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Public Policies Promoting Healthy Eating and Exercise

Evaluating the Relationship Among Income, Obesity, and Life Expectancy

By Theresa Chalhoub, Madeline Twomey, and Rhonda Rogombe November 27, 2018

Income inequality is of major concern in the United States. While the rich continue to grow richer, wages have largely stagnated among middle- and low-income groups.[1] Growing research suggests that this stagnation affects far more than just how much is in people's bank accounts. According to a 2016 *Journal of the American Medical Association* (JAMA) article co-authored by Center for American Progress (CAP) senior fellow David Cutler, income is correlated with life expectancy.[2] The study determined that as income rises, life expectancy increases. It also found that the difference in life expectancy between the lowest and highest income quartiles—the top and bottom 25 percent of income earners—varied across geographic locations and increased over time.

According to the JAMA study, health behaviors including smoking, obesity, and exercise may explain some of the geographic variation in life expectancy for the lowest income quartile. In a previous issue brief, CAP outlined state and local tobacco use prevention policies to help address growing inequality in life expectancy.[3] Similarly, this brief discusses existing policy initiatives at the state and local levels that may be effective in promoting healthy eating and exercise and, as a result, begin to close the gaps in life expectancy between low- and high-income individuals across the nation.

Evaluating the relationship among income, obesity, exercise, and life expectancy is complicated; there are many factors driving each piece, some of which are still unknown. Yet progress has been made: From increasing access to whole, fresh foods to encouraging increased physical activity, public health officials across the nation are employing creative approaches to boost the health of their communities.

Obesity and exercise in the United States

Obesity in the United States has been on the rise since the 1970s.[4] From 1971 through 1974, 14.5 percent of U.S. adults from the ages of 20 through 74 were obese;[5] from 2015 through 2016, the obesity rate among U.S. adults stood around

39 percent.[6] While obesity is a national problem, it disproportionately affects certain demographic groups: women, people of color, and less-educated individuals bear the highest rates of obesity.[7] Childhood obesity rates are also continuing to rise.[8]

The Centers for Disease Control and Prevention (CDC) defines obesity as a body mass index (BMI) of 30 or more.[9] There are many important factors to consider when assessing health, and BMI is just one. A screening tool, BMI uses the height and weight of an individual to indirectly determine his or her percentage of body fat.[10] Obesity has several health risks associated with it, including high blood pressure, Type 2 diabetes, coronary heart disease, and stroke, among others.[11] Moreover, the CDC estimates that health care costs related to obesity amount to $147 billion per year.[12] Diabetes alone accounts for nearly 5 percent of U.S. health care costs. [13]

There are various causes of and contributing factors to obesity, including genetics, behavior, and community environment. Two such contributing factors are diet and physical activity.[14] Poor diet and obesity are now among the main causes of disability and death in the United States. According to a recent analysis conducted by the U.S. Burden of Disease Collaborators, poor diets accounted for approximately 530,000 deaths in 2016 alone. More than 80 percent of these deaths were due to cardiovascular disease, while the remainder were due to diabetes, cancer, and other diseases.[15] Physical activity also has an effect on health. In addition to helping to maintain a healthy body weight, regular physical activity can reduce the risk of several diseases associated with obesity, including cardiovascular disease, Type 2 diabetes, and even some cancers.[16] Research also suggests that regular physical activity can increase life expectancy: According to the CDC, engaging in seven hours of physical activity per week lowers the risk of dying early by 40 percent.[17]

The inaccessibility of healthy food in food deserts and food swamps is a key barrier to combating obesity in low-income areas. Food deserts typically describe areas in which there is limited access to affordable and healthy foods, considering factors such as transportation access, neighborhood income levels, and distance to the nearest supermarket.[18] Food swamps are areas in which unhealthy, highly processed foods, such as fast food, are more readily available than healthy food.[19] Food deserts and food swamps can overlap; the same areas that have little access to healthy food options can be saturated with junk food. More recent research suggests that the presence of food swamps may be a stronger predictor of obesity rates than the presence of food deserts.[20]

Policies to promote healthy eating and exercise

A number of federal, state, and local policies have begun to tackle the complex factors that affect the relationship among obesity, healthy eating, and exercise. The following sections outline several recent federal and local initiatives, providing some examples of ways governments can work with individuals and communities to improve health outcomes.

