The State of Obesity: BETTER POLICIES FOR A HEALTHIER AMERICA

SPECIAL FEATURE: 20-Year Report Anniversary Retrospective
Acknowledgments

*Trust for America’s Health* is a nonprofit, nonpartisan public health policy, research, and advocacy organization that promotes optimal health for every person and community and makes the prevention of illness and injury a national priority.

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Table of Contents

ACKNOWLEDGMENTS .................................................................................. 2
TABLE OF CONTENTS ............................................................................... 3
LIST OF ACRONYMS AND ABBREVIATIONS ........................................ 4
INTRODUCTION ....................................................................................... 5

SECTION 1: SPECIAL FEATURE: 20 YEAR RETROSPECTIVE .................. 10
A. Obesity Trends Over Two Decades ..................................................... 10
   Q&A with William Dietz, M.D., Ph.D.: Solving the Obesity Crisis Requires Data, Investment, Political Will, and Provider Education ................................................................. 12
B. Evolving Outlook on Obesity ........................................................... 15
C. Policy Advances and Remaining Gaps ........................................... 18

SECTION 2: OBESITY-RELATED DATA AND TRENDS ......................... 22
A. Trends in Adult Obesity ............................................................... 22
   I. State Trends ........................................................................ 23
   II. Demographic Trends ........................................................... 24
B. Trends in Youth Obesity ............................................................... 29
   I. National Youth Obesity Rates .................................................. 30
   II. Young WIC Participants, Ages 2 to 4 ............................................. 30
   III. Obesity Rates in Children and Teenagers, Ages 10 to 17 ......... 31
   IV. High School Obesity Rates ...................................................... 31

SECTION 3: OBESITY-RELATED POLICIES AND PROGRAMS ............. 33
A. Economics of What We Eat and Drink .......................................... 33
   I. Fiscal and Tax Policies that Promote Healthy Eating: Beverage Taxes, Healthy Food Financing Initiative, and the New Markets Tax Credit ....................................................... 33
   II. Food and Beverage Marketing ............................................... 34
B. Nutrition Assistance, Standards, and Education .......................... 36
   I. Federal Hunger and Nutrition Assistance: WIC, school/child nutrition programs, SNAP ...................................................... 36
   II. Nutrition Incentive Programs .................................................. 40
   III. Childcare and Education Settings: Head Start, Early Care and Education State Requirements, K–12 Local Wellness Programs, Farm to School/ECE, and Smart Snacks ....................................................... 40
   IV. Dietary Guidelines, and Nutrition and Menu Labels ............... 42
C. Community Policies and Programs ............................................... 44
   I. Built Environment: Community Design and Land Use, Housing, Safe Routes to Schools, and Federal HUD and DOT Funding Programs ...................................................... 44
   II. CDC State and Community Initiatives ........................................ 46
D. Healthcare Coverage and Programs ............................................ 52
   I. Medicare and Medicaid .......................................................... 52
   II. Healthcare and Hospital Programs ........................................... 54

SECTION 4. RECOMMENDATIONS .......................................................... 57

APPENDIX: OBESITY-RELATED INDICATORS AND POLICIES BY STATE .... 67

REFERENCES ......................................................................................... 73

View this report online at https://www.tfah.org/report-details/state-of-obesity-2023
<table>
<thead>
<tr>
<th>LIST OF ACRONYMS AND ABBREVIATIONS</th>
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<tbody>
<tr>
<td>Addressing Conditions to Improve Population Health program</td>
<td>ACTion</td>
<td>National Health and Nutrition Examination Survey</td>
</tr>
<tr>
<td>Affordable Care Act</td>
<td>ACA</td>
<td>National School Lunch Program</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>AI/AN</td>
<td>New Markets Tax Credit</td>
</tr>
<tr>
<td>Behavioral Risk Factor Surveillance System</td>
<td>BRFSS</td>
<td>Office of Personnel Management</td>
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<tr>
<td>Body Mass Index</td>
<td>BMI</td>
<td>Preventive Health and Health Services Block Grant</td>
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<tr>
<td>Centers for Disease Control and Prevention</td>
<td>CDC</td>
<td>Racial and Ethnic Approaches to Community Health program</td>
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<td>Centers for Medicare and Medicaid Services</td>
<td>CMS</td>
<td>Safe Routes to School program</td>
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<td>Child and Adult Care Food Program</td>
<td>CACFP</td>
<td>School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students</td>
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<td>Child Care and Development Block Grant</td>
<td>CCDBG</td>
<td>Social Determinants of Health</td>
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<td>Childhood Obesity Research Demonstration project</td>
<td>CORD</td>
<td>Special Supplemental Nutrition Program for Women, Infants, and Children</td>
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<td>Children’s Health Insurance Program Reauthorization Act</td>
<td>CHIPRA</td>
<td>State Physical Activity and Nutrition program</td>
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<td>Community Development Financial Institutions Fund</td>
<td>CDFI</td>
<td>Summer Food Service Program</td>
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<tr>
<td>Community Eligibility Program</td>
<td>CEP</td>
<td>Supplemental Nutrition Assistance Program</td>
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<tr>
<td>Community Health Needs Assessments</td>
<td>CHNA</td>
<td>The George Washington University</td>
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<td>Diabetes Prevention Program</td>
<td>DPP</td>
<td>Trust for America’s Health</td>
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<td>Division of Nutrition, Physical Activity and Obesity</td>
<td>DNPAO</td>
<td>U.S. Department of Agriculture</td>
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<td>Early Care and Education</td>
<td>ECE</td>
<td>U.S. Department of Health and Human Services</td>
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<td>Electronic Benefit Transfer</td>
<td>EBT</td>
<td>U.S. Department of Housing and Urban Development</td>
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<td>Every Student Succeeds Act</td>
<td>ESSA</td>
<td>U.S. Department of Transportation</td>
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<td>Federal Poverty Level</td>
<td>FPL</td>
<td>U.S. Food and Drug Administration</td>
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<td>Fiscal Year</td>
<td>FY</td>
<td>U.S. Preventive Services Task Force</td>
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<td>Food Insecurity Nutrition Incentive</td>
<td>FINI</td>
<td>USDA’s Food and Nutrition Services</td>
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<td>Fresh Fruit and Vegetable Program</td>
<td>FFVP</td>
<td>Youth Risk Behavior Survey</td>
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<td>Front-of-package</td>
<td>FOP</td>
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<td>Good Health and Wellness in Indian Country</td>
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<td>Healthy Incentives Pilot</td>
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<td>Healthy, Hunger-Free Kids Act</td>
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<td>High Obesity Program</td>
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Introduction

This year’s *State of Obesity* report marks the 20th annual report from Trust for America’s Health (TFAH) on obesity in the United States. During that time, we have seen obesity rates rise across states, ages, sexes, racial/ethnic groups, and income.\textsuperscript{1,2,3,4,5,6} We have also seen ultra-processed food consumption and food advertising increase.\textsuperscript{7,8,9,10,11} Structural racism, discrimination, poverty, economic hardship, and food insecurity—which have direct and indirect effects on the choices, habits, and health of Americans—remain a major issue in the nation.\textsuperscript{12,13} And an ever-changing medical, technological, and political landscape continues to evolve. We have made important policy progress during the last two decades that has improved the lives of many Americans, yet large gaps and major underlying drivers of obesity persist. This year, our special feature is a retrospective on the last 20 years of data trends, the changing understanding and strategy around obesity, policy milestones, and the essential work remaining.

**FIGURE 1: Adult and Youth Obesity Rates Over 20 Years: 1999–2000 to 2017–2020**

<table>
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<tbody>
<tr>
<td>All Adults Age 20+</td>
<td>30.5%</td>
<td>41.9%</td>
</tr>
<tr>
<td>All Youth Age 2-19</td>
<td>13.9%</td>
<td>19.7%</td>
</tr>
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</table>

Source: NHANES
WHY DOES TFAH FOCUS ON OBESITY?

Obesity is a serious and growing public health threat. The causes and drivers of obesity are complex and multifactorial, and include national trends like increased consumption of ultra-processed food, and social and economic conditions that influence the health and wellness options available to some Americans (e.g., poverty and discrimination). Obesity is associated with a range of physical and mental conditions at the population level and is linked with higher healthcare costs and productivity losses.

(1) Obesity increases the risk of a range of diseases for adults—including higher rates of complications and serious illness from COVID-19, type 2 diabetes, high blood pressure, heart disease, stroke, arthritis, depression, sleep apnea, liver disease, kidney disease, gallbladder disease, pregnancy complications, and many types of cancer—and an overall risk of higher mortality.19,20,21,22,23,24,25,26,27,28,29,30,31,32

(2) Children with obesity are also at greater risk for certain diseases, like type 2 diabetes, high blood pressure, and depression, and a child with obesity is more likely to have obesity as an adult.33,34,35,36,37 Children with obesity also have a higher risk of hospitalization and severe illness from COVID-19.38

(3) Individuals with obesity have higher medical costs than lower-weight individuals. A 2021 study found that obesity accounted for $170 billion in higher medical costs annually in the United States.39 This includes billions in extra costs to the Medicare and Medicaid programs.40,41 Indirect, or nonmedical, costs from obesity also run into the billions due to missed time at school and work, lower productivity, premature mortality, and increased transportation costs.42,43
SUMMARY OF 2023 STATE OF OBESITY RECOMMENDATIONS

Trust for America’s Health (TFAH) offers recommendations for federal, state, and local policymakers and other stakeholders each year. Our goal—ensuring that every community can support healthy lifestyles for all—requires a systems-level approach, including public policy changes across key sectors to ensure healthy choices are available and easy for everyone. A systems approach includes reducing longstanding structural and historic inequities; targeting obesity prevention programs to communities with the highest needs; and scaling and increasing evidence-based initiatives that create the healthy community environments to support optimal health and promote healthy behaviors and outcomes.

A summary of TFAH’s recommendations is below; the full recommendations are on page 57.

1. Advance health equity by strategically dedicating federal resources to efforts that reduce obesity-related disparities and related conditions by:
   - Increasing funding for the Centers for Disease Control and Prevention (CDC) chronic disease and obesity prevention programs, including the State Physical Activity and Nutrition program, the Racial and Ethnic Approaches to Community Health program, the Healthy Tribes program;
   - Expanding the Social Determinants of Health program at CDC to support multisector collaborations to address upstream drivers of chronic disease;
   - Instituting economic policies that reduce poverty at a population level;
   - Prioritizing health equity in planning and decision-making at federal agencies; and
   - Adapting federal grantmaking practices to ensure that the community-based organizations that are best able to conduct obesity prevention activities can navigate federal funding mechanisms.

2. Decrease food and nutrition insecurity while improving nutritional quality of available foods by:
   - Guaranteeing healthy school meals for all and, in the interim, encouraging Community Eligibility Program participation;
   - Finalizing proposed rules to strengthen nutrition standards for school meals and snacks;
   - Maintaining eligibility, increasing the value of benefits, and ensuring there are no new participation barriers in the Supplemental Nutrition Assistance Program (SNAP);
   - Improving diet quality in SNAP through voluntary pilot programs and supporting programs that promote and incentivize healthy eating, like SNAP-Ed and the Gus Schumacher Nutrition Incentive Program;
   - Expanding access to the Special Supplemental Nutrition Program for Women, Infants, and Children for young children and postpartum women, codifying the fruit and vegetable benefit increase, and finalizing the proposed rule to improve the nutrition quality of the WIC benefit packages;
   - Creating a mandatory front-of-package label for processed foods to help consumers make informed choices;
   - Bolstering the Child and Adult Care Food Program by allowing a third meal service option, increasing reimbursements, simplifying administration, and continuing funding for nutrition and wellness education;
   - Expanding support for programs that promote maternal and child health, including breastfeeding support;
   - Improving the nutrition quality of the food that government agencies provide by uniformly implementing the Food Service Guidelines for Federal Facilities;
• Incentivizing healthy food options, like adding healthful corner stores, and supporting community gardens and farmers’ markets through community design; and
• Increasing outreach to eligible families to apply for school meals and other nutrition assistance programs.

3. Change the marketing and pricing strategies that lead to health disparities by:
• Closing tax loopholes and eliminating business cost deductions for advertising of unhealthy food and beverages to children on television, online, and places frequented by children;
• Discouraging unhealthy food and drink options by enacting sugar-sweetened beverage taxes—and using the revenue to reduce health and socioeconomic disparities;
• Incorporating local wellness policies that reduce unhealthy food and beverage marketing and advertising to children and adolescents, like by prohibiting coupons, sales, and advertising around schools.

4. Make physical activity and the built environment safer and more accessible for all by:
• Increasing federal education funding to support health and physical education, as well as programs that promote social-emotional learning and improve health outcomes for children;
• Codifying and funding the update of the Physical Activity Guidelines for Americans every 10 years;
• Boosting funding for active transportation projects like pedestrian and biking infrastructure and recreational trails in addition to adding flexibilities and increasing technical assistance to ensure all communities are able to access funding;
• Making physical activity safer by making Safe Routes to Schools, Vision Zero, Complete Streets, and non-infrastructure projects eligible under the Highway Safety Improvement Program;
• Identifying innovative methods for conducting physical education and prioritizing physical activity during schooltime;
• Working locally to make community spaces more conducive and safer for physical activity, active transportation, and outdoor play;
• Adopting and implementing Complete Streets principles; and
• Encouraging outdoor play and activity for children via state and federal programs and additional park development for communities most in need.

5. Work with the healthcare system to reduce disparities and close gaps in clinical-to-community settings by:
• Increasing access to health insurance coverage by expanding Medicaid and making marketplace coverage even more affordable;
• Clarifying to health insurers that obesity-related preventive healthcare services must be covered with no patient cost-sharing like all other grade A or B U.S. Preventive Services Task Force recommendations as required by current law, and ensuring continued free preventive coverage if legal challenges alter the current requirements;
• Expanding the capacity of healthcare providers and payers to screen and refer individuals to social services and care coordination, to sufficiently reimburse and increase capacity for social services, and to better integrate social needs data into medical records;
• Addressing root causes of health disparities by enacting the Health Equity and Accountability Act;
• Requiring Medicare and Medicaid to cover obesity-related services, such as obesity and nutritional counseling and treatments, and providing additional funding to offer these services;
• Prioritizing social and structural determinants of health in communities with high levels of obesity through community-directed goals and strategies, as well as evidence-based programs; and
• Enabling Medicaid waivers to allow community-based organizations to be reimbursed for chronic disease prevention activities, to further incentivize cross-sector collaboration.
WHAT IS OBESITY AND BMI?

Public health and healthcare sectors define “obesity” as a disease where an individual’s body fat and body-fat distribution exceed the level considered healthy. Body mass index (BMI) is a metric often used as a proxy for body fat because it is correlated with cardiometabolic risk, and it is simple and inexpensive to determine—no invasive tests, specialized equipment, or prior diagnoses required—and thus more universally available. BMI is a useful screening measure at the individual level to help clinicians decide which patients need additional assessment for chronic disease, and a useful population health measure to assess the distribution of BMI in populations so that resources can be targeted to certain geographic areas, groups, or others disproportionately affected by low or high weight for health.

Using BMI as a measure of obesity has several important considerations. First, the formula for calculating BMI as originally designed is not representative of all peoples. Secondly, BMI does not perfectly correlate with body fat—e.g. muscular individuals often have lower body fat than their BMI would suggest—or risk for chronic disease; though it does correlate as well or better than other non-invasive, widely available measures. For individuals, a more holistic understanding of family/personal history, lifestyle factors, body fat, and body fat distribution are important to assessing cardiometabolic risk. On a population level, the risk that occurs at different BMIs vary by sex and race/ethnicity. For example, certain populations of Asian Americans have higher risks of cardiometabolic diseases at lower BMIs, and Black Americans have lower risks at higher BMIs. Some researchers have suggested adjusting BMI thresholds to estimate cardiometabolic risks more accurately in different populations.

The use of BMI by the public health and healthcare sectors has been a recent topic of discussion—including a focus on its use as a diagnostic measure in the medical setting, as well as its historic, discriminatory origins and modern connection with weight-based stigma. In June 2023, the American Medical Association House of Delegates voted to adopt a new policy that outlines the limitations of BMI as an individual-level metric, supports additional education for physicians around BMI, and recommends BMI be used in conjunction with other measures in a clinical setting.

BMI is calculated by dividing a person’s weight (in kilograms) by height (in meters) squared. The BMI formula for measurements in pounds and inches is:

\[
BMI = \left( \frac{\text{Weight in pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \right) \times 703
\]

For adults, BMI is associated with the following weight classifications:

<table>
<thead>
<tr>
<th>BMI Level</th>
<th>Weight Classification</th>
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<tbody>
<tr>
<td>Below 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5 to &lt; 25</td>
<td>Healthy weight</td>
</tr>
<tr>
<td>25 to &lt; 30</td>
<td>Overweight</td>
</tr>
<tr>
<td>30 and above</td>
<td>Obesity</td>
</tr>
<tr>
<td>40 and above</td>
<td>Severe Obesity</td>
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Medical professionals measure childhood obesity differently, comparing a child’s BMI with children of the same age and sex in a reference population that accounts for typical changes during growth and development. A child’s BMI is expressed as a percentile relative to children from the reference population of the same age and sex based on growth charts developed by CDC using nationally representative height and weight data from American children from 1963 to 1965 and from 1988 to 1994.

<table>
<thead>
<tr>
<th>BMI Level</th>
<th>Weight Classification</th>
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<tbody>
<tr>
<td>Below 5th percentile</td>
<td>Underweight</td>
</tr>
<tr>
<td>5th to &lt;85th percentile</td>
<td>Healthy weight</td>
</tr>
<tr>
<td>85th to &lt; 95th percentile</td>
<td>Overweight</td>
</tr>
<tr>
<td>95th percentile and greater</td>
<td>Obesity</td>
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SPECIAL FEATURE: 20 Year Retrospective

TFAH’s first obesity report was published in October 2004 with a new report released annually ever since. Much of the 2004 report’s content had similar themes to this current report: it also documented obesity rates in the United States, implications for health risk and costs, framed the issue as primarily a public health and societal issue, and called for cross-sector action and policy changes at the national and state level to prevent and treat obesity in the United States. There have also been substantive changes in the understanding and outlook on obesity policy, an expanded understanding of social and structural drivers of obesity, and major changes in the medical, technological, and political landscape across the United States. This section reflects on the last 20 years of trends, the changing understanding and strategy within public health, and key progress and remaining gaps in nutrition, physical activity, and obesity policy.

A. OBESITY TRENDS OVER TWO DECADES

Over the last two decades, obesity rates have risen across the United States. According to National Health and Nutrition Examination Survey (NHANES) data, the U.S. obesity rate among adults ages 20 and older rose 37 percent and among youth ages 2 to 19 rose 42 percent between the 1999–2000 and 2017–2020 surveys. The change over time was slower for adults from 2003 to 2012, with a sharper increase in more recent survey years. For youth, obesity rates were steady from 2003 to 2014, but then followed by increases (see Figure 3).

FIGURE 3: Percent of Adults and Youth with Obesity, 1999–2020

Source: NHANES
The increase in obesity rates cross all sex, racial/ethnic, and age groups where data are available. The amount of the increase varies by population, from the lower end (15 percent for Black boys and 16 percent for Black women) to the higher end (61 percent for white boys and 58 percent for white men) (see Figures 4 and 5 for adult and youth obesity rates in 1999–2000 and 2017–2020).

