-related.²¹⁷

Forecasting Future Prevalence of Obesity

JEC economists project the prevalence of obesity in the adult population using data from the National Health and Nutrition Examination Survey (see Figure 3-1).²¹⁸ Although it is difficult to know what exactly the future prevalence of obesity will be, recent research from the National Health Statistics Reports evaluating obesity data obtained just before the COVID-19 pandemic (which added 2019–March 2020 data to the 2017–2018 data) closely matched the JEC projection’s first data point for 2019–2020 (41.9 percent of adults qualified as obese and 9.2 percent qualified as severely obese, while the projections were 41.9 percent and 8.9 percent).²¹⁹

The current distribution of obesity by age group suggests that population dynamics over the next 10 years do not appear likely

to deviate from the prior 20-year trend. The NHSR identifies the rates of obesity by age group. The data collected over the 2017–March 2020 time period indicates that 39.8 percent of adults aged 20–39, 44.3 percent of adults aged 40–59, and 41.5 percent of adults older than 59 qualified as obese.²²⁰ Similarly, 9.7 percent of adults aged 20–39, 10.7 percent of adults aged 40–59, and 6.1 percent of adults older than 59 qualified as severely obese.²²¹ More than 20 percent of children ages 6–19 qualified as obese, with nearly a third of obese children qualifying as severely obese.²²² Moreover, almost 60 percent of current children are projected to qualify as obese by the age of 35.²²³

The projection suggests that by 2033 a majority (50.5 percent) of the U.S. adult population will qualify as obese. The likelihood of this outcome is supported by previous research published in the *New England Journal of Medicine*, which uses more nuanced and sophisticated statistical techniques to project that a near-majority (48.9 percent) of the U.S. adult population will qualify as obese by 2030 (JEC economists' projection for 2030 is 48.0 percent).²²⁴

Obesity-Related Health Expenditures Issues

There has been no shortage of research on the costs associated with obesity-related healthcare. JEC economists use estimates from several high-quality studies and their projections of future obesity rates to estimate the annual total direct healthcare costs of obesity and the portion of that amount covered by government funding.

A 2021 study by Cawley et al. examined obesity-related direct healthcare costs from 2001 through 2016. JEC economists selected Cawley et al.'s estimates of the average annual excess medical costs due to obesity (\$2,782, aggregated over all obesity classes during the 2011–2016 time period, 2017 dollars) due to the breadth of data they considered and because the value represented a mid-range estimate compared with similar options (\$1,861 per Ward et al., \$3,429 per Biener et al., and \$3,920 per Lopez et al.

for direct excess healthcare costs derived from similar time periods; 2011–2016 for Cawley et al. and Ward et al., 2013 for Biener et al., and 2018 for Lopez et al.).²²⁵

Cawley et al. found that the average annual excess cost attributable to obesity-related healthcare effectively doubled a normal weight patient's average annual medical expenses.²²⁶ Similar to other research, they found that the cost of medical care rose in conjunction with BMI: Persons qualifying as Class 1 obese experienced 68 percent higher annual healthcare costs, and persons qualifying as Class 2 and Class 3 experienced 120 percent and 234 percent increases, respectively.²²⁷ Using their data JEC economists estimate that non-severe obesity (Class 1 and 2) accounted for an average \$2,580 in excess annual medical costs per obese person during the later period of their data (2011–2016), and severe obesity (Class 3) accounted for \$6,312 in excess annual medical costs over the same time period.²²⁸

An analysis of Cawley et al.'s inflation-adjusted data indicates that per patient obesity healthcare costs grew at an annual rate of around 2 percent over the 16-year period that their data covers.²²⁹ This mirrors what other research has found—that obesity-related healthcare costs have increased so rapidly over the last three decades primarily because the numbers of people qualifying as obese has risen, rather than the cost of care.²³⁰ Nonetheless, a 2 percent annual rate of change can compound to substantial increase over longer periods of time. This rate of increase is included along with inflation-adjustments in forecasting the future cost of obesity-related healthcare.