Federal initiatives

The Obama administration made a significant effort to address the obesity epidemic. In 2010, former First Lady Michelle Obama launched the Let's Move! initiative to reduce childhood obesity. The initiative included a comprehensive set of recommendations that aimed to increase physical activity and access to healthy, affordable food for children and their parents.[21] One key component of the initiative was increasing the availability of nutritious lunches in public schools.[22] In 2012, the U.S. Department of Agriculture (USDA) issued a final rule to improve the nutritional requirements for the National School Lunch Program (NSLP) and the School Breakfast Program to include, among other things, more whole grains, fruits and vegetables, and lower levels of sodium and fat.[23]

To address a general lack of access to fresh, whole foods, the USDA also partnered with the Farmers Market Coalition in 2014, allowing eligible farmers markets to accept the Supplemental Nutrition Assistance Program (SNAP).[24] The partnership aims to give low-income SNAP participants greater access to nutritious foods while also supporting farmers. In 2017, participants spent more than $20 million of their benefits at farmers markets—a 35 percent increase from 2012.[25] Furthermore, as a provision of the Affordable Care Act (ACA), the Food and Drug Administration (FDA) began requiring all chain restaurants and other food establishments with 20 or more locations to post detailed calorie counts on their menus.[26] The FDA fully enacted this measure in May 2018.[27]

Although the support of the Trump administration is critical to addressing the persisting public health crisis of obesity, little positive action is expected. The administration has already undermined many of the Obama administration's efforts to combat obesity. The USDA will now allow exemptions from established nutrition standards, affecting whole grain, sodium, and milk requirements for school lunches.[28] These exemptions will affect more than 30 million children—including 21.5 million low-income children—who participate in the NSLP daily and rely on the program for access to nutritious foods.[29] The Trump administration has also proposed severe cuts to key health programs at the CDC,[30] which, if enacted, would eliminate dedicated funding for nutrition, physical activity, and obesity efforts.[31]

State and local initiatives

State and local officials should invest as much as possible in creating and evaluating pragmatic, multisector policies to improve health outcomes. Examples of strong public policies to address obesity and exercise include sugary beverage taxes and investments in walkable communities. However, cities and states should also create programs that best address their specific needs.

Sugary beverage taxes

Sugary beverage taxes aim to raise prices of certain products in order to reduce consumption of high-calorie, nutrition-poor beverages.[32] Several cities and counties across the nation have imposed sugary beverage taxes aimed at improving residents'

health outcomes.[33] Several studies show that if implemented properly, these taxes can have a significant impact on residents' beverage choices, reducing their overall sugar and caloric intake and ultimately leading to lower obesity rates—particularly among low-income individuals. For example, in Philadelphia, Pennsylvania, residents reported that their daily soda consumption decreased by 40 percent in the first two months after the soda tax went into effect.[34] Similarly, a study conducted in Berkeley, California, found that sugary beverage consumption in low-income neighborhoods decreased by 21 percent after a tax was implemented.[35]

The American Beverage Association, Coca-Cola, and other beverage producers have lobbied fervently against cities that propose such taxes.[36] In June 2018, the beverage industry successfully funded a campaign in California that banned the implementation of new local sugary beverage taxes across the state until 2031.[37]