**FIGURE 4: Adult Obesity Rates by Select Characteristics in 1999–2000 and 2017–2020**

*Note: 1999–2000 data is not available.

Source: NHANES

**FIGURE 5: Youth Obesity Rates by Select Characteristics in 1999–2000 and 2017–2020**

*Note: 1999–2000 data is not available.

Source: NHANES
Q&A with William Dietz, M.D., Ph.D.:

Solving the Obesity Crisis Requires Data, Investment, Political Will, and Provider Education

William Dietz, M.D., Ph.D., is the director of the Sumner M. Redstone Global Center for Prevention and Wellness at the Milken Institute School of Public Health at The George Washington University (GW). Dietz is also the director of GW’s STOP Obesity Alliance and co-chair of the Lancet Commission on Obesity. He is a past president of the American Society for Clinical Nutrition and the North American Association for the Study of Obesity.

Before joining the GW faculty, Dietz was the director of Centers for Disease Control and Prevention’s Division of Nutrition, Physical Activity, and Obesity from 1997 to 2012. Prior to his appointment to CDC, Dietz was a professor of pediatrics at Tufts University School of Medicine. Dietz received his undergraduate degree from Wesleyan University and his M.D. from the University of Pennsylvania.

TFAH: You’ve worked in the area of nutrition, physical activity, and obesity prevention throughout your career. Over that time, what’s been the most important progress within the policy arena and elsewhere? What’s been disappointing?

Dr. Dietz: The most important outcome is that obesity is now widely recognized as a significant problem and that the problem is more than a cosmetic issue; it’s a health issue. One of the biggest things we did at CDC was to publish the state maps, so metrics have played a role—from how obesity is being measured to how the data are being displayed. Another important milestone was demonstrating the costs associated with obesity, which showed the need for policies and cost-effective interventions.

An area of disappointment—I’m not sure disappointment is the right word—but only recently has there been an emphasis on the stigma and bias associated with obesity, which I think colors the whole approach. Despite the fact that obesity has been named a disease and that we have ample evidence of its adverse consequences, this notion that people are responsible for their obesity remains a challenge. It continues to affect almost every element of obesity treatment, from the individual to the population level.

TFAH: As you reflect on the past 20 years, how has the way the field thinks about obesity evolved?

Dr. Dietz: The most recent development, medication, is getting a lot of well-deserved attention because its results are approaching the impact of bariatric surgery. But, with 42 percent of the population having obesity, we have to recognize that we are not going to treat our way out of this disease. I’m concerned that the legitimate emphasis on the effectiveness of medication will displace the need to continue to focus on preventative measures.

TFAH: Despite extensive efforts to curb obesity rates, they have continued to rise year over year. Why do you think that is? What’s preventing substantial progress?

Dr. Dietz: Resources and political will, and these are related. In addition, bias and stigma come into play, and are reflected in the reluctance to invest in obesity treatment due to the biased thinking that people are responsible for their obesity. We’ve talked about social determinants, we’ve talked about cultural determinants, but the other major sector of determinants is commercial determinants. Commercial determinants are ubiquitous, beginning with the exposure of children to food ads on television and continuing through the intensive promotion of fast food and ultra-processed food. I believe that there’s a relationship between

Dr. Dietz: Yes, that’s an important issue. It’s not just the social determinants; the other relevant piece is cultural determinants. In many cases, cultural determinants are at least as powerful as social determinants.

TFAH: We now have a better understanding that a combination of factors leads to obesity. How should we think about genetics vs. other contributing factors?

Dr. Dietz: There’s no question that genetics affects the susceptibility to obesity, but genetics are widely misinterpreted as a cause of obesity. Susceptibility genes have been present in the population for millennia, but not until recently have we had an environment that reacts with those genes to produce obesity.

TFAH: Are you concerned that the new attention to medications to treat obesity will lead to a deemphasis of the role of social determinants?

Dr. Dietz: Yes, that’s a real concern. It’s not just the social determinants; the other relevant piece is cultural determinants. In many cases, cultural determinants are at least as powerful as social determinants.
ultra-processed food, food access, and obesity in underserved neighborhoods, because of the reliance on corner stores, which in turn rely on sales of ultra-processed foods.

**TFAH:** This year’s *State of Obesity* report includes an extensive list of policies to improve nutrition, increase physical activity, and prevent and treat obesity enacted over the last two decades. Which of the policies do you think has had the greatest impact? What would it take to scale those policies?

**Dr. Dietz:** The White House Task Force on Childhood Obesity during the Obama Administration was a key. If you look carefully at the task force recommendations, many found their way into legislation. That’s directly attributable to [former First Lady] Michelle Obama’s visibility and her willingness to talk openly about the importance of addressing nutrition and physical activity in kids.

There were two or three major steps that were directly related to the task force or occurred around the same time. One was the revision of the [Special Supplemental Nutrition Program for Women, Infants, and Children] WIC package in 2010, implemented in 2011, which was subsequently associated with a decrease in prevalence of childhood obesity in WIC participants. The decreases in obesity were highly significant decreases and reflected a major policy step forward. What was interesting about these decreases is that they were greater in children of color than they were in the white population. A second policy was changes in school meal standards, which were also shown to have had an impact on the prevalence of obesity among low-income adolescents.

These are two major policies and outcomes which had a major impact on obesity. What we don’t know is if these effects were sustained throughout the pandemic, which threw a major wrench into all of these efforts, because schools, despite their best efforts, could not match the standards that were in place before COVID. I don’t know the extent to which these standards have been reinstated, but I think their suspension during COVID is partially responsible for the big increase in obesity rates in low-income children that we saw during the pandemic.

**TFAH:** The two successful interventions you’ve described both target young people. Is that where the best chance to reverse the obesity trends exists? Is intervening in adulthood too late?

**Dr. Dietz:** Well, it may be. The difference is an emphasis on prevention or an emphasis on treatment—treatment necessitated by the consequences of obesity. Once someone has a BMI of 35 or above, preventative measures are not going to be particularly successful. That doesn’t mean that we should move away from behavioral interventions that improve physical activity and nutrition in adults—behavior change needs to be the cornerstone for any intervention. These nutrition and physical activity strategies need to be implemented at the population level and at the worksite level; there’s substantial interest in preventive measures on the part of health plans and employers.

Coming back to your question, about half of adult obesity begins in childhood, but the other half of obesity begins in adults, often young adults. This suggests we should focus preventative efforts on young adults. This is a huge opportunity, because those young adults are the folks who are having children. There’s an opportunity for a double effect—successful obesity prevention in those young adults may also prevent obesity in their children. We need to intervene at the family level.

While we are talking about young families, we should also mention breastfeeding. Gestational weight gain is associated with increased obesity risk in children, and breastfeeding lowers that risk. All new mothers should be encouraged to breastfeed their babies, and policies should be in place to support breastfeeding.

**TFAH:** What role should the federal government play in addressing the obesity crisis? How can the federal government’s current commitments to preventing obesity be improved?

**Dr. Dietz:** Again, political will is essential at the local, state, and federal level. But change is probably more likely at the state level than it is at the federal level. There are lots of opportunities for change at the state level. State employee health benefits and state Medicaid benefits are examples. That’s one place where we should focus our attention. We are starting to see and trying to fuel the development of political mobilization at the state level to focus on more effective treatment and prevention. A focus on treatment is particularly important because the costs of obesity and its comorbidities increase with the severity of the disease.

**TFAH:** One of the pillars of GW’s STOP Obesity Alliance is to ensure that healthcare providers have the tools and training to prevent and manage obesity. What are the main opportunities and barriers to enhancing provider education on treating obesity?

**Dr. Dietz:** Our primary work at the STOP Obesity Alliance focuses on how to help primary care doctors intervene around obesity. If we are going to be
successful in treating obesity, it has to be done within primary care settings but people in primary care are not well equipped on how to treat obesity.

**TFAH:** What should primary care providers be taught? Do we know what the most effective inventions are?

**Dr. Dietz:** One of the most challenging decisions for health plans, given the new and effective anti-obesity medications, is who to treat and how. For example, health plans cannot afford to start everyone in their plan with a BMI over 40 with significant comorbidity on one of the new anti-obesity medications. So, who should be treated and how? Solving this problem must begin with shared decision-making between patients and providers. However, obesity care is not something that has been routinely taught in medical schools or residency programs.

An additional challenge is there are no quality measures for obesity treatment, so most health plans, unless they are really deliberate about it, they don’t know what the prevalence of obesity is in their population, which means they can’t track who’s doing what, and they can’t track costs. If your plan includes obesity treatment, the plan needs to measure the outcomes of care. Lack of metrics is one of the biggest gaps that stand between us and more sophisticated approaches to the treatment of obesity.

**TFAH:** We know that weight-based discrimination and stigma are prevalent in our society, including in the healthcare system. How does this impact our ability to make progress, and what can we do to address it?

**Dr. Dietz:** Within the field, we are recognizing that stigma is a major barrier both at the individual and population level. Providers need to recognize that obesity is a chronic disease that requires ongoing care and follow-up, and the care needs to be paid for.

You’re probably familiar with the Obesity Action Coalition. For the first time since I’ve been in the field, we have an effective patient advocacy group. Their lives are full of stories about the maltreatment they’ve received from providers. Here at GW, we have patients who have talked to medical students about their lived negative experiences with healthcare providers. These presentations transform students’ perceptions of obesity and certainly sensitizes them to the kind of experiences people with obesity have had. Those experiences have an adverse effect on patient care and patient health. As many as 50 percent of providers still think that obesity is an individual behavior problem, not a disease.

**TFAH:** As we close, talk about what’s next for the sector. Is medication the future? Anything we haven’t covered?

**Dr. Dietz:** Two thoughts. Effective medications are certainly a choice for severe obesity. But it’s important to define what we mean by the use of these medications. The lifetime of expense of the newest generation of drug therapy will break the bank. These drugs are associated with a rapid decline in weight and an eventual plateau. What would happen if once someone reaches that plateau, you put them on a weight maintenance drug that would be less costly and would be more effective? I think we are going to learn that pretty soon.

You’re probably also aware of the older papers that showed that obesity spreads along social networks. An additional question is: can weight loss operate across social networks? And finally, can we invest in two-generation prevention by instituting preventive strategies in young adults and their children?
B. EVOLVING OUTLOOK ON OBESITY

Over the past 20 years, there has been an essential progression in the understanding and approach that the public health, medical, and policy fields take in their work in obesity prevention and treatment—including recognizing obesity as a chronic disease; emphasizing social determinants of health, equity, and a more comprehensive policy approach; and acknowledging the perniciousness of weight stigma, bias, and discrimination across our society.

When this report series began in 2004, obesity was in the early stages of being recognized as a disease, with various governmental agencies and medical associations gradually moving toward a consensus:

- In 1998, the National Institutes of Health stated that “obesity is a complex multifactorial chronic disease” in its report Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults.54

- In 2002, the Internal Revenue Service determined obesity treatment costs would qualify as deductible medical expenses, and the Social Security Administration found that obesity is a chronic disease that can be used in disability claims.55

- In 2004, the Centers for Medicare and Medicaid Services (CMS) removed language from its Medicare coverage manual that stated, “obesity itself cannot be considered an illness,” opening treatment options for enrollees. Two years later, CMS began covering bariatric surgery under Medicare.56

- In 2008, the Obesity Society—a professional society focused on obesity science, treatment, and prevention—supported classifying obesity as a disease.57

- In 2013, the American Medical Association adopted a policy resolution recognizing obesity as a chronic disease requiring treatment and prevention interventions.58

More recently, a 2021 opinion poll by Morning Consult found that 65 percent of adults surveyed agreed that the federal government should recognize obesity as a disease, and 70 percent supported Medicare and similar programs recognizing obesity as a treatable medical condition.59 The recognition and acceptance of obesity as a disease helped elevate the seriousness of the issue, started to make treatment and health coverage options available for more individuals with obesity, and helped move away from individual blame and toward a better understanding of the complex, multifactorial causes and continuum of the disease.

Another important shift in the obesity policy field has been the elevation of social determinants of health and health equity, and the need for a systems policy approach to tackle complex and interconnected societal issues. Cultural, social, environmental, and economic context has been a component of this work for decades. The first 2004 TFAH State of Obesity report called for moving past “an exclusive focus on individual action” and that “every segment of society has role to play,” and its policy recommendations centered around active living communities and access to affordable, healthy foods.60 Since then, an even wider view of context and conditions has been included in the series as an essential underlying element in obesity policy among advocates and many policymakers, in particular when it comes to addressing longstanding disparities in obesity. For example, TFAH
has added stress, structural racism, discrimination, poverty, economic hardship, and food insecurity into our obesity policy work, in addition to long-standing work on improving available choices and behaviors directly related to diet, nutrition, and physical activity.

More recently, TFAH’s reports have featured some of these critical issues in order to highlight their importance: Food and Nutrition Insecurity Among Youth and Families (2022), COVID-19, Social Determinants of Health, and Obesity (2021), Food Insecurity and its Connection to Obesity (2020), and Racial and Ethnic Disparities in Obesity and Advancing Health Equity (2019).

The third major evolution in the obesity policy field has been a recognition of the pervasiveness of weight-based discrimination and stigma, and the need to better incorporate and elevate reducing discrimination and stigma into other streams of obesity prevention and treatment work. Research has demonstrated that weight-based discrimination is widespread in educational, workplace, and healthcare settings. It can include ridicule, bullying, and fewer social, educational, and employment opportunities, as well as a lower quality of healthcare. Furthermore, experiencing weight-based stigma actually increases the risk of unhealthy eating and the avoidance of exercise and healthcare. Even though it is one of the most common forms of discrimination in society today, most people experiencing weight-based discrimination lack legal protection.

Recently, in the healthcare field, there have been discussions on advancing a more holistic approach to considering cardiometabolic health and obesity, and not a sole focus on weight or body mass index (BMI). BMI is a useful screening measure at the individual level to help clinicians decide which patients need additional assessment for chronic disease, and a useful population health measure to assess the distribution of BMI in populations so that resources can be targeted to certain geographic areas, groups, or others disproportionately affected by low or high weight for health. BMI does not, however, perfectly correlate with body fat; though it does correlate as well or better than other non-invasive, widely available measures. In June 2023, the American Medical Association House of Delegates voted to adopt a new policy that outlines the limitations of BMI as an individual-level metric, supports additional education for physicians around BMI, and recommends BMI be used in conjunction with other measures in a clinical setting. (For more on BMI, see page 9, and more on Medical Education, Training, and Best Practices, see page 54.)

Public health advocates—including TFAH—also need to consider their own role in contributing to weight-based stigma, as public health interventions that stigmatize obesity may have the opposite of their intended effect. This report was previously called F as in Fat: How Obesity Threatens Our Future. The “F” stood for the “failure” of the nation to have a public health response that matched the level of a crisis that had reached epidemic proportions in the United States. Changing the name to State of Obesity was in recognition of the success of the first 10 years of the report in raising awareness, presenting policy ideas, and making progress on the end goal of ensuring that “healthy choices [are] easy, affordable and accessible choices for everyone.” While such a title raised attention, it also could be misinterpreted and inadvertently stigmatize individuals living with obesity. In addition to changing the title, the focus of the report has increasingly broadened to examine the many social determinants of health and underlying systemic inequities associated with obesity, and has adopted key lessons as knowledge in the field evolved, such as always using person-first language when referring to people with obesity and ensuring visuals reflect healthy actions and behaviors and are not stigmatizing body size or weight.

This evolution and improvement across these three areas is a work in progress. Indeed, as TFAH—along with the public health, medical, and policy field at large—continues our work on nutrition, physical activity, and obesity policy, we expect to continue to learn new lessons on what works and where we can do better.
CULTURAL INSIGHTS ON NUTRITION, WEIGHT, AND FOOD SYSTEMS

In 2022, Vanderbilt University’s Cultural Context of Health and Wellbeing Initiative released a report titled Reframing Childhood Obesity: Cultural Insights on Nutrition, Weight, and Food Systems. The report reviews interrelated historical and structural factors that frame food and weight beyond individual choice. It also highlights examples of how governments and public health programs in different countries define, support, and encourage healthy eating in their populations, particularly among children and youth. It offers three overall considerations on how to improve childhood obesity policy interventions: (1) food is more than nutrition, (2) health is more than weight, and (3) diet is more than individual choice.73

2022 WHITE HOUSE CONFERENCE ON HUNGER, NUTRITION, AND HEALTH AND THE FIRST YEAR OF ITS NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH

In September 2022, the White House held the National Conference on Hunger, Nutrition, and Health—the first in 50 years—bringing together elected officials, advocates, and leaders across sectors around the goal “of ending hunger and increasing healthy eating and physical activity by 2030 so fewer Americans experience diet-related diseases—while reducing related health disparities.” At the conference, the White House released a five-pillar National Strategy to reach this goal:

(1) Improve food access and affordability;
(2) Integrate nutrition and health;
(3) Empower all consumers to make and to have access to healthier choices;
(4) Support physical activity for all; and
(5) Enhance nutrition and food security research.74

The White House also announced at the conference $8 billion in private- and public-sector commitments supporting the National Strategy. These commitments include philanthropic and in-kind contributions, healthcare innovation and education initiatives, and investment in new businesses.75

Since then, the White House has continued to build external support and partnerships across the country. It has also coordinated across the Biden-Harris Administration to implement new policies and rules that further the National Strategy, including three proposed rules: (1) make school meals healthier and accessible to more students, (2) improve nutrition standards and online purchasing for the WIC program, and (3) develop front-of-package labeling, new guidance on what food can be labeled “healthy,” and rules to reduce sodium content for food manufacturers. The Administration has also approved Medicaid demonstrations to test coverage of evidenced-based nutritional assistance and medically tailored meals.76
C. POLICY ADVANCES AND REMAINING GAPS

Over the past 20 years, local, state, and federal governments have implemented important policy changes to help improve nutrition, increase physical activity, and prevent and treat obesity. The chart on page 19 illustrates the major policy milestones of the last 20 years and outcomes where research and evaluations are available. The policies have shown a range of positive results for individuals and communities, including higher fruit and vegetable consumption (e.g., 2004 Fresh Fruit and Vegetable Program expansion); less sugary beverage consumption (e.g., various local sugary drink taxes); more active transportation and physical activity (e.g., 2005 Safe Routes to School programs); less food insecurity (e.g., 2020 COVID-19 flexibilities for U.S. Department of Agriculture (USDA) nutrition programs and various states’ universal school meal laws); and reduced obesity rates (e.g., 2009 WIC food package revisions for young children and 2010 changes to nutritional requirements for child nutrition programs).