JEC economists combine their projections of excess per person obesity-related healthcare costs (\$3,919 for Class 1 and Class 2 obesity in 2023, and \$9,591 for Class 3) with the projections for the U.S. population which they project qualify as Class 1 or Class 2 obese (85.6 million in 2023) and Class 3 obese (24.1 million in

2023) over the period from 2024 through 2033 to estimate the 10-year aggregate national direct cost of obesity-related healthcare. They multiply these amounts by the estimated government share of these costs (50 percent) to produce the final estimate, \$4.1 trillion in obesity-related government expenditures from 2024–2033.²³¹

Box 3-4: Obesity’s Effect on Labor Supply

The analysis in Box 3-2 suggests that obesity is responsible for an average of 2.1 Years of Life Lost (YLL) across the entire U.S. population. Based on CDC life expectancy estimates, this corresponds to a 2.5 percent decrease in life expectancy. JEC economists estimate that, in effect, obesity currently reduces labor supply by 2.0 percentage points (this assumes the ratio of the average number of working years before retirement and the average length of life following entering the workforce is approximately 0.80).

They apply this increase to labor supply in equal increments over 5 years to account for the estimate representing a long-run effect. Information from the Congressional Budget Office has indicated that labor income accounts for an 80 percent share of potential (i.e., long-run) GDP. JEC economists apply the estimate of increased labor supply to the estimates of the labor portion of GDP projected from 2024–2033 to estimate the total cost imposed on potential GDP by obesity (which is equivalent to the cost to GDP of current obesity rates). They then multiply this amount by 18.2 percent, the CBO’s estimate of the share of Federal tax receipts from aggregate economic activity.²³²

JEC economists estimate that obesity-related decreases in labor supply will cost the U.S. economy \$5.6 trillion from 2024–2033. Approximately \$1.0 trillion of this amount would have accrued to the Federal government as tax receipts.

Box 3-5: Obesity's Effect on Labor Productivity

The effect of obesity on labor productivity can be separated into “absenteeism” and “presenteeism” effects (being absent from work and being present, but less productive than otherwise possible). Research by Kudel et al. illustrates that obese workers are absent from their job approximately twice as often as normal weight workers. This corresponds to 2–2.5 extra days of absence each year, which is approximately 1 percent of working days.

JEC economists estimate the labor productivity lost to presenteeism with the simple assumption that the average obese worker, if they were a healthier weight, would perform an extra 5 minutes of work over the typical 8-hour workday. This corresponds to a 1 percent increase in output.²³³

By applying this 2 percent increase in labor productivity to potential GDP (see Box 3-4) and adjusting by the proportion of the U.S. adult population projected to qualify as obese during the 2024–2033 window, JEC economists estimate that obesity will be responsible for \$2.6 trillion in lost economic activity, and \$470 billion fewer Federal tax receipts.

Another way to estimate the effect of obesity on labor productivity is through wage comparisons, assuming that wages are a reasonable indicator of productivity. Biener et al. reports that a 10 percent increase in BMI reduced the earnings of women by 1.86 percent and of men by 3.27 percent.²³⁴ However, it can be difficult to determine the extent to which discrimination against persons with obesity may confound the productivity signal in wages.

JEC economists believe that a 2 percent estimate of the reduced labor productivity of workers suffering from obesity represents a substantially cautious estimate—the true effect is likely substantially larger.

Based on 1994 data, Wolf and Colditz found evidence suggesting that lost productivity due to obesity was nearly equivalent to the direct medical costs.²³⁵ This perhaps provides a useful upper bound for considering what the non-medical, indirect economic cost of obesity might be. Based on their analysis, the labor productivity cost of obesity would be worth \$565 billion in 2023, equivalent to a 6 percent reduction in productivity.

Addressing Obesity is Difficult but Important

Addressing obesity is no easy task for policymakers. One must inevitably balance between preserving individual liberty while reducing the severe costs imposed on others. At a minimum, government policies should not encourage poor health decisions by worsening moral hazard. Moral hazard occurs when someone does not bear the full consequences of their risky decisions, inciting them to take greater risks than they would otherwise.