Policies promoting physical activity and walkability

Many rural municipalities are engaging in discussions and projects designed to promote physical activity among their constituents, particularly as weak federal standards have resulted in insufficient state-level physical education requirements.[38] Some of these initiatives, such as bicycling initiatives and walkability projects, depend heavily on investment in infrastructure. The results of the 2002 Granville County community health assessment, for example, prompted officials in Granville County, North Carolina, to develop a strategy to reduce obesity through physical activity.[39] The assessment revealed that 1 in 5 Granville County residents were obese and that residents were more likely to die from chronic disease compared with the average North Carolinian.[40]

In order to encourage physical activity and to combat poor health outcomes among residents, local stakeholders developed a plan to invest in the development of greenways, which they define as "corridors of open green space linking parks, recreational areas, residential neighborhoods, employment, schools, and shopping districts."[41] Construction of the first greenways began in 2010, and the county has constructed 13 miles of greenways and trails as of 2018.[42] County officials have plans to construct an additional 200 miles of greenways and trails in the coming years.[43]

Case studies of city policies

The sections below outline specific public policies and efforts in Baltimore, Maryland, and Boulder, Colorado—places that have implemented strong public policies to increase the health and well-being of residents in their communities. Unless otherwise noted, the information in the following case study sections was collected through phone interviews between CAP and individuals at the Baltimore City Health Department, Baltimore Food Policy Initiative, Boulder County Housing and Human Services, and Boulder County Public Health.[44] Where possible, CAP supplemented information collected through the interviews with additional public information and resources.

Baltimore

Baltimore has taken a holistic approach to food policy across the city, using it as a mechanism to address economic and racial disparities within and across neighborhoods. In 2010, the city created the Baltimore Food Policy Initiative, which brings together the Department of Planning, Office of Sustainability, Baltimore City Health Department, and the Baltimore Development Corporation to work to "improve health outcomes by increasing access to healthy affordable food."[45] This initiative has many different components, some of which are highlighted below.

In 2012, the city's Office of Sustainability, in partnership with the Johns Hopkins Center for a Livable Future, began mapping food access disparities. Building on earlier efforts, they identified Healthy Food Priority Areas—formerly known as food deserts—where residents do not have adequate access to healthy foods.[46] The analysis considers four factors: healthy food availability, median household income, vehicle access, and proximity to supermarkets.[47] Food access disparities overwhelmingly affect black residents. As of 2018, more than 120,000 black residents, or 31 percent of the city's black population, live in priority areas compared with 16,000 white residents, or 8.9 percent of the city's white population.*[48] Overall, 23 percent of Baltimore residents live in Healthy Food Priority Areas, down from 25 percent in 2015.[49]

Due to transportation barriers and the absence of supermarkets, residents in Healthy Food Priority Areas often rely on corner stores for groceries and other food purchases. In general, corner stores lack the capacity to provide all of the products needed for a complete, healthy meal. In order to address this issue, the city has taken steps to help residents gain access to healthy foods and improve the quality of corner store selections. In 2010, the Baltimore City Health Department launched the Virtual Supermarket program to assist seniors in Healthy Food Priority Areas. Through this initiative, seniors are able to order groceries online and have them delivered to their residences. There are 14 sites across the city, and the program fulfills 2,500 orders per year.[50] The health department also established the Healthy Stores program, which currently works with 25 store owners on education, including the value of carrying fresh produce. The department also provides a stipend to stores that begin to carry fresh produce; helps provide signage; and, if applicable, provides baskets and refrigeration units. In 2016, the city's personal property tax credit also took effect, which incentivizes grocery stores to enter or renovate stores in certain priority areas.[51] These seemingly minor policy changes have already had a significant impact: As a result of the personal property tax credit, for example, one supermarket opened in East Baltimore, and more than 5,000 residents no longer live in Healthy Food Priority Areas.[52]

A key component of changing the food environment in Baltimore is community engagement. To that end, the city also created the Resident Food Equity Advisors program, which aims to include residents in the policymaking process.[53] Resident advisers are selected through an application process and engage with policymak-

ers to inform decisions and make recommendations on food policy.[54] Residents' primary motivations for joining this group include relationships within their community, race-related concerns about food access, equity issues, and personal experiences with health and diet-related illnesses such as diabetes and cardiovascular disease.[55] While the resident advisers' primary focus is food policy, they also aim to develop wealth-building strategies around food, such as supporting minority-owned businesses. These efforts, in tandem with others, are working to create a new food policy environment for Baltimore residents.