While these policy changes have been important and beneficial for certain populations, they also clearly have been insufficient in scale, funding, and impact to counter the underlying structural issues and larger, long-term trends that have been underway for many decades across the country—including longstanding societal challenges (e.g., poverty, discrimination) that impact the choices, behaviors, and health of Americans; more food made away from home and increased consumption of ultra-processed foods; as well as continued growth in food advertising, which can shape preferences. \(^{77,78,79,80,81}\)

Americans have shifted to eating fewer minimally processed and unprocessed foods, and more ultra-processed foods, which are lower cost, readily accessible and convenient, and hyper-palatable. \(^{82,83,84,85,86,87}\) (Ultra-processed foods are “ready-to-eat or ready-to-heat industrial formulations made mainly with ingredients refined or extracted from foods and contain additives but little to no whole food,” which tend to be high in fat, salt, and sugar and low in nutrients.) \(^{88}\)

One study analyzing NHANES data found American adults ages 20 and older significantly increased their consumption of ultra-processed foods and significantly decreased minimally processed or unprocessed foods between the 2001–2002 to 2017–2018 surveys. \(^{89}\)

A different study, also using NHANES data, specifically found that vegetable consumption for adults ages 20 and older remained constant between 1999–2000 and 2017–2018 surveys, while fruit consumption declined. \(^{90}\)

A third study using NHANES data looked at the diets of youth ages 2–19 between 1999–2000 and 2017–2018 and had similar trends to adults: the amount of ultra-processed food that youth consumed increased and the amount of unprocessed food consumed declined. \(^{91}\)

At the same time, obesity prevention and treatment programs and research have been substantially underfunded for decades. In TFAH’s inaugural report from 2004, the authors noted that “only 28 states have received funds to support a CDC-funded state-based nutrition and physical activity program aimed at reducing obesity and other chronic diseases.” \(^{92}\)

The current, analogous program at CDC to fund state, local, territorial, and tribal programs to improve nutrition and increase physical activity is the State Physical Activity and Nutrition Program in the Division of Nutrition, Physical Activity and Obesity, which had funding for only 16 states for its 2018–2023 funding cycle and has funding for only 17 states for the 2024–2029 funding cycle. \(^{93,94}\)

CDC has two other programs that fund specific areas and populations, but still leaves 11 states as well as all of the U.S. territories without federal obesity prevention program funding. \(^{95}\)

In comparison, the Rudd Center for Food Policy and Obesity at the University of Connecticut estimates that food, beverage, and restaurant companies spend almost $14 billion per year on advertising, with more than 80 percent on fast food, sugary drinks, candy, and unhealthy snacks. A 2021 report from the Rudd Center found that fast food advertising topped $5 billion in 2019, an increase of $400 million since 2012. \(^{96}\)

To make progress in preventing obesity across U.S. populations and geographies, the government needs to:

- Significantly expand proven policy interventions and programs—and their funding—to reach more people and communities;
- Fill persistent gaps to improve food and nutrition access;
- Have key sectors prioritize systemic changes in nutrition and healthy eating, including the food and beverage manufacturers, healthcare, and education systems; and
- Make systemic changes to improve social and economic conditions and eliminate structural inequities—so all communities in the United States have the resources to promote healthy eating and physical activity and support the health and well-being for all.

Specific recommendations can be found in the Recommendation section beginning on page 57.
<table>
<thead>
<tr>
<th>Year</th>
<th>Policy</th>
<th>Description</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Recognizing obesity as a disease</td>
<td>CMS removed language from its coverage manual that stated, “obesity is not an illness.”</td>
<td></td>
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<tr>
<td>2004</td>
<td>Child Nutrition and Special Supplemental Nutrition Program for Women,</td>
<td>The law expanded several nutrition programs: the Fresh Fruit and Vegetable Program (FFVP), the Summer Food Service Program, and the Child and Adult Care Food Program (CACFP). It also required schools to draft and implement school wellness policies.</td>
<td>Research has shown that FFVP increases students’ consumption of fresh produce and is associated with a meaningful reduction in obesity for participating children. An evaluation of CACFP found that participation in the program may reduce the prevalence of obesity.</td>
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<tr>
<td></td>
<td>Infants, and Children (WIC) Reauthorization Act of 2004</td>
<td></td>
<td></td>
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<tr>
<td>2005</td>
<td>Safe Routes to School</td>
<td>Congress funded Safe Routes to School programs in all 50 states.</td>
<td>Safe Routes to School projects increased walking and biking to school by 37 percent.</td>
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<tr>
<td>2006</td>
<td>Updated Nutrition Facts labels</td>
<td>Starting January 1, 2006, manufacturers were required to include transfat levels on Nutrition Facts labels.</td>
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<tr>
<td>2006</td>
<td>Medicare coverage of bariatric surgery</td>
<td>CMS announced it would begin covering bariatric surgery for Medicare beneficiaries effective February 2006.</td>
<td>Bariatric surgery in the Medicare-eligible population is effective and leads to weight loss and decreased mortality.</td>
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<tr>
<td>2008</td>
<td>Food, Conservation, and Energy Act of 2008 (“the 2008 Farm Bill”)</td>
<td>The bill increased monthly Supplemental Nutrition Assistance Program (SNAP) benefits; created the Healthy Incentives Pilot (HIP) program to encourage SNAP households to purchase fresh produce; and provided nationwide expansion of the FFVP.</td>
<td>HIP increased participants’ produce consumption by 11 percent. Research has shown FFVP increases students’ consumption of fresh produce and is associated with a meaningful reduction in obesity for participating children.</td>
</tr>
<tr>
<td>2009</td>
<td>WIC food package revisions</td>
<td>Federal rule overhauling WIC food packages, adding more fruits, vegetables, and whole grains, and incentives to promote breastfeeding.</td>
<td>After the WIC nutritional requirements were strengthened, obesity rates among children in the program declined.</td>
</tr>
<tr>
<td>2009</td>
<td>Children’s Health Insurance Program Reauthorization Act of 2009</td>
<td>CHIPRA authorized the Childhood Obesity Research Demonstration Project (CORD). In 2010, the Affordable Care Act provided funding, and in 2011 CDC awarded grants to four CORD projects, which combined obesity prevention in pediatric settings with public school interventions.</td>
<td>CORD 1.0 resulted in small but positive improvements in BMI and fruit and vegetable consumption among children at some sites.</td>
</tr>
<tr>
<td>2010</td>
<td>National Diabetes Prevention Program</td>
<td>Congress authorized CDC to establish and lead the National Diabetes Prevention Program (DPP).</td>
<td>Participants in National DPP can reduce their risk of developing diabetes by 58 percent—or up to 71 percent for those over the age of 60.</td>
</tr>
<tr>
<td>2010</td>
<td>Presidential Executive Order on President’s Council on Fitness, Sports,</td>
<td>Expanded Council’s mission to include education and promotion of good nutrition.</td>
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<td></td>
<td>and Nutrition</td>
<td></td>
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<tr>
<td>2010</td>
<td>Affordable Care Act</td>
<td>The law (1) created the Prevention and Public Health Fund, which has helped support hospitals promoting breastfeeding, early child care projects, and other programs to reduce chronic disease; (2) expanded Medicaid coverage; (3) mandated coverage of obesity treatments and preventive recommended by the U.S. Preventive Services Task Force; (4) enhanced federal matches for states that provide Medicaid coverage for these treatments; (5) provided funding for CORD; (6) required nonprofit hospitals to address community health needs; and (7) required chain restaurants to post calorie counts.</td>
<td>Medicaid patients in states that expanded the program had greater improvement in weight management in community health centers between 2012–2017 than among patients in community health centers in non-expansion states. The menu requirements have had a small but positive impact in purchased meal quality in U.S. chain restaurants.</td>
</tr>
<tr>
<td>2010</td>
<td>Healthy, Hunger-Free Kids Act of 2010 (HHFKA)</td>
<td>HHFKA strengthened requirements for child nutrition programs, increased funding for school meals, strengthened school wellness policy requirements, and created the Community Eligibility Provision that allows schools to provide universal free school meals in high-poverty communities.</td>
<td>The new nutrition requirements reduced the prevalence of obesity among school lunch participants. Universal school meal programs have been found to be positively associated with increased food security and improved nutrition.</td>
</tr>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Policy Description</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Updated school meal nutrition standards</td>
<td>The new nutrition requirements reduced the prevalence of obesity among school lunch participants.</td>
</tr>
<tr>
<td>2013</td>
<td>Smart Snacks rule</td>
<td>HOP grants have helped more than 2 million people have increased access to healthy food and places to be physically active.</td>
</tr>
<tr>
<td>2014</td>
<td>High Obesity Program (HOP)</td>
<td>HOP grants have helped more than 2 million people have increased access to healthy food and places to be physically active.</td>
</tr>
<tr>
<td>2014</td>
<td>Agricultural Act of 2014 (&quot;2014 Farm Bill&quot;)</td>
<td>While a preliminary evaluation of FINI found no statistically significant difference in fruit and vegetable intake from the program, a later report evaluating the program (which has since been renamed GusNIP) did find a significant increase in fruit and vegetable intake among program participants.</td>
</tr>
<tr>
<td>2014</td>
<td>Office of Personnel Management (OPM) obesity coverage</td>
<td></td>
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<tr>
<td>2014</td>
<td>Child Care and Development Block Grant (CCDBG) Act of 2014</td>
<td>The tax led to a persistent long-term reduction in sugary beverage consumption.</td>
</tr>
<tr>
<td>2015</td>
<td>Berkeley, California, beverage tax</td>
<td>The tax led to a persistent long-term reduction in sugary beverage consumption.</td>
</tr>
<tr>
<td>2015</td>
<td>Every Student Succeeds Act (ESSA)</td>
<td>ESSA designated school health and physical education as part of a student’s “well-rounded education,” allowing significant federal funding of these subjects.</td>
</tr>
<tr>
<td>2016</td>
<td>Nutrition label updates</td>
<td>A study found that those who accessed the new added sugar information on nutrition labels made healthier food choices.</td>
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<tr>
<td>2016</td>
<td>Child and Adult Care Food Program (CACFP) nutrition standards</td>
<td>An evaluation of CACFP found that participation in the program may reduce the prevalence of obesity.</td>
</tr>
<tr>
<td>2016</td>
<td>School wellness policy rule</td>
<td>Schools were required to meet HHFKA’s expanded school wellness policy requirements.</td>
</tr>
<tr>
<td>2017</td>
<td>Oakland, California beverage tax</td>
<td>The tax led to a substantial decline in sugary beverage purchases.</td>
</tr>
<tr>
<td>2017</td>
<td>Philadelphia, Pennsylvania beverage tax</td>
<td>The tax led to a large reduction the sales of tax-eligible beverages.</td>
</tr>
<tr>
<td>2018</td>
<td>Seattle, Washington beverage tax</td>
<td>The law resulted in a net reduction in grams of sugar sold.</td>
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<tr>
<td>Year</td>
<td>Policy</td>
<td>Description</td>
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<tr>
<td>2018</td>
<td>San Francisco, California, beverage tax</td>
<td>San Francisco’s one-cent-per-ounce tax on distribution of sugar-sweetened drinks, syrups, and powders went into effect.</td>
</tr>
<tr>
<td>2018</td>
<td>Menu labels</td>
<td>Large chain restaurants were required to start posting calorie counts.</td>
</tr>
<tr>
<td>2018</td>
<td>Agriculture Improvement Act of 2018 (“2018 Farm Bill”)</td>
<td>The bill created the Gus Schumacher Nutrition Incentive Program (GusNIP), expanding the FINI pilot program.</td>
</tr>
<tr>
<td>2018</td>
<td>Medicare Diabetes Prevention Program</td>
<td>On April 1, 2018, CMS began covering Medicare DPP as a preventive service for Medicare beneficiaries.</td>
</tr>
<tr>
<td>2019</td>
<td>SNAP Online Purchasing Pilot</td>
<td>USDA piloted a program allowing SNAP participants to spend their benefits online.</td>
</tr>
<tr>
<td>2020</td>
<td>Dietary guidelines by life stage</td>
<td>USDA and the U.S. Department of Health and Human Services (HHS) published Dietary Guidelines for Americans, 2020–2025, which focuses on healthy eating for all life stages, including infancy, toddlerhood, childhood, adolescence, pregnancy, lactation, and older adulthood.</td>
</tr>
<tr>
<td>2020</td>
<td>COVID-19 flexibilities</td>
<td>The Families First Coronavirus Response Act temporarily allowed USDA to waive many nutrition assistance program requirements, including allowing benefits to be issued remotely, school meals to be provided for free regardless of income, and school meals to be served outside of group settings and picked up by parents. The law also created the Pandemic-Electronic Benefit Transfer (EBT) program and increased SNAP benefits.</td>
</tr>
<tr>
<td>2021</td>
<td>The Infrastructure Investment and Jobs Act</td>
<td>The Infrastructure Act provided billions of new dollars for public transportation and active travel projects, set aside funding for bicycling and walking safety projects, as well as funding for states and localities to develop Complete Streets plans.</td>
</tr>
<tr>
<td>2021</td>
<td>American Rescue Plan</td>
<td>The law temporarily tripled the cash-value benefit that allows WIC participants to purchase fruits and vegetables.</td>
</tr>
<tr>
<td>2021</td>
<td>Thrifty Food Plan update</td>
<td>USDA updated the Thrifty Food Plan to reflect current eating habits and food costs.</td>
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<tr>
<td>2022</td>
<td>Universal school meals</td>
<td>California, Colorado, and Maine passed laws establishing free school meals for all.</td>
</tr>
<tr>
<td>2022</td>
<td>OPM Coverage for Obesity Medication</td>
<td>OPM announced that federal health plans must cover Food and Drug Administration (FDA)-approved obesity medications starting in 2023.</td>
</tr>
<tr>
<td>2022</td>
<td>Food Is Medicine policies</td>
<td>HHS encouraged states to pilot Medicaid initiatives addressing health-related social needs using Section 1115 funding, including nutrition supports such as nutrition counseling, produce prescriptions, and medically tailored meals.</td>
</tr>
<tr>
<td>2023</td>
<td>Summer EBT Program</td>
<td>Congress established a permanent Summer EBT program, which provides funds to families whose children participate in the School Lunch Program to buy groceries during the summer.</td>
</tr>
<tr>
<td>2023</td>
<td>Universal school meals</td>
<td>Massachusetts, Michigan, Minnesota, New Mexico, and Vermont passed free-school-meals-for-all laws.</td>
</tr>
</tbody>
</table>
Obesity-Related Data and Trends

A. TRENDS IN ADULT OBESITY

The National Health and Nutrition Examination Survey (NHANES) conducts in-person physical examinations to determine participants’ height, weight, and other physical measures. The COVID-19 pandemic disrupted the 2019–2020 collection processes, so the latest data available is a combination of data from the 2017–2018 and 2019–March 2020 surveys. The Behavioral Risk Factor Surveillance System (BRFSS) polls individuals about their health via telephone and was able to continue through the pandemic, including 2021 and 2022 data. Both NHANES and BRFSS show long-term trends of rising obesity rates among adults. The latest NHANES data shows the adult obesity rate passing 40 percent nationally. This subsection provides the most recent data available on adult obesity levels by state and by demographics.

DATA SOURCES FOR ADULT OBESITY MEASURES

1. The National Health and Nutrition Examination Survey (NHANES) is the source for the national obesity data in this report. As a survey, NHANES has two main advantages: (1) it examines a nationally representative sample of Americans ages 2 years and older; and (2) it combines interviews with physical examinations. The limitations of the survey include a time delay from collection to reporting and a small survey size (approximately 5,000 interviews) that is not designed to be used for state or local data.

2. The Behavioral Risk Factor Surveillance System (BRFSS) is the source for state-level adult obesity data in this report. As a survey, BRFSS has three major advantages: (1) it is the largest ongoing telephone health survey in the world (approximately 450,000 interviews per year); (2) each state survey is representative of the population of that state; and (3) the survey is conducted annually, so new obesity data are available each year. The main limitation of the survey includes its use of self-reported weight and height, which result in underestimates of obesity rates due to people’s tendency to over-report their height and under-report their weight. Also, the sample sizes in some states are too small to be useful for providing estimates about certain racial and ethnic groups.
I. State trends (BRFSS)

State-level obesity rates vary considerably from a low of 24.3 percent in Washington, DC to a high of 41 percent in West Virginia, according to 2022 BRFSS data. Other key findings from the recently release data include:

- In 2022, the adult obesity rate was at or above 35 percent in 22 states. Georgia, Virginia, and Wisconsin had adult obesity rates above 35 percent for the first time in 2022, joining 19 other states.

- In comparison, no state had an adult obesity rate higher than 35 percent in 2012 (see Figure 2 on page 6).

- Between 2021 and 2022, no states had statistically significant increases or decreases in their obesity rate. This is a contrast to the prior year (2020 to 2021) when 17 states had significant increases in their adult obesity rate and one state (California) had a significant decline, and more in line with other years. For example, from 2019 to 2020, three states had statistically significant increases in their adult obesity rates.

- In the prior five years (2017–2022), 29 states had statistically significant increases in their obesity rate, underscoring the long-term trend of rising obesity rates across the country.

For additional state-level data from BRFSS, see the charts on pages 26 – 28.
WHY ARE REPORTED NATIONAL OBESITY RATES HIGHER THAN STATE-BY-STATE RATES?

How is it that fewer than half of states (22) have adult obesity rates exceeding 35 percent, yet the national obesity rate is 41.9 percent? It’s because the two rates are from separate surveys with different methodologies and were conducted in different years. State obesity rates are from the BRFSS, which collects self-reported height and weight through landline and cellular telephone surveys. Research has demonstrated that people tend to overestimate their height and underestimate their weight. One study found that, due to this phenomenon, the BRFSS may underestimate obesity rates by 16 percent. NHANES, from which the national obesity rate is derived, calculates its obesity rate based on measurements obtained through in-person physical examinations. Accordingly, the higher rates found by NHANES are a more accurate reflection of obesity in the United States. NHANES does not have state-level data, which is why TFAH also uses BRFSS data.

II. Demographic trends

Obesity rates diverge along a number of demographic measures, including race/ethnicity, income, education, and geography. While obesity rates depend on many factors—from economic and community effects, to cultural and marketing influences, and individual-level behaviors—all are inexorably linked with the social, economic, and environmental conditions that individuals experience. Broader equity issues, like structural racism and poverty, and community context shape daily life and available choices around healthy food, physical activity, education, jobs, financial security, etc. (together these are often called the “social determinants of health”), which systematically affect people’s weight and health. See Appendix beginning on page 67 for state-level indicators that track some of these structural factors, including community conditions (e.g., poverty rate) and the built environment, active transportation, and food systems (e.g., percentage of children who live in neighborhoods with sidewalks/walking paths), as well as state policies that improve conditions (e.g., universal free school meals).

FIGURE 6: Percent of U.S. Adults With Obesity by Select Demographics, 2017–2020

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<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>2018</th>
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<td>41.9%</td>
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<tr>
<td>Men</td>
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<tr>
<td>Latino Adults</td>
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<tr>
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<td>40.6%</td>
<td>40.4%</td>
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<tr>
<td>Asian Men</td>
<td>17.6%</td>
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<td>17.8%</td>
<td>17.6%</td>
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<tr>
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<td>14.5%</td>
<td>14.6%</td>
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<tr>
<td>Black Women</td>
<td>45.7%</td>
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<tr>
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<td>57.9%</td>
<td>58.0%</td>
<td>58.1%</td>
<td>57.9%</td>
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</tbody>
</table>

SOURCE: NHANES
• **Race/ethnicity:** Racial/ethnic disparities in obesity rates are significant (see Figure 6).

  According to 2017–2020 NHANES data, Black Americans had the highest rate of obesity (49.9 percent) for adults ages 20 and higher, followed by Latino/a (45.6 percent), white (41.4 percent), and Asian (16.1 percent) adults.