Automobile seatbelts and airbags are a typical example of how episodes of moral hazard can occur. As the riskiness of harm due to driving has fallen, researchers have documented that automobile drivers (likely unconsciously) have increased the aggressiveness of their driving habits. In the era before safety devices were widespread, drivers experienced a larger penalty for riskier driving, which would have motivated corresponding risk-reducing behavior. Research following the widespread adoption of automobile air bags finds evidence of offsetting driver behavior (increased aggressive driving) in response to the decreased riskiness of driving.²³⁶ Unfortunately, these costs also appear to have been borne by higher rates of injuries and fatalities among pedestrians and bicyclists.

Similarly, academic research has found that when individuals bear less of their medical costs, they are more likely to consume more

healthcare.²³⁷ Finding policy solutions to obesity requires foresight to ensure that the potential for unintended consequences, such as those caused by moral hazard, are minimized.

Reforming Nutrition Assistance Programs

In weighing these interests, government should thus find ways to incentivize behavior that either lowers risk or promotes positive behavior. At a minimum, the government also must ensure that it is not incentivizing unhealthy behavior. Government nutrition programs like SNAP (Supplemental Nutrition Assistance Program), are likely contributing to unhealthy behaviors and certain aspects should therefore be reevaluated.

SNAP was created in 1964 to assist low-income families with food purchases to avoid malnutrition. Since its creation, economic conditions and public nutrition in the U.S. have substantially changed. When the program began, the primary problem to be solved was that of caloric deficiency—thankfully, that has been achieved. Perhaps, however, it was overachieved. Today, the largest nutrition-related problems facing low-income Americans are unhealthy diets and obesity rates rising much faster than average.²³⁸

There is concern among academic researchers that SNAP may be contributing to poor nutritional food choices and, therefore, obesity.²³⁹ As the program currently stands, SNAP benefits can be used on a wide variety of foods, including unhealthy foods. While this approach respects individual autonomy, it may be empowering self-destructive behaviors. Research estimates that 23 percent of the value of SNAP benefits are used on objectively unhealthy foods such as sodas, desserts, chips, and candy, meaning that the U.S. government funds approximately \$25 billion dollars in junk food purchases every year.²⁴⁰

USDA research has found that “lower nutritional quality of household food acquisitions was associated with SNAP participation status.”²⁴¹ This finding coincides with academic research that found that SNAP participants had a poorer diet than income-eligible non-participants.²⁴² While there may not be a causal effect of SNAP participation exacerbating unhealthy diets, these studies indicate that there is room for government food assistance programs to improve to encourage better health outcomes for the participants.

Economics of SNAP

The U.S. spent over \$110 billion on SNAP in FY2021, but this figure fails to capture the full cost that the U.S. is paying due to the adverse health outcomes it is likely creating.²⁴³ SNAP subsidies have increased caloric intake at a time when obesity is arguably the largest health issue in the U.S. This means that Medicaid and Medicare healthcare provisions, combined with SNAP benefits that facilitate unhealthy diets, create a government externality. A government externality is like a market externality, with the difference being that the connection by which others bear the external costs is artificially created by government policy, rather than arising due to market imperfection.²⁴⁴

In this case, a large part of the social cost imposed by obesity is due to government funding of healthcare (34 percent of all healthcare costs are covered by government programs).²⁴⁵ This is not necessarily an argument against government healthcare programs, but rather a rigorous identification of the structure of the problem at hand. To the extent that government externalities are exacerbated by other government policies, like SNAP, which could be mitigated with sensible reforms, all parties should engage in such inquiry with an open mind.

There is a clear argument to pursue SNAP reforms that would encourage healthy diets. This might include limiting junk food

purchases with SNAP benefits or rewarding making changes that lead to positive health outcomes. At a minimum, the Federal government should consider banning soda purchases using SNAP benefits. Soda accounts for the largest expenditure of SNAP benefits, and it (as well as other sugary drinks) has been clearly linked to adverse health outcomes.²⁴⁶ Insofar as the Federal government continues to fund nutrition programs, it should at least ensure that the programs deliver better health for low-income Americans. SNAP presents a clear lever to address obesity, but fixing its flaws is only a small step toward solving the problem.