Boulder

In 2016, voters in Boulder, Colorado, passed a Sugar-Sweetened Beverage Product Distribution Tax through a ballot initiative.[56] The tax—which took effect on July 1, 2017—applies to distributors, charging a 2-cents-per-ounce excise tax on certain sweetened beverages.[57] Passage of the tax was a community-driven effort led by the Healthy Boulder Kids campaign in conjunction with Healthier Colorado.[58] After passage of the ballot initiative in November 2016, many of the details of the tax's implementation were addressed by the Boulder City Council on a quick timeline.

The tax applies to distribution of sugary beverages that contain 5 or more grams of caloric sweeteners added for every 12 ounces.[59] A key implementation question included which entities and products would be subject to the tax, and some of the most hotly debated issues were around exemptions for various distributors and products. Ultimately, the tax exempts certain beverages, including alcoholic beverages, baby formula, beverages for medical use, 100-percent-natural fruit and vegetable juices without added sweeteners, and beverages where milk is the primary ingredient, among others.[60]

Another consideration during the implementation process was ensuring that the public was aware of the tax, in order for the measure to have an impact on people's consumption habits. Given the limited time frame for implementation, a major advertising campaign was out of reach. Instead, city officials created informational flyers and posters to be distributed and posted at points of sale.[61] The materials were printed in both English and Spanish and provided general information on the tax, emphasizing that the initiative was community-driven and that the revenue would go toward health promotion and equity initiatives in Boulder.[62]

Importantly, however, the tax does not require the distributor to pass the price increase onto the consumer. Distributors could choose to absorb the tax, meaning that people who purchased the drink could never see an increase in price. Therefore, the tax may not actually lower sugary beverage consumption as much as it otherwise could if consumers were aware of the increase in price and factored it into their consumption decisions.

The money collected by the sugar-sweetened beverage tax has been used for health promotion and chronic disease prevention in Boulder, particularly for low-income residents. The city formed a Health Equity Advisory Committee, which now includes nine members, to review funding applications and make recommendations on the use of tax revenue to the city manager.[63] In addition, the committee is tasked with defining outcomes and developing strategies for how best to engage target communities.[64] City officials stress the importance of promoting where the funding is going in order to better engage community members.

Since its implementation, the tax revenue has been used in a variety of ways, including support to safety net health providers; proposals related to food security or nutrition programs; physical fitness activities; and organizations working with particular groups, such as vulnerable older adults.[65] Between 2017 and 2018, the city awarded approximately $2.7 million to 19 nonprofits, such as No Student Hungry and Boulder Food Rescue's Fresh Food Connect program.[66] The beverage tax revenue has exceeded expectations and is expected to reach more than $5 million in 2018.[67] In November 2018, nearly 65 percent of voters supported a ballot measure authorizing the city to retain the excess funds, which will go toward initiatives to improve the health of low-income and minority communities in Boulder.[68]

Conclusion

Across the country, localities are engaging in initiatives to improve the health and well-being of communities and begin to tackle obesity rates. These efforts include sugary beverage taxes and projects to promote physical activity and walkability. Healthy eating has also been a focus of many national and local initiatives. These polices—and many others— have the potential to improve health outcomes and even increase life expectancy, particularly for lower-income populations. To sustain these initiatives and promote further progress, the federal government must work as a partner to state and local communities to provide consistent standards and robust federal funding.

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***Correction, November 28, 2018:** This issue brief has been updated to reflect the correct percentages of Baltimore, Maryland, residents living in priority areas.*

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