  More than half—57.9 percent—of Black women had obesity. That is the highest sex and race/ethnicity combination included in NHANES—and an 18 percentage points difference compared with white women (39.6 percent). In contrast, Black men had an obesity rate of 40.4 percent, which is slightly lower than white men (43.1 percent). 195

  Asian adults overall had much lower rates of obesity than any other race/ethnicity reported in NHANES. Other studies have shown variation in obesity rates among different ethnicities and national origins within the population. For example, the 2020 National Health Interview Study found that Native Hawaiian and other Pacific Islander adults ages 18 and older had self-reported obesity rates of 45.8 percent, and Pacific Islander adults had obesity rates of 44.5 percent, while Asian adults had an obesity rate of 10.2 percent (and whites had a 32.3 percent obesity rate). 194

  There is also evidence suggesting that Asian people should have lower BMI cutoffs for overweight and obesity measures than other races and ethnicities, because they have higher health risks at lower BMIs. This includes a higher risk for type 2 diabetes and other metabolic diseases at lower BMIs. Since a high BMI is a factor in determining whether to test for diabetes, fewer Asian individuals are tested and diagnosed by healthcare providers. 195 An estimated 40 percent of Asian people with diabetes have not been diagnosed, which is much higher than the overall population. 196

  It is also important to note that many national surveys, including NHANES, do not report data on health measures for American Indian and Alaska Native (AI/AN) people. The surveys that do exist do not gather or present findings by Tribal Nations. Available data show that the AI/AN population has high rates of obesity. The 2020 National Health Interview Survey, which is based on self-reported height and weight, finds 41.7 percent of AI/AN adults had obesity, which is slightly lower than Black adults in that survey (44.5 percent) and substantially higher than white adults (32.3 percent). 197 This gap in the data highlights the need for more attention and resources to advance equitable data collection and reporting for populations of smaller sizes.

• **Income and education:** Obesity rates were lower among adults living in higher-income households and adults with college degrees.

  In 2017–2020, 43.9 percent of adults living in households with incomes below 130 percent of the federal poverty level (FPL) had obesity, 46.5 percent of adults in households at 130–350 percent of FPL had obesity, and 39 percent of adults in households above 350 percent FPL had obesity. (In 2022, FPL was an annual income of $13,590 for an individual and $27,750 for a family of four.) 198 The trends varied by sex, with men in the below-130 percent FPL income category having slightly lower obesity rates (38.6 percent) than men in the middle-income (43.9 percent) and higher-income (42.4 percent) categories. For women, the data shows obesity rates in the lower-income category at 47.9 percent, middle-income category at 48.8 percent, and higher-income category at 35.1 percent.

  In 2017–2020, 40.1 percent of adults with less than a high school education had obesity compared with 46.4 percent of adults with a high school diploma and 34.1 percent of college graduates. 199

• **Rural/urban:** Rural areas and counties have higher rates of obesity and severe obesity.

  According to 2016 BRFSS data, adult obesity rates were 19 percent higher in rural regions than they were in metro areas. More than one-third (34.2 percent) of adults in rural areas had self-reported obesity compared with 28.7 percent of metro adults. 200

  Similarly, a CDC analysis of NHANES data found that adults (ages 20 and older) who lived in the most urban areas of the country (large “metropolitan statistical areas”) had the lowest obesity rates in 2013–2016. 201
### Adult Obesity Rates and Related Health Indicators, 2022

<table>
<thead>
<tr>
<th>States</th>
<th>Obesity</th>
<th>Overweight &amp; Obesity</th>
<th>Diabetes</th>
<th>Physical Inactivity</th>
<th>Hypertension</th>
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</tbody>
</table>

**SOURCE:** TFAH analysis of Behavioral Risk Factor Surveillance System data

For rankings, 1 = Highest Rate, and 51 = Lowest Rate; T = Tie; Red and * indicate state rates that significantly increased between 2020 and 2021; Green and ** indicate state rates that significantly decreased between 2020 and 2021; **Bold** indicates state rates that significantly increased between 2017 and 2022. Hypertension data is collected bi-annually; this data is from 2021.
<table>
<thead>
<tr>
<th>States</th>
<th>Percent of AI/AN Adults With Obesity</th>
<th>Percent of Asian Adults With Obesity</th>
<th>Percent of Black Adults With Obesity</th>
<th>Percent of Latino Adults With Obesity</th>
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<td>Alabama</td>
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SOURCE: TFAH analysis of Behavioral Risk Factor Surveillance System data
NOTE: For rankings, 1 = Highest Rate, and 51 = Lowest Rate; T= Tie.
* For race/ethnicity data, three years of data are needed for sufficient sample size; 2020–2022 data were used here. Some data are not available due to an insufficient sample size. Because data from one year are not available for Florida, race/ethnicity data is not available for the state.
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**SOURCE:** TFAH analysis of Behavioral Risk Factor Surveillance System data

**NOTE:** For rankings, 1 = Highest Rate, and 51 = Lowest Rate; T = Tie.
B. TRENDS IN YOUTH OBESITY

As with adults, obesity has been rising among children for decades. Between the inaugural 1976–1980 NHANES survey and the 2017–2020 survey, obesity rates for children ages 2 to 19 more than tripled, from 5.5 to 19.7 percent. This section includes the latest data available on childhood obesity. As with adults, this report relies on multiple surveys to better understand the full picture of childhood obesity.

DATA SOURCES FOR CHILDHOOD OBESITY MEASURES

1. The National Health and Nutrition Examination Survey (NHANES) is the primary source for national obesity data on adults and on children ages 2 to 19 in this report. NHANES is particularly valuable in that it combines interviews with physical examinations, including measured heights and weights, while also covering a wide age range of Americans. The downsides of the survey include a time delay from collection to reporting and no state or local data. The most recent NHANES data are from a combination of the 2017–2018 and 2019–2020 NHANES surveys since data collection was disrupted by the COVID-19 pandemic.

2. The WIC Participant and Program Characteristics Report is a biennial census of low-income mothers and young children (under the age of 5) that the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) serves. Because obesity disproportionately affects individuals with low incomes, early childhood is a critical time for obesity prevention, and the data provide valuable information for evaluating the effectiveness of programs aimed at reducing obesity rates and health disparities. The most recent public WIC data are from 2020.

3. The National Survey of Children’s Health surveys parents of children ages 0 to 17 about aspects of their children’s health, including height and weight for children ages 6 and older. An advantage of this survey is that it includes state-level data. A disadvantage is that height and weight data are parent-reported, not directly measured. The most recent data are from its 2019–2020 iteration.

4. The Youth Risk Behavior Survey (YRBS) measures health behaviors, including eating habits and physical activity behaviors, as well as body-weight status (determined from self-reported height and weight), among students in grades 9 to 12. As in other surveys that use self-reported data to measure obesity, this survey likely underreports the true rates. YRBS officials conduct the survey in odd-numbered years; 2019 is the most recent dataset available. The 2019 survey includes state-level samples for 44 states plus three U.S. territories, two tribal areas, and select large urban school districts, as well as a separate national sample.
I. National Youth Obesity Rates (NHANES)

The most recent national data, the 2017–2020 NHANES survey, found that 19.7 percent of youth ages 2 through 19 had obesity. The data show variation in obesity prevalence by demographic and socioeconomic groups:

- **Race/ethnicity:** Black and Latino youth had higher rates of obesity than their Asian and white peers. Obesity prevalence for Asian youth was 9 percent, Black youth 24.8 percent, Latino/a youth 26.2 percent, and white youth 16.6 percent in 2017–2020.

- **Sex:** Boys are slightly more likely to have obesity than girls. In 2017–2020, 20.9 percent of boys had obesity, and 18.5 percent of girls had obesity.

- **Age:** The prevalence of obesity increases with age. In 2017–2020, 12.7 percent of children ages 2 to 5, 20.7 percent of children ages 6 to 11, and 22.2 percent of children ages 12 to 19 had obesity. Between the 1976–1980 NHANES survey and the 2017–2020 survey, the percentage of children ages 2 to 19 with obesity overall tripled, with the obesity rates of teens ages 12 to 19 quadrupling.207

- **Household income:** Children in households with lower incomes have higher rates of obesity. In 2017–2020, 25.8 percent of children living in households with incomes below 130 percent of FPL had obesity, 21.2 percent of children in households at 130–350 percent of FPL had obesity, and 11.5 percent of children in households above 350 percent FPL had obesity.208

II. Young WIC Participants, Ages 2 to 4 (WIC Program Data)

In 2020, 14.6 percent of children ages 2 to 4 in the WIC program had obesity, and 15.3 percent were overweight. The percentage of children who were overweight or had obesity increased between 1992 and 2008, then decreased between 2010 and 2020 after a 2009 change in the WIC benefits to allow for healthier food options, including fruits, vegetables, seafood, and whole grains (see page 36 for more on WIC). American Indian and Latino/a children were the most likely to be overweight or have obesity compared with other races/ethnicities.209,210 (See Figure 7 for current data by race/ethnicity and chart on page 32 for state-level data.)

![FIGURE 7: Percent of Children Ages 2–4 in WIC Program Who Are Overweight or Have Obesity, by Race/Ethnicity, 2020](image)

Source: USDA

Note: For children, overweight is defined as BMI Percentiles ≥85 to <95 and obesity is ≥ 95. See page 9 for more on BMI calculations.
III. Obesity Rates in Children and Teenagers, Ages 10 to 17
(National Survey of Children’s Health)

The National Survey of Children’s Health 2020–2021 survey reported that, nationwide, 17.0 percent of children ages 10 to 17 had obesity and another 16.4 percent were overweight. The states with the highest rates of obesity for children ages 10 to 17 were West Virginia (26.0 percent), Kentucky (25.5 percent), and Louisiana (24.0 percent); the states with the lowest rates of obesity were Montana (10.2 percent), Colorado (10.8 percent), and Wyoming (11.5 percent). See chart on page 32 for more state data.

IV. High School Obesity Rates (YRBS)

According to 2021 YRBS data, 16.3 percent of high school students (grades 9 to 12) nationwide had obesity and 16.0 percent were overweight. Obesity levels in 2021 were slightly higher than 2019 (15.5 percent with obesity) and show an increase in the long-term; in 1999, obesity rates among high schoolers participating in the survey were at 10.6 percent. Other takeaways:

- The prevalence of obesity among high school students in different states varied considerably, from 10.2 percent in Utah to 26.9 percent in West Virginia.
- There were also stark differences in obesity rates across demographic groups. Male students (18.7 percent) had higher obesity rates than female students (13.7 percent); bisexual students (20.3) and questioning students (20.3 percent) had higher obesity rates than gay or lesbian (13.7) and heterosexual (15.0 percent) students; and AI/AN, Black, Latino, and Native Hawaiian/ Pacific Islander students (all above 20 percent) had higher obesity rates than white (13.7 percent) and Asian (7.7 percent) students (see Figure 8).

See page 32 for state-by-state data on obesity, overweight, and physical activity levels among high school students.
# Youth Obesity Rates and Related Health Indicators

<table>
<thead>
<tr>
<th>States</th>
<th>Percent of Low-Income Children Ages 2-4 With Obesity</th>
<th>Percent of Children Ages 10-17 With Obesity</th>
<th>Percent of Children Ages 6-17 Who Participated in 60 Minutes of Physical Activity Every Day</th>
<th>Percent of HS Students With Obesity</th>
<th>Percent of HS Students Who Were Overweight</th>
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**SOURCE:** WIC Participants and Program Characteristics Survey, USDA

**SOURCE:** National Survey of Children's Health, HRSA

**SOURCE:** Youth Risk Behavior Survey, CDC

**NOTE:** For rankings, 1 = Highest Rate, and 51 = Lowest Rate. T = Tie.
Obesity-Related Policies and Programs

A. ECONOMICS OF WHAT WE EAT AND DRINK

Financial levers can be valuable tools to influence behaviors that affect obesity. These include a range of policies, from financial incentives for investing in food system choice and improvements to taxes to discourage the consumption of unhealthy foods and beverages.

I. Fiscal and Tax Policies that Promote Healthy Eating: Beverage Taxes, Healthy Food Financing Initiative, and the New Markets Tax Credit

Beverage Taxes

In December 2022, the World Health Organization called on its member countries to tax sugar-sweetened drinks. A recent meta-analysis of 62 studies found that such taxes effectively discourage consumption. These taxes can also raise funds to support other public health priorities and to incentivize manufacturers to reduce the sugar content in their products. At least 85 countries currently impose some sort of beverage tax.

In the United States, sugary beverages are a leading source of added sugar in the American diet and researchers estimate a national tax could prevent half a million cases of childhood obesity over a decade. Eight U.S. cities have imposed beverage taxes and multiple peer-reviewed studies have demonstrated these taxes have reduced purchases and consumption of sugary drinks. Despite their effectiveness, beverage taxes have faced political headwinds in recent years, in part due to lobbying by the beverage industry. In 2022, the West Virginia legislature voted to repeal its 71-year-old soda tax effective July 2024. This trend is also happening in other countries: in January 2023, the Israeli finance minister’s first public act after taking office was to repeal a beverage tax imposed by the previous government.

Healthy Food Financing Initiative

An estimated 40 million Americans lack easy access to fresh and nutritious food. Created by the 2014 Farm Bill, the Healthy Food Financing Initiative (HFFI) provides grant funding and technical assistance for programs that increase access to healthy food in under-resourced communities, helping to reduce food insecurity, revitalize low-income neighborhoods, and build a more equitable food system. The program is a public-private partnership funded by USDA and administered by the Reinvestment Fund, an independent community development financial institution. In 2022, the Biden Administration significantly expanded the grant program, boosting funding from $4 million to $22.6 million, as part of a broader effort to transform the U.S. food system.

HFFI funds efforts such as:

- Northeast Grocers, a northeast Kansas City, Kansas neighborhood coalition working to develop a cooperative, community-owned grocery store.
• Manuel’s Food Market, a family-run grocery store in Albuquerque, New Mexico, which used HFFI funding to renovate the store and build a commercial kitchen to prepare food;241,242 and

• The Local Farm Cooperative in Selma, Alabama, a worker-owned and worker-operated co-op, which plans to open a mobile unit to sell fresh produce to underserved communities throughout Dallas County.243,244

Despite the one-year increase, Congress appropriated just $3 million for HFFI for fiscal year (FY) 2023.245 Congressional supporters of the program, meanwhile, have introduced legislation to reauthorize HFFI at $25 million for FY 2024, increasing the amount to $50 million by FY 2028, and hope their proposal will be included in the 2023 Farm Bill.246,247

New Markets Tax Credit

Established as part of the Community Renewal Tax Relief Act of 2000, the New Markets Tax Credit (NMTC) incentivizes taxpayers to invest in low-income communities that lack adequate access to capital.248 The credits are competitively awarded by the U.S. Treasury’s Community Development Financial Institutions Fund (the CDFI Fund). NMTC-funded projects are expected to create jobs or otherwise improve the lives of residents by, for example, improving access to healthcare services, places to exercise, healthy food, and economic opportunity.

Recent NMTC-funded projects include:

• The recently completed construction of a new 50,000-square-foot warehouse and food distribution center in Grand Junction, Colorado, for the Food Bank of the Rockies, which will allow it to deliver 62 percent more meals annually.249

• The renovation of Baltimore’s Lexington Market, the country’s longest continuously operating public market;250 and

• A new 63,000-square-foot facility for the Food Bank of Western Massachusetts, which will allow the organization to extend its mission of combating food insecurity and is scheduled to open in Chicopee, Massachusetts, in September 2023.251

In its most recent funding round, the CDFI Fund awarded $5 billion in credits to a total of 107 Community Development Entities.252 Since its inception, the NMTC has invested $60.4 million in low-income communities.253

The NMTC is set to expire in 2025,254 but President Biden has proposed making the credit permanent and indexed for inflation,255 changes that have bipartisan support.256 The NMTC is currently authorized at $5 billion annually.257

II. Food and Beverage Marketing

The food and beverage industry spends billions of dollars every year trying to influence what Americans eat and drink. An estimated 80 percent of food and beverage advertising promotes unhealthy choices, such as fast food, sugary drinks, and candy.258 These marketing messages are communicated through traditional television advertising, product packaging, and increasingly via digital platforms.259 A recent meta-analysis of the impact of food and beverage on children and adolescents’ eating behavior found that diverse types of food marketing—including television, digital, and package marketing—are associated with significant increases in food intake, choice, preference, and purchase requests.260

Digital advertising presents many of the same challenges as traditional advertising but also creates new ones.
As with television, food advertising on digital platforms is highly prevalent. In 2021, food and beverage companies spent $5.5 billion just on search engine marketing and $3.5 billion on social media marketing.261 Like with TV, this advertising is also dominated by ads for unhealthy products.262 Digital marketing allows the industry to target specific groups of consumers (e.g., children, specific racial/ethnic groups). When people shop for groceries online, stores can promote particular products via targeted advertising and tailored information, and research has demonstrated that vendors more frequently promote unhealthy products, which tend to have higher profit margins.263 In addition, due to proprietary analytics, digital advertisers have knowledge about their own tactics and reach that is not available to the general public, making it hard for consumer and public health advocates to track industry behavior.264

Influencer marketing—a $13.8 billion industry and growing—is another concerning trend in digital food marketing.265 A recent study of popular “made-for-kids” child influencer YouTube videos found that two-thirds of the videos featured food and 38 percent contained a branded food or beverage, of which three-quarters were candy, sweet or salty snacks, sugary drinks, or ice cream.266 Another study found that children who viewed influencers promoting unhealthy snacks increased their immediate intake of unhealthy food, while influencer promotion of healthy food had no effect.267

Racial inequities that exist in other contexts also apply to the food-marketing environment. Food and beverage advertisers disproportionately target Black and Hispanic consumers with marketing for unhealthy foods—including candy, sugary drinks, and fast food—which accounted for three-quarters of television ad spending directed at these demographic groups.268 Black youth see approximately 75 percent more television ads for fast food than their white peers.269 The number of fast food ads seen by Hispanic children increased by 7 percent between 2012 and 2019, even while children overall saw fewer such ads.270 In the digital space, a study found that leading unhealthy food brands had a disproportionately higher percentage of Black followers than white followers on Instagram.271 The study also found that sugary drink brands had a higher percentage of Black and Hispanic followers on X (formerly Twitter) than low-calorie drinks, while low-calorie drink brands had a higher percentage of white X (formerly Twitter) followers than sugary drink brands.272

Public health advocates have recommended a number of proposals aimed at reducing the marketing of unhealthy food and beverages, including changing the tax code to disallow deductions for the cost of advertising unhealthy products to children277 and restricting food and beverage marketing on school-provided digital devices.278 A group of public health advocates have also submitted a citizen’s petition to the Food and Drug Administration (FDA) requesting that it prohibit the use of the word “formula” on drinks meant for children more than 12 months old.279
B. NUTRITION ASSISTANCE, STANDARDS, AND EDUCATION

The nation’s nutrition assistance programs help ensure that low-income families have access to enough food for all family members at all times for an active, healthy life. Some programs, such as the National School Lunch Program, provide food directly to participants, while others, such as the Supplemental Nutrition Assistance Program (SNAP, formerly known as “food stamps”), provide funds that can be used to purchase groceries. Together, these programs provide some level of food security for tens of millions of people.