Medical Innovations and Obesity Care

To address obesity, the Federal government must also create an environment in which medical innovation can thrive. This requires a regulatory system in which entrepreneurs are rewarded for innovations without undue regulatory or bureaucratic burdens. Full success of this goal would result in the rapid creation of new medicines, therapies, and technologies as well as swift reduction of the cost and price of existing healthcare products.

Recent and ongoing research has identified that a category of existing drugs can effectively reduce the BMI of individuals, which in turn should help prevent the associated conditions of obesity (heart disease, cancer, diabetes, etc.)²⁴⁷ For example, GLP-1s (Glucagon-like Peptid-1 Receptor Agonists) have been approved for diabetes care for almost two decades, but were only recently approved for use as a weight loss therapy.²⁴⁸ They have been observed to reduce the weight of non-diabetic patients suffering from obesity by between 6.1 and 17.4 percent.²⁴⁹ This area of medical science is moving exceptionally fast, though, and recent trials have shown results suggesting that body weight losses of 24 percent in under a year are possible.²⁵⁰

The ongoing innovations in GLP-1 drugs have tremendous potential to address the obesity crisis. However, their cost is likely

to inhibit their widespread use. Without insurance, these drugs can be expected to cost around \$900 a month.²⁵¹ Finding ways to reduce these costs, whether it be through greater competition in prescription drug markets or by easing barriers to production, would likely result in greater access to these drugs and their benefits.

Additionally, weight loss drugs such as GLP-1s are explicitly prohibited from being covered by Medicare Part D as their use for weight loss is classified as a “cosmetic treatment.”²⁵² Given the substantial savings to Medicare that could be achieved by reductions in obesity, this should be reconsidered. Recent research suggests that if this were to change, Medicare could save \$175 billion over the first 10 years.²⁵³ Furthermore, the fact that GLP-1 drugs use for weight loss is covered by Federal health insurance for government workers suggests that simple fairness be applied in making them available for Federal healthcare program recipients.²⁵⁴

Given the estimates of average expenditures due to excess annual healthcare costs attributable to obesity, as the costs of these drugs fall, the benefit to government healthcare programs could become quite large. JEC economists estimate that the 2023 excess healthcare cost for each severely obese person is \$9,591. Public healthcare costs tend to be higher, resulting in an estimated 2023 excess healthcare cost for each severely obese person of \$10,634.

These drugs may provide the potential to achieve a net decrease in government expenditures while at the same time achieving better health outcomes—such two-for-one deals in public policy are rare. Given public health research that finds that a large proportion of healthcare spending on obese persons is concentrated on those who are severely obese, it may be most effective to initially concentrate GLP-1 spending on that population.

Healthcare Patent Policy

The U.S. is the world's leading innovator in pharmaceutical development, but domestic healthcare consumers pay higher prices than healthcare consumers abroad. This is partially due to free riding by other countries, who refuse to provide patent protection for U.S.-developed drugs. They demand instead that the drugs be priced at the marginal production cost, which does not cover the cost of research and development.²⁵⁵ It is estimated that patented drugs are priced five times higher in the U.S. as their unpatented equivalents in foreign markets.²⁵⁶ Addressing this is not easy but there are several policies that can be pursued to reduce prices.

Price competition in the U.S. could be facilitated by expedited review for generic drugs, allowing them to get to market more quickly.²⁵⁷ In particular, there's a case for expedited review for biosimilar drugs already in widespread use. It would be valuable most when only one drug of that type is available to the public.

Policies that increase drug price transparency and empower consumers to make educated decisions regarding medicine choices would also help. Allowing and encouraging patients to shop around and pursue drugs at cheaper costs would incentivize greater competition among producers and retailers. To facilitate this, instead of patients' prescriptions being managed entirely by third parties, patients could instead have the power to seek out lower costs for their prescriptions and choose which brands best suit their needs.