I. Federal Hunger and Nutrition Assistance: WIC, school/child nutrition programs, SNAP

Special Supplemental Nutrition Programs for Women, Infants, and Children

WIC provides healthy food, nutrition education, breastfeeding support, and healthcare referrals to low-income pregnant, postpartum, and breastfeeding women and their children up to age 5. The federal government funds the program and USDA’s Food and Nutrition Service (FNS) works with state and local agencies to administer it.280 The program is one of the nation’s largest nutrition assistance programs and helps provide food security to 6.4 million mothers and young children.281 The WIC food packages must meet high nutritional standards, and studies have found that, after these nutritional requirements were strengthened in 2009, obesity rates among children in the program declined.282,283,284 Despite its successes, the WIC program struggles to enroll participants: only half of eligible people participate in the program with participation rates declining for children after age 1 and age 2.285,286 Participation barriers include:

- The cost and time needed for in-person appointments, including applying to receive benefits, attending clinic appointments, reloading Electronic Benefit Transfer (EBT) cards, and shopping for groceries (WIC benefits can only be spent online in a limited number of states with pilot programs);
- Common misunderstandings about eligibility, including the ability of children to remain enrolled through age 5; and
- Language and cultural barriers that make it difficult for some people to navigate the enrollment process.291,292

As a component of its nutrition service, WIC actively promotes breastfeeding, and participants’ breastfeeding rates have been steadily climbing over the past decade.293,294 In 2011, 28 percent of babies in the program were breastfed, compared with 34 percent in 2021, a growth rate of 21 percent.295 The program’s breastfeeding support services, which include peer counseling, seem to be particularly helpful. A systematic review of WIC participation and breastfeeding outcomes published in 2023 found that WIC program participation alone is not associated with breastfeeding initiation compared with eligible non-participants, but that breastfeeding support services are positively associated with both breastfeeding initiation and duration.298

Despite its successes, the WIC program struggles to enroll participants: only half of eligible people participate in the program with participation rates declining for children after age 1 and age 2.285,286 Participation barriers include:

- The cost and time needed for in-person appointments, including applying to receive benefits, attending clinic appointments, reloading Electronic Benefit Transfer (EBT) cards, and shopping for groceries (WIC benefits can only be spent online in a limited number of states with pilot programs);
- Common misunderstandings about eligibility, including the ability of children to remain enrolled through age 5; and
- Language and cultural barriers that make it difficult for some people to navigate the enrollment process.291,292

USDA has been working to reduce these barriers by streamlining and modernizing the program. In February 2023, FNS proposed a new federal rule that would allow WIC benefits to be used to purchase groceries online.295 The agency also announced that states may continue to provide some services remotely, including allowing participants to re-enroll in the program and reload their benefit cards without visiting a clinic, after the COVID-19 public health emergency expired in May 2023.294 FNS is also funding projects to improve participants’ experiences with the program. In FY 2022, that included $23 million for activities like translating WIC materials into languages other than English, providing WIC participants rides to authorized vendors, and hiring more staff to support WIC participants.295,296

Early modernization efforts include the 2019–2024 grant with Tufts University to test and evaluate the use of telehealth in WIC programs in seven states. The goal is to augment nutrition education and breastfeeding for enrollees in rural areas or with other barriers to accessing support typically offered in-person.297,298

For FY 2023, Congress provided $6 billion for WIC, including $90 million for its breastfeeding peer-counselor program and $14 million for infrastructure, identical to its FY 2022 funding level.299 The bill also extended the produce “benefit bump”—which was instituted in 2021 as part of the American Rescue Plan, more than tripling the WIC fruit and vegetable benefit.300 A multi-state survey of WIC participants demonstrated that the bump led to increased fruit and vegetable intake among children in the program.301 FNS has proposed making the increase permanent as part of a broader update to the food packages.302
Child Nutrition Programs

The National School Lunch Program (NSLP) is the nation’s second-largest nutrition assistance program, providing healthy meals to America’s schoolchildren since 1946. The $14 billion NSLP—along with the School Breakfast Program, Special Milk Program, Child and Adult Care Food Program (CACFP), Summer Food Service Program, Fresh Fruit and Vegetable Program, and Farm to School Grant Program—combine to form USDA’s child nutrition programs. These programs are federally funded, administered by FNS and state agencies, and operate in public and private schools, daycare centers, after-school programs, and residential childcare centers.

NSLP is the largest of the programs: it fed more than 30 million children in FY 2022, while the School Breakfast Program fed 15.7 million. Both programs serve nutritious meals to children in schools and residential childcare institutions at low or no cost. Schools that do not participate in either program, or who have half-day students, can participate in the Special Milk Program, which reimburses schools for the milk they serve. CACFP reimburses childcare centers, after-school programs, and adult daycare centers for the cost of meals they serve. The Fresh Fruit and Vegetable Program provides fresh fruits and vegetables as a healthy snack option for students, while the Patrick Leahy Farm to School Grant Program helps improve access to healthy local foods in schools through field trips, school gardens, and sourcing local food for school meals.

School meals are provided at no or low cost to children whose families meet income eligibility guidelines. Pandemic waivers allowed many school districts to offer free meals to all students regardless of income during the first two years of the pandemic, but those waivers expired in September 2022. For school year 2022–2023, pre-pandemic rules have been back in place, permitting only schools in low-income areas to use special provisions, such as the Community Eligibility Program, to serve free meals to all students. After the expiration of the waivers, a Food Research and Action Center survey of 91 large districts found a drop in students’ breakfast and lunch participation, and found that many schools offering school meals discovered the programs provide a range of benefits. For example, 92 percent of school districts reported that offering school meals to all made life easier for parents and guardians; 88 percent reported it decreased child hunger; 86 percent reported it eliminated stigma associated with school meals; 86 percent reported it supported household finances; 79 percent reported it eased administrative burdens; 70 percent reported it improved students’ food and nutrient intake; and 65 percent reported it supported academic achievement. Another school district survey, this one by the School Nutrition Association, found 96 percent of school districts reported that meal debt had increased after the waivers expired.

![Reported Benefits of Free Meals for All from 91 Large School Districts](source: Food Research and Action Center)
A March 2023 proposed rule from USDA would expand the eligibility for schools from the current threshold of requiring 40 percent of students have income eligibility to 25 percent of students, meaning more schools would be able to serve free meals to more students. However, as discussed in more detail below, some states have continued to provide universal free school meals to students with state dollars.

To support schoolchildren from low-income families during the summer, FNS sponsors two complementary programs that work together to reduce seasonal hunger.

- The Summer Food Service Program (SFSP), also known as the Summer Meals Program, serves free healthy meals and snacks to schoolchildren in low-income communities. These meals must be served in a group setting, except for in certain rural communities where starting in summer 2023 students will be allowed to take home up to 10 meals at a time.

- The Summer EBT program provides funds to families they can use to buy groceries. Summer EBT began as a pilot program in a few states and was expanded during the pandemic to help children during childcare and school closures. As part of the FY 2023 omnibus spending bill, Congress made the program permanent beginning in Summer 2024. Meanwhile, the temporary Pandemic EBT program was extended through summer 2023 for children who attend a school that participates in the School Lunch Program, although it was ended for children in childcare programs.

Food served through the child nutrition programs must meet strict federal nutrition standards, making school meals some of the healthiest foods that American children eat and lowering food insecurity for them and their families. School meals have also been linked to lower BMIs and prevalence of obesity, particularly since the nutrition standards were strengthened following passage of the Healthy, Hunger-Free Kids Act of 2010. Pandemic-related supply-chain issues led to a relaxation of the nutrition standards in 2020, and a temporary federal rule currently governs the programs as schools transition back to traditional meal service.

In February 2023, the Biden Administration proposed an updated, permanent rule to better align school nutrition standards with the latest Dietary Guidelines for Americans, most notably by reducing allowable levels of sugar and salt. The agency expects the rule to go into effect for the 2024–2025 school year.

The FY 2023 appropriations bill provided $28.5 billion for the child nutrition programs, including:

- $15.4 billion for the NSLP;
- $5.5 billion for the School Breakfast Program and $5 million for program expansion grants;
- $4.7 billion for CACFP plus $46 million for CACFP training and technical assistance;
- $655 million for the SFSP and $40 million for summer EBT;
- $30 million for school meal equipment grants;
- $20.2 million for Team Nutrition grants to provide nutrition education to schoolchildren;
- $14 million for Farm to School grants and $6.4 million for the Farm to School Tactical Team, which helps school districts and community partners implement the program; and
- $7.8 million for the Special Milk Program.

Supplemental Nutrition Assistance Program

SNAP, formerly called “food stamps,” is the nation’s largest nutrition assistance effort. It helps feed more than 41 million low-income people every year by providing them funds on an EBT card that can be used to buy groceries. Almost 40 percent of households that use SNAP include children. In addition to its critical role in combating hunger and food insecurity, SNAP reduces poverty, improves health and economic outcomes, supports workers with low wages, and bolsters individuals and families during economic instability.

The federal government pays for SNAP benefits and shares the cost of administering the program with the states. SNAP benefits can be used to buy any food with the exception of prepared or hot food, vitamins, live animals, and alcohol. Seven states also have a Restaurant Meals Program waiver that allows certain enrollees—individuals experiencing homelessness, who have a disability, or are age 60 or older—to use SNAP benefits to purchase hot, prepared food from participating restaurants.
During the COVID-19 pandemic, Congress made a number of temporary changes to the SNAP program, relaxing requirements and increasing benefits.\textsuperscript{348,349} One Urban Institute study estimated that these temporary benefits reduced overall poverty by 10 percent—or 4.2 million people—and child poverty specifically by 14 percent in October–December 2021 in the 42 states that saw these benefits increase. The poverty reduction was highest for Black and Latino/a people.\textsuperscript{350} These changes have now expired, cutting benefits for SNAP recipients.\textsuperscript{351,352,353} The Center on Budget and Policy Priorities estimates these cuts will average $90 per person per month.\textsuperscript{354} The expiration of the benefits increase is on top of other pandemic assistance ending, including the expanded child tax credit.\textsuperscript{355}

Meanwhile, grocery prices have soared, rising by 12 percent between June 2021 and June 2022, the largest 12-month increase since the 1970s.\textsuperscript{356} SNAP benefit levels are tied to the Thrifty Food Plan, a USDA calculation that determines the minimum cost of groceries needed for a healthy diet. In 2021, USDA modernized the Thrifty Food Plan to better reflect current food costs and eating habits, resulting in a 21 percent increase in the average benefit level.\textsuperscript{357,358} Notwithstanding this increase, the average SNAP benefit is still less than $8 per person per day, and benefits are only adjusted for inflation once a year.\textsuperscript{359}

In September 2022, to help reach its goal of ending hunger and increasing healthy eating and physical activity by 2030, as outlined in the National Strategy on Hunger, Nutrition, and Health, the Biden Administration pledged to expand SNAP eligibility to more underserved populations.\textsuperscript{360} It also announced commitments from a number of businesses and nonprofit organizations to help improve SNAP access. For example:

- AARP pledged to conduct research on how to increase older Americans’ access to SNAP, as their participation rates lag behind those of other demographic groups;
- Google pledged to develop new features to help people more easily access food and healthcare benefits, including SNAP and Medicaid; and
- Instacart said it will work to incorporate SNAP into its online platform so that its customers can use SNAP benefits with all of its grocery partners.\textsuperscript{361}

In December 2022, the Biden Administration announced a $5 million grant to the National Grocers Association to help more small retailers offer online shopping for SNAP participants, which particularly will help those who live in rural areas or have limited transportation options.\textsuperscript{362}

Meanwhile, some legislators on both the state and federal level have called for tightening rules for SNAP enrollees, making it more difficult for people to access the program. Proposals in Congress would expand the age range for people who have to meet SNAP’s work requirements and reduce the ability of states to waive these rules.\textsuperscript{363,364,365} In the June 2023 law to increase the nation’s debt ceiling, there was a provision expanding the age range for new work requirements to include individuals ages 50 to 54 until 2030. The legislation also created exemptions from work requirements for certain individuals: those experiencing homelessness of all ages, veterans of all ages, and youth ages 18 to 24 who aged out of foster care.\textsuperscript{366,367} Still, some lawmakers are likely to continue to try to make changes to SNAP, including in the 2023 Farm Bill, which is the authorizing legislation for the program; though this has received opposition from a variety of lawmakers.\textsuperscript{368,369,370} These debates are also occurring at the state level, with Iowa recently passing a bill imposing an asset test on SNAP recipients along with rigorous identity-verification requirements.\textsuperscript{371}

For 30 years, SNAP has included an educational component called SNAP-Ed that funds nutrition and obesity prevention programming for SNAP enrollees. Recent examples of SNAP-Ed activities include:

- Healthy eating community workshops, sponsored by the Oswego County Office for the Aging in New York, that teach older adults how to make small changes to their eating and exercise habits to improve their health;\textsuperscript{372}
- The Detroit Public Schools Community District’s Farm-to-School program, which increases the amount of locally grown fresh produce used in meals served in district schools;\textsuperscript{373} and
- The Diabetes Is not Destiny program, sponsored by Oklahoma Tribal Engagement Partners in collaboration with tribal organizations, which inspires health while honoring Native traditions such as gardening, traditional dancing, and harvesting wild foods.\textsuperscript{374,375}

Congress funded SNAP at $153.9 billion for FY 2023, including $506 million for SNAP-Ed.\textsuperscript{376,377}
II. Nutrition Incentive Programs (GusNIP)

The Gus Schumacher Nutrition Incentive Program (GusNIP) is a competitive grant program that funds projects that encourage SNAP recipients to purchase and consume more fruits and vegetables. Created by the 2018 Farm Bill, GusNIP is the successor to the Food Insecurity Nutrition Incentive grant program and is administered collaboratively by FNS and the National Institute of Food and Agriculture. An analysis of the program found that participants eat more fruits and vegetables the longer they are in the program and eat more fruits and vegetables than the average adult.

In FY 2022, thanks in part to additional funding provided under the American Rescue Plan, GusNIP funded:

- $38.7 million for Nutrition Incentive Programs, which support point-of-purchase incentives, such as “buy one, get one free”; and
- $20.7 million in Produce Prescription Program grants, which support programs where healthcare providers write “prescriptions” for fruits and vegetables that can be redeemed for fresh produce.

In FY 2023, USDA anticipates funding $36.3 million in Nutrition Incentive Program grants and $10.8 million in Produce Prescription Program grants.

III. Childcare and Education Settings: Head Start, Early Care and Education (ECE) State Requirements, K–12 Local Wellness Programs, Farm to School/ECE, and Smart Snacks

Head Start

Head Start helps prepare preschool-age children from low-income families to succeed in school by providing educational, health, and social services to them and their families. The program includes Early Head Start, which serves infants and toddlers. The Administration for Children and Families, an agency within the U.S. Department of Health and Human Services (HHS), manages the program on the federal level and provides oversight to local providers, who serve more than a million children each year. In 2022, HHS made it easier for families to access the program by announcing that children in SNAP-eligible families would be automatically eligible for Head Start.

Head Start programs provide healthy food to their participants via either CACFP or NSLP. The program also supports breastfeeding and provides free formula to families. Since 2016, federal standards have required the program to actively engage in obesity prevention both in the classroom and through its family partnership process.

Children who participate in Head Start are healthier than their peers. One study found that children who entered Head Start with high or low weight status were significantly more likely to be a healthy weight range by kindergarten than a comparison group. Another 2019 study of predominantly Black and Latino/a Head Start students in Harlem, New York, found that the 4-year-olds
significantly improved their knowledge and attitude of a healthy lifestyle after learning about a healthy diet and physical activity in Head Start.\textsuperscript{392}

The FY 2023 omnibus bill included $12 billion for Head Start, a $960 million increase over FY 2022.\textsuperscript{393,394}

**Farm-to-School/Early Care and Education State Requirements**

The Child Care and Development Block Grant (CCDBG) assists low-income families with the cost of high-quality childcare. It is funded by the federal government and administered by the states.\textsuperscript{395} To receive federal funding, ECE providers must meet state-mandated early childhood education health and safety requirements, which often include nutrition and physical activity benchmarks.\textsuperscript{396}

One way that ECE providers can meet nutritional requirements is through Farm-to-ECE programs. Farm-to-ECE activities can include school gardens, farm visits, eating locally grown produce, and education about food and farming.\textsuperscript{397,398} All of these can help encourage the youngest learners to eat more fresh fruits and vegetables and develop lifelong healthy eating habits, while at the same time supporting local farmers.

Congress provided $8 billion for CCDBG for FY 2023, a nearly 30 percent increase over the FY 2022 funding level of $6.2 billion.\textsuperscript{399,400}

**K–12 Local Wellness Programs**

The federal government requires every school district that participates in a federal child nutrition program to develop and implement a local school wellness policy that promotes the health of students and addresses childhood obesity.\textsuperscript{401} These policies are required to:

- Establish nutrition education, nutrition promotion, and physical activity goals;
- Include nutrition guidelines for all foods and beverages available on campus; and
- Limit food marketing to those products that meet the Smart Snacks in Schools nutrition standards.\textsuperscript{402}

A review of school-district wellness policies during the 2014–2015 school year, however, found that only 57 percent of policies included all federally required topics.\textsuperscript{403}

School districts are required to assess their local wellness policies every three years,\textsuperscript{404} however, the most recent due date fell in June 2020, during the height of the pandemic. Recognizing that administrators might need additional time to complete this requirement, USDA has provided waivers of the requirement through the 2022–2023 school year.\textsuperscript{405}

**Smart Snacks**

All food sold at schools—including food sold in vending machines, at school stores, and at school fundraisers—must meet the Smart Snacks federal nutrition standards, which are similar to the child nutrition program requirements. Snacks sold after school hours, food intended to be eaten off school property, or food provided for free—for example, cupcakes brought in for a student’s birthday—do not have to comply. States can also exempt infrequent school fundraisers from the standards.\textsuperscript{406}
IV. Dietary Guidelines, and Nutrition and Menu Labels

Dietary Guidelines for Americans

The Dietary Guidelines for Americans—issued jointly by USDA and HHS—provide the public with evidence-based guidance about healthy eating, serve as a resource for policymakers and health professionals, and provide the foundation for the federal government’s nutrition programs. The guidelines are revised every five years to keep pace with the latest scientific research about nutrition, with the most recent edition published in December 2020.

It focuses on healthy eating for all life stages, including infancy, toddlerhood, childhood, adolescence, pregnancy, lactation, and older adulthood.

In January 2023, USDA and HHS announced the appointment of nutrition and public health experts to the 2025 Dietary Guidelines Advisory Committee, which will review the science for the 2025–2030 guidelines. The committee is tasked with examining the evidence through a health equity lens to ensure the guidelines are relevant to people of all ethnic, racial, socioeconomic, and cultural backgrounds.

MyPlate is a simplified nutrition guide based on the Dietary Guidelines for Americans. The MyPlate icon—which depicts a glass labeled dairy and a plate divided into four sections labeled fruits, vegetables, grains, and proteins—serves as a graphic representation of a healthy diet, intended to provide an easy-to-follow visual to help Americans eat healthier. A recent study, however, found that people who reported following the MyPlate guidelines did not eat any healthier than those not following the system, though another study found knowledge of MyPlate among adolescents to be associated with a lower consumption of sugary drinks.

MyPlate also offers a suite of interactive online tools, including the Start Simple with MyPlate app and the myplate.gov website. The app allows users to choose healthy food goals, track their progress, and earn badges, while the website provides recipes, tip sheets on healthy eating, and inspiring videos.

Packaged Food Labels

To help consumers make informed decisions, the FDA requires that manufacturers include Nutrition Facts labels on most packaged food. The rules governing these labels were updated in 2016 to make the labels easier to read and to include important information such as added sugars. Nutrition Facts labels are typically found on the back of packages, while manufacturers often include other nutritional or health claims on the front of packages, where they are more likely to catch a consumer’s eye and can quickly impact purchasing decisions.

Such front-of-package (FOP) labels are not mandatory and, while health claims must comply with FDA rules to ensure accuracy, they can sometimes be misleading. For example, under current rules, the front of a breakfast cereal box can note that it is a “good source of fiber,” which may imply that it is a healthy choice, without disclosing the product’s high levels of added sugar. Unlike some countries, the United States does not have a mandatory FOP labeling system or require warning labels on unhealthy foods. Such systems can positively influence consumer purchasing decisions as well as spur industry to improve the nutritional quality of their products.

In 2022, as part of its National Strategy on Hunger, Nutrition, and Health following the White House Conference on Hunger, Nutrition and Health, the Biden Administration announced it would both develop an FOP labeling system and update the rules governing what foods can be labeled “healthy” to better align with the Dietary Guidelines for Americans. In January 2023, the FDA announced it would begin conducting research to inform its development of an FOP label system, and in June 2023, it issued a notice on further plans to study draft FOP designs with consumers.

Meanwhile, the agency proposed a rule that would allow foods to be advertised as “healthy” only if they contain food from a major food group and have limited amounts of sodium, saturated fat, or added sugars. Breakfast cereal manufacturers have protested, noting 95 percent of cereals on the market could not meet the added sugars standard, and threatened legal action. While many cereals and other sugary products would lose their “healthy” designation under the proposed rule, other products such as avocados and salmon would gain it. Currently, foods cannot be labeled as healthy if they exceed limits on total fat, including monounsaturated and polyunsaturated fats, which are abundant in fish and nuts and which are now recognized to lower disease risk. The new rule eliminates the total fat limits focusing instead on saturated fat.

Other FDA actions following the White House Conference aimed at allowing
consumers to have healthier choices when buying packaged food include:

- Issuing voluntary sodium targets in October 2022 for processed, packaged, and prepared foods.433,434
- Issuing draft guidance in March 2023 on how and when food manufacturers can use Dietary Guidance Statements on food packages.435,436,437 Such statements explain how a particular food can be part of a healthy diet; for example: “Make half your grains whole grains.”438 The guidance requires that the product contain a meaningful amount of the food that is the subject of the statement and that the product not exceed limits on saturated fat, sodium, and added sugars.439,440
- Announcing a draft rule in March 2023 governing the use of salt substitutes, allowing them to be used in place of sodium in a wider variety of foods in order to reduce overall sodium in the food supply.441,442

Menu Labels

Since 2018, large chain restaurants and vending machine operators have been required to disclose nutritional information about their products, including calorie counts.443,444 This allows consumers to make more informed choices when they eat out, which is particularly important given that food prepared outside the home tends to have more calories than food prepared at home and consumers tend to underestimate calorie levels in out-of-home meals.445,446,447 Menu labels can also incentivize restaurants to offer healthier menu choices.448,449 A loophole in the regulation is that third-party delivery services—whose use has proliferated in recent years—often fail to include calorie counts on their platforms.450 While public health advocates have asked the FDA to apply the rule to third-party platforms, the agency has not done so.451

As with local restaurant menu labeling laws,492,493 national menu requirements appear to have had a positive—if modest—impact on consumption.494 The first major study conducted after nationwide implementation of the requirement, which was published in 2021, analyzed millions of transactions from a major fast food franchise. The researchers found a small (4.7 percent) improvement in mean calories per transaction than what would have been expected in the absence of labeling.455

Importance of the Farm Bill

The Farm Bill—a comprehensive piece of agricultural legislation that must be passed by Congress every five years—is one of the most important legislative components of the nation’s nutrition assistance system because it authorizes the $150 billion SNAP program, along with a number of other agriculture and food programs. The current Farm Bill expires in September 2023, and Congress is currently working on the 2023 bill, holding field hearings and listening sessions around the country.456,457

SNAP is designed to provide low-income families with food security, which makes it an important tool to reduce obesity and other diet-related diseases, as obesity is increasingly associated with food insecurity. The program has a host of other important benefits for participants as well: improving the health of children in the program, decreasing medical costs, improving economic outcomes, and providing economic stability to individuals and families.458,459 SNAP even boosts the local economy: Moody’s Analytics estimates that for every $1 spent on SNAP benefits, the program generates $1.67 in economic activity.460

SNAP accounts for the majority of the cost of the Farm Bill,461 making the program a perennial target for changes. This year is no exception. Some lawmakers want to reduce nutrition spending by imposing tighter work requirements on participants, limiting exempted populations, and reducing the ability of states to waive them.462 Despite intense negotiations, the final Farm Bill traditionally passes with bipartisan support, and key lawmakers on the House and Senate Agriculture Committees have indicated that they hope and expect the same this year.463,464
C. COMMUNITY POLICIES AND PROGRAMS

I. Built Environment: Community Design and Land Use, Housing, Safe Routes to Schools, and Federal HUD and DOT Funding Programs

Many Americans live in an obesogenic environment that strongly influences their eating and activity levels. Many aspects of the built environment—all the human-made parts of the places where we live and work—steer Americans into a sedentary lifestyle by making it easy or even necessary to travel by car while not supporting walking or other means of active travel or recreation. In March 2023, researchers at the University of Southern California found that the built environment—including neighborhood design, walkability, and access to healthy food outlets, parks, and other green spaces—is the strongest environmental predictor of obesity in adolescents. These findings confirm previous research demonstrating the health value of living in a walkable community and near green spaces, including parks, tree canopies, and nature trails. Conversely, living in neighborhoods without these conditions has been shown to be linked with higher rates of obesity. One study found that children who live in communities with unfavorable built environment conditions—for example, poor housing and no access to sidewalks or parks—were up to 60 percent more likely to have obesity or be overweight. Another review of existing studies found an association between traffic-related air pollution and childhood obesity. Community design and land-use policies and programs are especially important for a number of populations, including people of color. For example, research has shown that Black and Latino/a people have less access to parks and green space. Ensuring people can safely walk, cycle, and roll is particularly critical, as a 2022 study found that Black and Latino/a people are disproportionately likely to be killed while walking or cycling, even after controlling for miles travelled. The disparities are particularly acute for Black cyclists, who are 4.5 times more likely to die while cycling than white cyclists.

Community Design and Land Use
Community design and land-use choices can and should be made with health considerations in mind. Policymakers can promote active lifestyles by:

- Designing communities that promote affordable, active transportation rather than encouraging reliance on automobiles;
- Adopting Complete Street policies, which ensure streets are designed to be safely used by all—including people of all ages and abilities and those traveling by car, foot, bicycle, wheelchair, or other mobility device—by building and maintaining sidewalks, trails, and protected bike lanes, and installing safety features such as streetlights, speed bumps, traffic signals, crosswalks, roundabouts, and shade trees;
- Building and maintaining playgrounds, parks, and other green spaces, which support physical activity and social connection and improve air pollution (Additionally, the Community Preventive Services Task Force found the economic benefits triple the building costs for parks, trails, and greenways in a recent systemic review); and
- Investing in high-quality, accessible public transportation infrastructure, as taking public transportation is associated with higher levels of physical activity; people often walk or bike to and from public transportation.

In March 2023, researchers at the University of Southern California found that the built environment—including neighborhood design, walkability, and access to healthy food outlets, parks, and other green spaces—is the strongest environmental predictor of obesity in adolescents.
**Housing Impacts**

A variety of housing size and affordability options in proximity to jobs, schools, and services for people of all ages is critical for thriving communities. Since housing makes up a large part of land use in a community, it affects everyday transportation and physical activity for residents. Generally, poor street connectivity and sprawling, low-density housing (e.g., single-family housing on large lots) separated from commercial development increases reliance on automobiles and encourages sedentary behavior. In contrast, communities with better street connectivity, high-density housing, and a mix of land uses in close proximity encourage active transportation. A 2022 literature review of the connection between land use and childhood obesity found strong evidence of an association between shorter street blocks—an indicator of walkability—and lower BMIs.

**Safe Routes to School**

Walking, rolling, or biking to and from school is an easy way for children to make physical activity part of their daily routine. However, the rise of car-dependent neighborhoods, concerns about traffic and crime, and changing social norms have converged to reduce the number of children who walk to school.

The Safe Routes to School (SRTS) program encourages active travel to school by sponsoring awareness campaigns and funding safety improvements such as crosswalks, sidewalks, and bike lanes. Research has found that SRTS initiatives are cost-effective and associated with a significant increase in active transportation to and from school. A study published in 2022 found that students who walk or bike to school when they are young are more likely to continue the habit when they are older.

Since 2015, SRTS has supported projects in 17,000 schools benefitting nearly 7 million students. The 2021 Infrastructure Investment and Jobs Act Law expanded the program to benefit high schools and to allow the Highway Safety Improvement Program, in addition to the Transportation Alternatives Program, to fund SRTS projects.

**Federal Housing and Transportation Funding Programs**

The Infrastructure Investment and Jobs Act, which was signed into law by President Biden in November 2021, included historic levels of federal funding to improve the nation’s transportation infrastructure, including upgrades to public transportation and funding for active transportation. The law:

- Provided $90 billion for public transit over five years, the largest investment in U.S. history;
- Reauthorized the federal surface transportation programs, which include funding for active travel, and improved the Transportation Alternatives Program, increasing its funding by $3 billion over five years;
- Established several new programs, including a $6.4 billion Carbon Reduction Program to fund green projects such as pedestrian and cycling trails, a $1 billion Reconnecting Communities pilot program to restore connectivity to communities previously cut off by transportation infrastructure, and a $5 billion Safe Streets and Roads for All program to prevent roadway injuries and deaths;
- Encouraged states and localities to develop Complete Street plans;
- Required states where 15 percent or more of their roadway fatalities are non-motorists to spend at least 15 percent of their Highway Safety Improvement Program funds on non-motorist road users; and
- Expanded eligibility for the Highway Safety Improvement Program to include safety improvements to protect pedestrians and cyclists, including SRTS projects.

As discussed above, neighborhoods that suffer from problems like deteriorating infrastructure, high crime, and poverty also typically have high rates of obesity. The U.S. Department of Housing and Urban Development’s (HUD) Choice Neighborhood program provides flexible funding to help local communities with distressed housing transform their neighborhoods. The agency has announced $10 million for Choice Neighborhood Planning Grant awards in FY 2023.
II. CDC State and Community Initiatives

CDC’s Division of Nutrition, Physical Activity, and Obesity (DNPAO) leads the agency’s obesity prevention efforts. In FY 2023, DNPAO’s budget is $58.4 million, consistent with its FY 2022 funding level, a fraction of CDC’s $1.8 billion budget to promote health and prevent chronic disease.509,510

CDC’s major programs that support obesity prevention on a community level are discussed in more detail below.

State Physical Activity and Nutrition Program

DNPAO’s State Physical Activity and Nutrition (SPAN) Program funds state, territorial, and tribal interventions that increase physical activity and improve nutrition.511 SPAN is currently supporting five-year projects that began in 2018 and end in September 2023. The current SPAN grants total $70 million over five years with grantees in 16 states.512

The next round of SPAN five-year grants will begin September 30, 2023. DNPAO has $75.5 million in total funding available and expects to make 17 awards. The projects will:

- Make physical activity safe and accessible for all;
- Make healthy food choices easier;
- Make breastfeeding easier to start and sustain;
- Strengthen obesity prevention standards in ECE settings; and
- Spread and scale family healthy weight programs. 513

The Biden Administration’s FY 2024 budget included a request to expand funding to all states and territories.514

High Obesity Program (HOP)

The High Obesity Program (HOP) funds 15 land-grant universities that work with their local communities to increase access to healthier foods and promote physical activity in rural counties where more than 40 percent of adults have obesity.515 Current activities funded by HOP include:

- A partnership between West Virginia University in Morgantown and the Mountaineer Food Bank to promote the availability of healthier food in Clay and McDowell counties;
- An initiative of Louisiana State University and the Louisiana Department of Transportation and Development to help rural communities apply for Complete Streets federal funds for walking and biking infrastructure;
- Efforts by the University of Tennessee in Knoxville to improve food systems in Hardeman County; and
- The creation of school-based coalitions by South Dakota State University in Brookings to help schools serve as centers of healthy food and physical activity in extremely rural areas of Buffalo and Ziebach counties.516,517

Like DNPAO’s SPAN grants, the next round of five-year HOP grants will begin September 30, 2023, and run through 2028.518 The 2023 HOP grants have $16.5 million funding and have been awarded to 16 land-grant universities.519,520
Preventive Health and Health Services Block Grant

The Preventive Health and Health Services (PHHS) block grant provides states, territories, and tribes with flexible funding to address local public health needs. In FY 2020, the most recent year for which CDC has published data by topic area, states spent $149 million in PHHS grant funds, including $9.5 million on nutrition and $2.8 million on physical activity.

A few examples of PHHS-funded activities include:

- The Philadelphia Food Justice initiative, which is working to develop a more just food system in the city;
- The North Carolina Department of Health and Human Services’ work to form a co-op of small local convenience store owners so they can pool their produce orders and make it economically feasible to sell fresh produce.
- The Coordinated Approach to Child Health program in Oklahoma, which employs a coordinated approach to obesity prevention in schools by improving child nutrition services and making physical activity fun.

PHHS received $160 million in funding in FY 2023, the same amount as in FY 2022.

### SELECT OBESITY-RELATED FUNDING OPPORTUNITIES FROM CDC

<table>
<thead>
<tr>
<th>Name</th>
<th>Grant Number</th>
<th>Goal</th>
<th>Length</th>
<th>Number of Grants</th>
<th>Annual Size</th>
<th>Total Program Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Physical Activity and Nutrition (SPAN) Program</td>
<td>23-0012</td>
<td>Improve nutrition and physical activity at the state and local level</td>
<td>5 years beginning September 30, 2023</td>
<td>Recipients in 17 states</td>
<td>Average one-year award amount: $880,000</td>
<td>$75.5 million over 5 years (2023–2028)</td>
</tr>
<tr>
<td>High Obesity Program (HOP)</td>
<td>23-0013</td>
<td>Increase access to healthy foods and safe places for physical activity in high-obesity areas</td>
<td>5 years beginning September 30, 2023</td>
<td>16 land-grant universities in states with eligible counties</td>
<td>Average one-year award amount: $712,000</td>
<td>$57 million over 5 years (2023–2028)</td>
</tr>
<tr>
<td>Preventive Health and Health Services (PHHS) Block Grant</td>
<td>23-2304</td>
<td>Provide each state with flexible support to address its most important health needs</td>
<td>Annual</td>
<td>61 including 50 states, DC, 2 American Indian tribes, 5 U.S. territories, and 3 freely associated states</td>
<td>$9.5 million on nutrition and $2.8 million on physical activity in FY 2020</td>
<td>$160 million in FY 2023</td>
</tr>
<tr>
<td>Racial and Ethnic Approaches to Community Health (REACH)</td>
<td>23-0014</td>
<td>Reduce racial and ethnic health disparities in chronic disease</td>
<td>5 years beginning September 30, 2023</td>
<td>40 state and local health departments, tribes, universities, and community-based organizations</td>
<td>Average one-year award amount: $1,112,000, of which $722,000 is for projects that must include nutrition and physical activity</td>
<td>$228 million over 5 years (2023–2028), of which $148 million is for projects that must include nutrition and physical activity</td>
</tr>
<tr>
<td>School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students (Healthy Schools)</td>
<td>23-0002</td>
<td>Increase students’ physical activity, healthy dietary behaviors, and self-management of chronic health conditions, as well as promote health equity and reduce disparities</td>
<td>5 years beginning in 2023</td>
<td>State education agencies in 16 states</td>
<td>Average one-year award amount: $390,000</td>
<td>$31.5 million over 5 years (2023-28)</td>
</tr>
</tbody>
</table>
Racial and Ethnic Approaches to Community Health

Racial and Ethnic Approaches to Community Health (REACH) is a CDC program aimed at reducing health disparities among populations with the highest levels of chronic disease. REACH funds culturally appropriate initiatives by states, localities, tribes, universities, and community organizations that target preventable risk behaviors, including those that lead to obesity. For example, REACH funding helped New York City Public Schools switch from whole milk to lower-fat options, sponsor a mobile farmer’s market in Savannah, Georgia, and create a fruit and vegetable prescription program in the Navajo Nation. For the upcoming 2023–2028 grants, proposed projects must include work in nutrition and physical activity.

More than one-third of REACH’s funding is dedicated to the Healthy Tribes collection of programs, including the Good Health and Wellness in Indian Country (GHWIC) program, which focuses on health promotion and chronic disease prevention in tribal communities. Healthy Tribes’ long-term goals include increasing physical activity, breastfeeding, and the intake of healthy foods. The program’s 27 grants reach more than 100 tribes and Urban Indian Organizations.

REACH received $69 million of funding in FY 2023—including $24 million for GHWIC—a slight increase over FY 2022’s $66 million, of which $22.5 million was for GHWIC.

Healthy Schools Program

CDC’s Healthy Schools Program—officially titled School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students—provides funding to state education and health agencies, universities, and Tribal Nations to establish programs and policies to help students in underserved communities increase physical activity, make healthier food choices, and manage chronic health conditions, including obesity. Building on the 2018–2023 funding cycle, the next round of Healthy Schools five-year grants will provide funding to 19 states and one tribal recipient district with an average grant of $390,000 per year, with up to 50 recipients in the future if funding allows. Total funding for the five-year grants is $39 million.

National Diabetes Prevention Program

Because obesity is the leading risk factor for developing type 2 diabetes, obesity and diabetes prevention are interlinked. The National Diabetes Prevention Program (National DPP) is a public-private partnership aimed at preventing and delaying the estimated 96 million Americans with pre-diabetes from developing type 2 diabetes. A key component of the National DPP is its research-based lifestyle change program that includes a lifestyle coach, a CDC-approved curriculum, and one year of group support. Participants in this type of lifestyle change program can cut their risk of developing diabetes by 58 percent—or up to 71 percent for those over the age of 60.

In FY 2023, the National DPP received $37.3 million in funding, a $4 million increase over FY 2022.

Physical Activity Guidelines

Regular physical activity lowers the risk of obesity and contributes to overall health—reducing the risk of disease (including chronic diseases like Type 2 diabetes and hypertension, and infectious diseases...
like flu, pneumonia, and COVID-19) and depression, improving brain health and strengthening bones and muscles. In 2018, HHS published its second edition of *Physical Activity Guidelines for Americans*, which provides recommendations about the amount and type of physical activity necessary at each phase of the lifecycle to improve health and reduce the risk of chronic disease. It recommends that:

- **Children**
  - Ages 3 to 5 be physically active throughout the day;
  - Ages 6 to 17 engage in 60 minutes or more of moderate-to-vigorous activity per day.

- **Adults**
  - Engage in at least 150 minutes (2.5 hours) of moderate-to-vigorous activity or 75 minutes (1.25 hours) of vigorous aerobic activity per week; and
  - Perform muscle-strengthening exercises two or more days per week.

As of 2020, CDC research found that just over half (54 percent) of American adults met either the aerobic or muscle-strengthening recommendations, and 24 percent of American adults meet both.

**Active People, Healthy Nation**

Active People, Healthy Nation is a CDC-led initiative to help 27 million Americans become more physically active by 2027. It coordinates and engages stakeholders at national, state, and community levels to increase physical activity. The initiative’s strategies include eight components: (1) community design for physical activity; (2) access to places for physical activity; (3) school and youth programs; (4) community-wide campaigns; (5) social supports; (6) individual supports; (7) prompts to encourage physical activity; and (8) equitable and inclusive access to opportunities.

**Other CDC Programs**

A number of other CDC programs support initiatives that prevent obesity:

- CDC’s National Center for Chronic Disease Prevention and Health Promotion’s Advancing Health Equity for Priority Populations with or at Risk for Diabetes program will fund efforts to decrease the risk for type 2 diabetes among adults with prediabetes and improve self-care practices, quality of care, and early detection of complications among people with diabetes. Additionally, this funding will support the implementation of evidence-based, family-centered childhood obesity interventions as a type 2 diabetes risk-reduction strategy. CDC awarded $82 million to fund 77 grantees in year one for activities beginning in June 2023.

- **Addressing Conditions to Improve Population Health (ACTion)** will award $2.5 million in grants in FY 2023 to state, tribal, territorial, and local governments for projects to implement policy, system, and environmental interventions that address social determinants of health (SDOH) to reduce disparities, risk factors, and inequities related to chronic disease. ACTion focuses on four SDOH domains, including the built environment and food and nutrition security. It incorporates lessons from the FY 2021 and FY 2022 SDOH Accelerator Grants program.

- **National Early Child Care Collaboratives**, which is funded at $5 million in FY 2023, is an initiative that helps ECE programs for young children implement obesity prevention strategies.

- CDC’s Farm-to-Education Program, funded at $2 million in FY 2023, supports research and education promoting healthy eating habits in ECE settings.
Providing free school meals to all students regardless of income ensures that every student has access to nutritious meals every school day. Without universal school meals, students may be prevented from accessing breakfast or lunch at school because of stigma associated with qualifying for free or reduced-cost meals, language barriers, administrative hurdles that hinder families from signing up for the program, or federal income thresholds that keep them from qualifying for free meals even if their families struggle to put food on the table.568

California was the first state in the nation to permanently offer universal free school meals. The state began the program during the COVID-19 pandemic using federal pandemic relief funding and then made the policy permanent for the 2022–2023 school year.569,570 Public and charter schools in the state must provide free breakfast and lunch for all K–12 students. State tax dollars reimburse school systems for meals not eligible for federal reimbursement.571

Seven other states have since enacted similar policies:

- **Maine** Governor Janet Mill signed a law in 2022 making free school meals permanent following the end of the federal pandemic funding.572,573

- **Colorado** passed a ballot initiative in November 2022 permitting public schools the option to provide free meals to their students in school year 2023–2024, but not requiring them to participate.574,575

- **Minnesota** became the fourth state to offer universal school meals when Governor Tim Walz signed a law in March 2023 providing free breakfast and lunch for all students.576,577

- **New Mexico** Governor Michelle Lujan Grisham signed the Healthy Hunger-Free Students Bill of Rights Act into law, also in March 2023. The bill ensures all K-12 students have free-of-cost breakfasts and lunches beginning in the 2023-2024 school year.578

- **Vermont** became the sixth state with a permanent universal meal law for public school students in June 2023.579,580

- **Massachusetts** became the latest state to adopt universal free school meals permanently, with funding included in the FY 2024 state budget, which was signed into law by Governor Maura Healy in August 2023.582

Nevada also passed a law continuing free school meals for the duration of the 2023–2024 school year. In addition, at least 24 additional states and the District of Columbia are also considering universal school meal legislation.583,584

A 2020 literature review of universal school meal programs around the world found them to be positively associated with increased food security and improved nutrition. Nearly all studies found no adverse associations with BMI, and several found a positive reduction in obesity risk.585
MODEL STATE AND LOCAL PROGRAMS: FARM-TO-SCHOOL PROGRAMS

Programs that connect farms to schools and childcare centers can educate children about nutrition and expose them to fresh, locally grown, healthy foods, all while developing community connections, benefiting farmers, and strengthening the local economy. In addition to federal programs, such as USDA’s Patrick Leahy Farm-to-School Grant Program and CDC Farm-to-Education program, 43 states have established their own farm-to-school programs, most recently Arkansas and Nebraska. Lessons children learn from these programs include:

- How to grow and care for a garden;
- The health and environmental benefits of eating locally grown foods; and
- What produce is harvested during different times of the year.

Many states have unique events that showcase traditional local foods. For example, during Maryland Homegrown School Lunch Week, school systems partner with local food producers to showcase Maryland specialties such as locally harvested crabs. In New York, 20 school districts participate in New York Thursdays where meals include locally grown foods, such as the “ABC Salad,” featuring New York–grown apples, beets, and carrots. Florida’s farm-to-school program has a Harvest of the Month educational tool that focuses on a different Florida product each month of the school year, ranging from snap beans in September to blueberries in May.

While more peer-reviewed studies are needed on farm-to-school programs, existing research shows that these activities are associated with nutrition-related knowledge and healthy food selection during school meals.
D. HEALTHCARE COVERAGE AND PROGRAMS

In the past several years, the FDA has approved a new generation of medications called Glucagon-like Peptide 1 receptor agonists that have the potential to revolutionize obesity treatment as they are far more effective and have fewer side effects than earlier obesity medications. These medications—including the well-known versions, Ozempic and Wegovy—have an active ingredient that mimics a hormone that controls appetite. These effective medications offer options for individuals struggling with obesity and severe obesity who need and want a pharmaceutical treatment option. Availability, equitable access, and affordability of these medications, as well as other safe and effective obesity treatment options, will be key issues for healthcare and public health to consider.

I. Medicare and Medicaid

The public health insurance programs Medicare and Medicaid, which provide health coverage for more than 145 million Americans, incur a disproportionate amount of obesity-related healthcare costs. Health economists have estimated the two programs together pay for nearly half of annual obesity-related medical costs, which are estimated to be more than $170 billion per year.

Medicare

Medicare, the federal health insurance program for Americans ages 65 and over and some people with disabilities, provides the following obesity-related benefits:

- Obesity screening by primary care providers;
- Intensive behavioral therapy for beneficiaries with an obesity diagnosis;
- The Medicare Diabetes Prevention Program for beneficiaries with prediabetes;
- Bariatric surgery for beneficiaries with BMIs of 35 or higher who have an obesity-related disease and have been unsuccessful with previous weight-loss attempts.

Medicare does not cover weight-loss programs, such as Weight Watchers and is prohibited by federal law from covering obesity medications.

Covered Medicare obesity treatments have relatively low uptake. One study found that Medicare patients had 22 percent lower odds of undergoing bariatric surgery than patients with private health insurance, an already small number given that it is the most effective treatment for severe obesity.

Medicare prescription drug plans currently are prohibited from covering obesity medications, which were viewed as cosmetic when Medicare was expanded to include prescription coverage in 2003, and not included in the 2011 expansion of Medicare obesity benefits. Medicare’s lack of coverage influences the entire healthcare market, as many private insurers follow Medicare’s lead with respect to pharmaceutical coverage. A diverse coalition of drug manufacturer and public health advocates has been lobbying Congress to allow Medicare to cover obesity medication, and there is bipartisan support for this change.

Given the disproportionate number of Black and Latino/a Americans with obesity, many have argued that covering obesity medications is also a health equity issue.
Medicaid

Medicaid is a program that provides health insurance for Americans with low incomes and disabilities. It is jointly funded by the states and the federal government and administered by the states, which results in some variation in both Medicaid eligibility and coverage.

For children, states must provide Medicaid coverage for all medically necessary obesity services. For adults, states can choose whether to provide coverage for obesity treatment, and most states offer coverage for at least one obesity-related treatment.618 As of 2016–2017, of the 51 state Medicaid programs (including DC):

- 49 covered some form of bariatric surgery;
- 41 covered at least one obesity screening and counseling visit;
- 20 covered nutritional counseling; and
- 16 covered one or more FDA-approved medications for the treatment of obesity.619,620

A 2023 survey by Bloomberg Businessweek found that only 10 state Medicaid plans offer broad-based coverage of obesity medications, while six have more limited coverage.621 Connecticut started offering coverage in July 2023.622

The National Diabetes Prevention Program (DPP) is offered by 23 states and the District of Columbia as a covered benefit to at least some beneficiaries with prediabetes.623 In some of these states, however, the program is not offered to all beneficiaries or not offered statewide.624

While obesity rates vary across the states, obesity-related healthcare coverage is not highly correlated with the severity of obesity in that state. Thus, many people who need it the most lack coverage.625 For example, while West Virginia has the highest obesity and diabetes rates in the nation, its Medicaid program does not cover the National DPP and explicitly excludes coverage for obesity medications.626,627,628

Medicaid offers a higher federal match for states that cover all preventive treatments rated A or B by the U.S. Preventive Services Task Force (USPSTF),629 which include:

- Obesity screening for children and adolescents and referring those with obesity to intensive, multicomponent, family-centered behavioral interventions (Grade B);630
- Referral of adults with BMIs of 30 or above to intensive, multicomponent, behavioral interventions (Grade B);631
- Offering behavioral counseling about healthy weight gain to pregnant people (Grade B);632 and
- Diabetes screening and referral for preventive interventions for adults who are overweight or have obesity (Grade B).633

The USPSTF is also currently reviewing evidence to update its recommendations regarding:
- weight management in children and adolescents,634 and preventive services for food insecurity.635
II. Healthcare and Hospital Programs

Healthcare is a multitrillion-dollar industry in the United States with more than 18 million workers. Americans collectively make 1 billion physician office visits each year. Accordingly, hospitals and other healthcare facilities have a substantial impact on the lives of individuals and families, and are a tremendous opportunity to help prevent and reduce obesity. Ways they can do this include training and continuing education, sponsoring community benefit programs, and promoting breastfeeding.

Medical Education, Training, and Best Practices

Healthcare providers need to receive more and better training in treating and preventing obesity, as current training in these areas is insufficient or nonexistent. Most medical schools do not provide the level of nutrition education required by the National Research Council, and one-third of medical schools have no obesity education program. Accordingly, many health professionals lack competency in nutrition-related issues and knowledge of and confidence in treating obesity. In a 2020 study of Stanford internal medicine residents, 91 percent of residents reported discomfort prescribing obesity medication, only one-third correctly identified indications for bariatric surgery and, of those, just 9 percent reported referring patients for the surgery. Healthcare providers not only need but want better training. A 2019 survey found that 79 percent of doctors and nurses surveyed were interested in education on weight management or strategies to initiate weight conversations. Importantly, medical school training and continuing education both need to incorporate the rapidly expanding pharmacological treatments for obesity.

It is critical that obesity education include training about the complex, multifactorial causes of the disease and the importance of providing nonjudgmental care that is free from weight bias and discrimination, which can itself impact patient health. Weight stigma, particularly from healthcare professionals, increases the risk of unhealthy behaviors that can lead to weight gain and obesity. Medical professionals should screen their patients for unmet social needs—such as food insecurity, unstable housing, and domestic violence—which all increase the risk of developing chronic disease, including obesity.

The American Academy of Pediatrics recently released a new clinical guideline for evaluating and treating children and adolescents with obesity. The new guidelines encouraged earlier and more proactive treatment for obesity and, for the first time, recommends obesity medication—in addition to other ongoing treatment—for children ages 12 and older who have been diagnosed with obesity. Noting the threat that obesity poses to children’s health, the guideline also encourage providers to:

- Understand obesity is a chronic disease rooted in the complex interactions between genetics, environment, physiology and behavior;
- Conduct comprehensive whole child evaluations, including screening for overweight and obesity, understand individual and contextual risk factors, and identify obesity-related health problems;
- Recognize that obesity treatment is safe and effective and should begin early and at the highest available intensity;
- Offer intensive health behavior and lifestyle treatment for children who are overweight or have obesity; and
- Offer referrals for adolescents 13 years and older with severe obesity for an evaluation for metabolic and bariatric surgery.

The American Academy of Pediatrics guideline also explicitly recognizes that weight bias can harm patients and warns providers to be mindful of this—as well as advice on using person-first language, inclusive instructional images, and appropriately sized medical equipment and office furniture.

For the treatment of adults, guidelines from the American College of Cardiology and the American Heart Association in collaboration with the National Heart, Lung and Blood Institute and other stakeholders can help health practitioners decide which patients they should recommend for weight loss, the best diets and lifestyle changes to help patients lose weight and maintain weight loss, and the benefits and risks of bariatric surgery. Providers should also follow the USPSTF clinical preventive service recommendations related to obesity.

In addition to following clinical guidelines, hospitals and other healthcare facilities can also promote healthy environments for patients, visitors, and staff by:

- Serving healthy and nutritious food onsite;
- Sponsoring workplace wellness programs and nutrition classes;
- Reimbursing employees’ exercise-related expenses;
• Providing onsite fitness centers; and
• Designating a private space where employees can breastfeed or express milk.659,660,661

Community Benefit Programs
To maintain their tax-exempt status, nonprofit hospitals—which constitute 58 percent of community hospitals in the United States662—must conduct triennial community health needs assessments (CHNA) to determine their community’s specific health needs and implement a plan to address them.663 A study published in 2023 found that obesity was identified as a community health need in 71 percent of respondents’ CHNAs.664

Some examples of CHNA initiatives:
• Excela Health in Greensburg, Pennsylvania, partners with local YMCAs throughout Westmoreland County to sponsor Diabetes Prevention Programs and activities to get people engaged in physical activity, such as the Mall Walkers program.665
• North Mississippi Health Services, headquartered in Tupelo, Mississippi, sponsors karate and boot camp classes;666 and
• Jackson Country Memorial Hospital in southwest Oklahoma provides free obesity screenings and weight-management support groups.667

Breastfeeding
Breastfed children are at a significantly lower risk for childhood obesity, and the American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of life and continuing with complementary food for up to two years or more.668,669 Among infants born in the United States in 2019, 83 percent of babies were ever breastfed, and 25 percent were still exclusively breastfeeding at six months.670

The Baby Friendly Hospital Initiative, a joint program of the World Health Organization and UNICEF, is a global program to support the implementation of the Ten Steps to Successful Breastfeeding. In the United States, Baby Friendly USA is the accrediting body that designates a hospital as “Baby Friendly” when they offer the optimal level of care for infant feeding. Today, 27 percent of children in the United States are born at one of the 605 facilities designated as Baby Friendly, compared with fewer than 3 percent in 2007.671

FAMILY HEALTHY WEIGHT PROGRAMS IN REACH/HOP AND MISSOURI STATE PLAN AMENDMENT
The American Academy of Pediatrics, U.S. Preventive Services Task Force, and American Psychological Association all recommend that children with elevated BMIs receive intensive health behavior and lifestyle treatment.672,673,674 This type of intervention has been found to be particularly effective when it involves not solely the patient, but their entire family working with a multidisciplinary treatment team to receive education and counseling about healthy weight, good nutrition, and the importance of physical activity. These programs are also called family healthy weight programs.675

While family healthy weight programs have been demonstrated to be effective, there are not nearly enough of them to serve all the children who need them. The federal government has been working to make it easier for families who need these programs to access them. CDC maintains a list of recognized programs as a resource for healthcare providers, health payers, and public health practitioners.676 Family healthy weight programs are also an intervention for which REACH and HOP grantees can receive funding.677,678 In addition, in 2021, CMS approved a request from the state of Missouri to amend its Medicaid plan to cover these type of obesity treatments.679
## INTERSECTION OF THE FEDERAL NUTRITION SAFETY NET AND HEALTHCARE: FOOD IS MEDICINE

The medical and scientific communities increasingly understand that obesity has complex causes that include poor nutrition and food insecurity, and that when healthcare providers treat obesity, they must incorporate nutrition education and access into their treatment plans. This idea that “food is medicine” (or “food as medicine”)—an umbrella term for food-based health interventions—can be practiced not only in traditional healthcare settings but also through social welfare programs and community organizations.680,681

Examples of food-is-medicine services can include:

- Prescription programs, where healthcare providers give written instructions or “prescriptions” to patients to eat more produce or other healthy foods;
- Providing patients with medically tailored groceries and meals;
- Nutrition food referrals; and
- Nutrition education and teaching-kitchen programs.682,683

As part of its whole-of-government effort to reduce obesity and other diet-related diseases, the Biden Administration is working to expand food-based health interventions. Following the 2022 White House Conference on Hunger, Nutrition, and Health, the National Institutes of Health in 2023 solicited input on food-is-medicine best practices.684 The federal government will use what it learns to implement more effective programs.

Meanwhile, HHS has encouraged states to pilot Medicaid-for-food initiatives using Section 1115 funding.685 (Section 1115 of the Social Security Act allows HHS to waive federal program requirements to allow states to test novel projects.)686 Arkansas, Oregon, and Massachusetts have already been approved for Medicaid-for-food funding, and six more states have pending requests.687 Arkansas is covering nutrition supports for Medicaid recipients, including healthy meal preparation.688 Oregon is adding food assistance services, which may include nutrition education, produce prescription programs, and medically tailored meal delivery.689 Massachusetts is providing nutrition counseling, nutritionally appropriate food prescriptions, and cooking supplies.690

Food-is-medicine initiatives are meant to complement other nutrition assistance programs, such as SNAP, not supplant them. HHS encourages states operating Medicaid-for-food programs to ensure plan beneficiaries are also connected to all existing state and federal nutrition supports.691
Recommendations

Since 2004, Trust for America’s Health (TFAH) has issued policy recommendations for the prevention and treatment of obesity that, if fully enacted, would create healthier community environments that support optimal health for everyone. Importantly, TFAH’s recommendations have evolved as our understanding of obesity has also changed. First, recognizing obesity as a disease was a critical step forward in understanding the complex contributors and necessary treatment for this chronic disease. Second, recognizing that the non-medical drivers of health contribute more to health outcomes than do healthcare interventions was important in understanding how public health should be targeting its efforts in obesity prevention.

The health of individuals and families are impacted by the communities in which they are born, live, work, learn, play, worship, and age. The available choices and habits related to diet, nutrition, and physical activity—as well as factors like stress, discrimination, poverty, economic hardship, and food insecurity—vary across the United States and play a critical role in determining the health and well-being of community members. By shifting emphasis away from individual choices and toward improving the health of an entire community, and nationally, public health can track, measure, and create policies and programs that make the healthy choice the easy choice, regardless of where someone lives or the resources available to them. While some obesity prevention policy areas have made progress, other areas have stagnated.

Ensuring that all communities can support healthy lifestyles for people of all demographics requires a systems approach—because the development of chronic disease is influenced by culture, economics, and society—including public policy changes across key sectors to ensure healthy choices are available and easy for everyone. A systems approach includes reducing longstanding structural and historic inequities; targeting obesity prevention programs to communities with the highest needs; and scaling and spreading evidence-based initiatives that create the healthy community environments that support optimal health and promote healthy behaviors and outcomes (e.g., within healthcare, transportation, and education sectors).

This section focuses on recommendations for federal, state, and local governments in five areas: (1) advance health equity by strategically focusing on efforts that reduce obesity-related disparities and related conditions; (2) decrease food and nutrition insecurity while improving nutritional quality of available foods; (3) change the marketing and pricing strategies that lead to health disparities; (4) make physical activity and the built environment safer and more accessible for all; and (5) work with the healthcare system to reduce disparities and close gaps in clinical-to-community settings.
1. Advance Health Equity by Strategically Dedicating Federal Resources to Efforts that Reduce Obesity-Related Disparities and Related Conditions.

Obesity prevention strategies must have an intentional focus on equity. As the main funder of community-based obesity prevention activities, the federal government plays a critical role in directing resources and programs that can prevent and reduce obesity. In any policymaking, including the recommendations below, equity should be prioritized by:

- Providing equitable funding to communities by delivering a foundation of flexible support, resources, and technical assistance tailored to a community’s specific needs; and
- Focusing on communities with the highest rates of obesity first, particularly those with low historic investment and structural inequities related to poverty, structural racism, and other social and economic factors.
- Supporting continued education opportunities for federal agency staff to be trained in the importance of resource allocations, inclusive language, and equitable implementation of projects in historically underinvested communities.

**Recommendations for the federal government:**
- **Increase capacity to prevent obesity and related chronic diseases.** Congress should significantly increase funding for the National Center for Chronic Disease Prevention and Health Promotion at the Centers of Disease Control and Prevention (CDC) to improve the nation’s prevention of obesity and related chronic diseases. This investment should include at least $130.42 million in FY 2024 for CDC’s Division of Nutrition, Physical Activity and Obesity to ensure its State Physical Activity and Nutrition program grants have sufficient and equitable funding to reach all 50 states as well as U.S. territories and tribal communities for implementation of effective multisector campaigns to prevent and reduce obesity. Likewise, national obesity surveillance systems should be adequately funded to improve the collection of race/ethnicity and other demographic data, in order to better tailor programs and funding.
- **Increase funding for equitable obesity-related initiatives.** Congress should increase funding for initiatives that center on equity, such as CDC’s Racial and Ethnic Approaches to Community Health (REACH) program, which delivers effective, local, culturally appropriate programs to those who bear a disproportionate burden of chronic disease. The Healthy Tribes program is funded out of the REACH funding line and supports tribal organizations to reduce chronic disease and health disparities and to promote health in American Indian and Alaska Native populations. TFAH recommends at least $102.5 million for REACH and Healthy Tribes in FY 2024 to expand these effective approaches to additional communities.
- **Support multisector collaborations that address the social determinants of health.** Research shows a strong connection between the social determinants of health (SDOH)—such
as economic opportunity, housing, transportation, and access to nutritious foods—and risk of obesity and other health conditions, yet there has been little federal funding for public health approaches to address SDOH.\textsuperscript{694,695} Congress should expand funding to $100 million, as requested in the president’s FY 2024 budget, for the SDOH program at CDC to fund meaningful multisector partnerships between public health and other sectors to address structural drivers of poor health. Such a program would create community conditions that foster optimal health, including access to healthy foods, safe places to be physically active, and initiatives that reduce poverty. The Improving Social Determinants of Health Act would authorize the creation of such a program at CDC and should be signed into law.

- **Address economic factors that contribute to obesity.** Poverty is a significant contributor to obesity and chronic disease. Congress and state policymakers should support programs that both reduce poverty and improve health. Multifaceted approaches, including increasing the minimum wage, expanding the Earned Income Tax Credit, and access to safe, healthy, and affordable housing can reduce poverty and improve population health.\textsuperscript{696,697,698} For further discussion of TFAH’s policy recommendations on economic well-being, see our report *Promoting Health and Cost Control in States.*\textsuperscript{699}

- **Prioritize health equity in federal agency goals planning.** All relevant divisions at the U.S. Department of Health and Human Services (HHS), the U.S. Department of Transportation (DOT), and U.S. Department of Agriculture (USDA) should implement and publicly report on the progress for their Agency Equity Action Plans.\textsuperscript{700} In addition, HHS, DOT, and USDA agencies that work to prevent obesity and the development of chronic diseases should prioritize policies, programs, and resources to reduce health disparities and advance health equity.

- **Adapt federal grantmaking practices to account for differential needs, resources, and capacity.** Federal agencies that support obesity and chronic disease prevention efforts should consider health impact assessments, disease burden, historical underfunding, and social context when determining grantmaking eligibility criteria, so that communities with the greatest health related needs can benefit from competitive grant mechanisms. Community-based organizations may be well situated to implement obesity prevention activities in impacted communities but may also need technical assistance or flexibility to meet the procedural requirements of federal grants. Upfront financial barriers and limited operating budgets could be constricting the community organizations that are best suited to implementing chronic disease prevention programs. In particular, the Agency Equity Action Plans call for helping underserved communities learn about and navigate federal funding opportunities, providing technical assistance throughout the application process, and making federal funding applications simpler and easier to navigate, all of which are policies that all agencies in the federal government should implement.\textsuperscript{701}
2. Decrease Food and Nutrition Insecurity While Improving Nutritional Quality of Available Foods.

Food and nutrition insecurity are root causes, or non-medical drivers, of obesity. Federal nutrition assistance programs play a major role in the food and nutrition security of millions of Americans. In 2022, the Supplemental Nutrition Assistance Program (SNAP) helped 41.2 million people with an average monthly benefit of $230.42 while the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provided healthy foods and nutrition services to 6.2 million participants. However, millions more people are eligible but not signed up for these critical benefits. Focused attention and outreach are necessary to increase participation rates and to address larger structural factors that prohibit complete nutrition security, such as limited incomes and a lack of local stores with healthy food, particularly produce.

**Recommendations for the federal government:**

- **In the interim, encourage Community Eligibility Provision enrollment and expand eligibility.** The Community Eligibility Provision (CEP) has allowed over 33,000 schools, about one in three of the schools that participate in school meals, to offer them at no charge to all students. CEP provides meals for all enrolled students if 40 percent or more of students are directly certified for free school meals, and schools are reimbursed according to the percentage of directly certified children. Participating schools report that CEP improves children’s access to healthy meals, reduces paperwork for parents and schools, and makes school meal programs more efficient. If the transition to Healthy School Meals for All must be incremental, Congress and USDA should improve uptake of the CEP by swiftly finalizing the current proposed rule to decrease the CEP eligibility threshold from the current 40 percent to the proposed 25 percent. USDA estimates that this change would enable at least 45 percent of students nationwide to be eligible for free or reduced-price meals.

- **Strengthen school nutrition standards.** USDA should swiftly implement its proposed 2023 rule to increase nutrition standards for school meals and snacks, including commitments to lower sodium to healthy and age-appropriate levels, create an added-sugars standard, and increase access to nutrient-rich foods. Congress should provide USDA the resources needed to offer technical assistance, training, and peer-to-peer learning collaboratives. USDA should also consider performance-based incentives, and work with industry to provide foods that meet the new standards in phases to allow schools adequate time to adjust to improved nutrition levels.

- **Extend benefits in SNAP.** Congress should protect the update to the Thrifty Food Plan, which increased pre-COVID-19 pandemic SNAP benefits by 21 percent, and continuously review the effectiveness of the benefit level. Congress should also oppose any legislative or regulatory efforts that would effectively limit SNAP eligibility, reduce the value of benefits, or create any other barriers to participating, such as imposing additional work requirements or time limits or eliminating broad-based categorical eligibility. In addition, Congress should require and provide more resources to states to provide translation and outreach services for people applying for SNAP who have limited English proficiency.

- **Improve diet quality in SNAP.** Without decreasing access or benefit levels in SNAP, USDA and Congress should identify opportunities to improve diet quality, such as piloting voluntary programs that test healthier eating strategies. With its authority, USDA should expand projects to evaluate innovative approaches to optimizing SNAP purchases. Additionally, Congress should double investments in SNAP-Ed, and USDA should continue to strengthen the highly effective Gus Schumacher Nutrition Incentive Program, which supports projects that increase fruit and vegetable purchases among SNAP beneficiaries.

- **Create a mandatory front-of-package label for processed foods to help consumers make informed choices.** FDA should swiftly move forward in implementing a front-of-package
nutrition label system for packaged foods, a key recommendation from the White House National Strategy on Hunger, Nutrition, and Health.\textsuperscript{711} Front-of-package labels have been proven to help consumers make better choices by putting simplified, essential nutrition information on the front of packaged food products.\textsuperscript{712,713}

- **Increase access to WIC.** Congress should expand access to WIC for young children up to age 6 (or the beginning of kindergarten) and women up to two years postpartum, extend certification periods to streamline clinic processes, partner more closely with Head Start to enhance child retention, and allow WIC benefits to be remotely loaded onto benefit cards. These steps will modernize the WIC program to make it more flexible and allow more families to access WIC’s effective interventions by reducing duplicative paperwork requirements for both the participants and service providers.

- **Enhance nutritional quality and value of benefits in WIC.** WIC has proved effective at reducing obesity and promoting good health,\textsuperscript{714,715} in part due to the 2009 changes to the food package to align the nutritional quality of WIC foods with independent scientific recommendations from the National Academies.\textsuperscript{716,717} Congress should extend the 2021 increase in WIC’s fruit and vegetable benefit through FY 2024, and USDA should make permanent the proposed rule to improve the nutrition quality of the WIC benefit packages and reforms that increase the overall value of the WIC benefit.

- **Expand access to the Child and Adult Care Food Program (CACFP).** Low-income preschoolers attending CACFP-participating childcare centers are less likely to have obesity than similar children attending nonparticipating centers.\textsuperscript{716} Congress should bolster CACFP by allowing a third meal service option, increasing reimbursements to support healthier standards, streamlining administrative operations, and continuing funding for CACFP nutrition and wellness education.

- **Expand support for maternal and child health, including breastfeeding.** Congress should increase funding and access for programs that promote maternal and child health and breastfeeding support, such as CDC’s Hospitals Promoting Breastfeeding program; Maternal, Infant, and Early Childhood Home Visiting; and the WIC Breastfeeding Peer Counseling Program.\textsuperscript{718} Breastfeeding has been shown to contribute to multiple positive health outcomes, including the prevention of childhood obesity.\textsuperscript{719} Congress should increase funding for the Health Resources and Services Administration’s Title V Block Grant, which supports state maternal and child health priorities, including breastfeeding, nutrition, and physical activity.\textsuperscript{720,721}

- **Promote healthy food options through procurement policies.** When government agencies establish policies to improve the nutrition of the food they purchase and provide, they can improve public health and serve as an example for the private sector to provide healthy food.\textsuperscript{722} Federal and other facilities should improve the nutritional quality of food they provide by uniformly implementing the Food Service Guidelines for Federal Facilities.\textsuperscript{724}

**Recommendations for state/local government:**

- **Support access to healthy school meals.** States and localities should continue strengthening school nutrition standards by working to align with the Dietary Guidelines for Americans. Additionally, states and school districts should partner with out-of-school providers, community partners, and food banks to ensure children have access to food and critical enrichment opportunities when they aren’t in school. Schools should continue flexibilities that will expand access to nutrition for students, such as second-chance breakfasts, breakfast on-the-go, and breakfasts in classrooms, while following CDC’s Whole School, Whole Community, Whole Child framework, which provides information on the components of a school nutrition environment.

- **Community design should encourage healthy food options.** Local communities should incentivize—through land-use planning, zoning, and property tax credits—grocery stores, healthy corner stores, community gardens, food marts, and farmers’ markets to locate or renovate in areas with limited access to nutritious foods and meet certain requirements for the amount of healthy food they provide. Local communities and schools should also be incentivized to partner with local farms.

- **Allocate resources to increase outreach and awareness of eligibility for nutrition assistance programs.** State agencies responsible for providing other benefits to families, such as unemployment insurance, Temporary Assistance for Needy Families, Medicaid, WIC, or SNAP, should ensure that parents or guardians are aware of all of the child nutrition programs administered by USDA and available to families in their jurisdiction.\textsuperscript{725}

From infancy through adulthood, Americans are exposed to effective advertising via television, radio, digital, and retail ads encouraging the consumption of fast food, soda, and calorie-dense low-nutrient food products. While these messages reach virtually all populations, companies disproportionately market to children of color.726,727

There is now a substantive and growing body of evidence showing that increasing the price, through excise taxes, of unhealthy items like sugary drinks reduces consumption (similar to pricing strategies that helped decrease the smoking rates), especially when that revenue goes to programs and services that improve population health.728,729 Policies in several communities show clear evidence that this approach works to reduce the consumption of sugary drinks.730,731

**Recommendations for the federal government:**

- **End unhealthy food marketing to children.** Congress should close tax loopholes and eliminate business-cost deductions related to the advertising of unhealthy food and beverages to children on television, the internet, social media, and places frequented by children, like movie theaters and youth sporting events. Researchers project that eliminating advertising subsidies for unhealthy foods and beverages would prevent approximately 109,000 cases of obesity over a decade.732 FDA should establish clear and consistent labeling requirements for “toddler milks,” which can confuse parents into buying nutritionally inferior products for their young children. FDA should also examine the need to regulate marketing strategies in retail environments, both in-person and online, that may be promoting inaccurate information about products to children.

- **Discourage overconsumption of sugar.** Federal, state, and local governments should increase the price of sugary drinks, through an excise tax, with tax revenue allocated to local efforts to reduce health and socioeconomic disparities, nutrition security, and obesity prevention programs. Another strategy to lower sugar consumption is making the tax amount proportional to the sugar amount in drinks, thereby incentivizing companies to reformulate and reduce the sugar content in their products.

**Recommendations for state and local governments:**

- **Reduce unhealthy food marketing to children at the local level.** Local education agencies and communities should consider incorporating strategies in their local wellness policies that further reduce unhealthy food and beverage marketing and advertising to children and adolescents, like by prohibiting coupons, sales, and advertising around schools and school buses, as well as by banning sugary drinks as branded sponsors of youth sporting events.733
4. Make Physical Activity and the Built Environment Safer and More Accessible for All.

While many individuals can take measures to be active, there are often larger social, economic, and environmental barriers that communities should address, such as modifying community design so it is easier and safer for people to walk, bike, or roll for recreation or transportation purposes; strengthening public transportation options; ensuring that children have daily opportunities for physical activity inside and outside of school; and creating accessible recreational options for people of all ages, racial and ethnic backgrounds, abilities, and incomes. While some communities have made progress, obstacles to physical activity are disproportionately greater in those communities where social and economic conditions have resulted in a lack of safe space for physical activity due to a variety of barriers, such as fewer recreational facilities, underfunded school systems, car-dependent transportation, and both overt discrimination and structural racism.

What constitutes safe public space for physical activity for someone can vary based on their gender, race, and/or ethnicity. Safety from traffic and crime are vitally important to overcome perceived and real barriers to physical activity. However, structural racism causes some people of color to face additional, unique challenges to being physically active in public spaces. For example, Black individuals may experience dread, anxiety, and hypervigilance while attempting to exercise, especially in predominantly white neighborhoods, due to a fear for their own safety.741

Recommendations for the federal government:

- **Fund programs that support physical education and healthier schools.** Congress should increase funding for the Student Support and Academic Enrichment grant program (under Every Student Succeeds Act Title IV, Part A) to $2 billion in FY 2023.735 The Student Support and Academic Enrichment grant recipients can use the funding to support health and physical education, among other activities. Also, given the interconnectedness of social, emotional, and mental well-being, along with the physical health of children, a positive school climate can promote physical activity, healthy eating, and emotional health as well as academic performance. Congress should expand funding for programs that promote social-emotional learning and improve health outcomes for children, such as CDC’s Healthy Schools program.

- **Prioritize evidence-based physical activity guidelines.** Congress should pass and appropriate funding for the Promoting Physical Activity for Americans Act to require HHS to publish Physical Activity Guidelines for Americans at least every 10 years based on the most current scientific and medical knowledge, including information for population subgroups, as needed. Appropriations should also fund communication, dissemination, and support for the guidelines. Since the release of the first Physical Activity Guidelines for Americans in 2008, the vast majority of Americans (74 percent of men, 81 percent of women, and 80 percent of adolescents) do not meet these recommendations.726 The Guidelines were last updated in 2018.

- **Fund active transportation in all communities, with a focus on equity.** The Infrastructure Investment and Jobs Act sets aside funding for states and communities to develop Complete Streets plans. DOT should set strong guidance on what qualifies for a complete street plan developed with federal money. Congress should ensure that funding for active transportation projects—like pedestrian and biking infrastructure, recreational trails, and Safe Routes to Schools—included in the Infrastructure Investment and Jobs Act, which includes a five-year reauthorization of federal surface transportation programs, are properly utilized. Local matching requirements for active transportation projects should be made more flexible to ensure that all communities, regardless of their resource level, have an equitable opportunity to receive funding. DOT can help by encouraging states to take advantage of technical assistance programs to help low-income, rural, and other high-need communities apply for and implement active transportation, planning, and multimodal projects. Congress should ensure that all federal infrastructure bills mandate state adoption of Complete Streets principles as a condition for the receipt of federal funding for major transportation projects.
• **Make physical activity safer.** DOT should add Safe Routes to Schools, Vision Zero, Complete Streets, and non-infrastructure projects as eligible initiatives of the Highway Safety Improvement Program. DOT should conduct national road safety audits to identify high-risk intersections and other hazards, and states and large cities with higher rates of pedestrian deaths should implement safety improvement projects.

**Recommendations for state/local governments:**

• **Prioritize schooltime physical activity.** States and local education agencies should identify innovative methods to deliver physical activity every day, such as partnering with out-of-school providers for before and after-school activity, providing virtual options for physical education, implementing active recess or class-based activities, and more. States should consider using the Every Student Succeeds Act Title I and/or IV funding for physical education and other physical activity opportunities.757

• **Make local spaces more conducive to physical activity.** Local school districts and states should evaluate schoolyard suitability and enhance schoolyard spaces to account for active play, outdoor classroom space, school gardens, access to nature, and mitigation of urban heat islands. Shared-use agreements should allow for schoolyards and other school recreation facilities to be open to communities outside of school hours.

• **Make communities safer for physical activity and active transportation.** States and cities should enact Complete Streets and other complementary streetscape design policies to improve active transportation and to increase outdoor physical activity opportunities.

• **Encourage outdoor play.** States should build on the successful federal Every Kid Outdoors program—which provides fourth graders with a free-entry park pass for themselves and their families to visit federal public lands—to include state-managed lands and/or to expand to other age groups, and the federal government should extend the program to more ages. State and local policymakers and funders should support park development in high-need areas, prioritizing equity and community engagement.758
5. Work with the Healthcare System to Close Disparities and Gaps in Clinic-to-Community Settings.

The Affordable Care Act (ACA) is a landmark piece of legislation that has provided access to health insurance coverage through subsidized health care plans through the ACA Health Insurance Marketplaces and by expanding Medicaid eligibility. There are significant disparities in access to care by sex, age, race, ethnicity, education, and family income. Health insurance and access to care are foundational to obesity prevention and treatment as well as to overall health. The following recommendations are in addition to the principal belief that all individuals in the United States, regardless of race, income, immigration status, or any other factor, deserve and should have access to quality healthcare. All healthcare payors should establish payment-based quality measures that prioritize screening and counseling to prevent obesity and, when necessary, cover obesity-related services that meet the National Academy of Medicine’s health equity standard of “providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.”

Recommendations for the federal government:

- **Enforce U.S. Preventive Services Task Force recommendations for obesity prevention.** While there is a current legal challenge being decided by the courts (Braidwood Management, Inc. v. Becerra), the law as it was enacted and is currently in effect requires most insurance plans to cover recommended preventive services with an A or B grade from the U.S. Preventive Services Task Force (USPSTF) with no cost-sharing. There are several grade A or B obesity-related USPSTF recommendations, including referrals for intensive behavioral interventions for adults and children, with varying implementation or uptake of these recommendations across insurers. HHS, the U.S. Department of Labor, and the U.S. Treasury Department should jointly communicate to insurers that they continue to require coverage of grade A and B recommendations by publishing Frequently Asked Questions, a form of correspondence that the departments have previously done on other USPSTF recommendations. Insurance plans should also incorporate quality measures that incentivize screening and counseling for overweight and obesity, with an emphasis on prevention. With an outstanding legal challenge that could eliminate the availability of recommended preventive services for millions of Americans, Congress should guarantee access to recommended preventive services, if necessary.

- **Expand Medicare coverage of weight management and obesity-related services.** Medicare should expand coverage of obesity-related services, such as obesity and nutritional counseling provided by registered diieticians, obesity medications, and bariatric surgery.

Recommendations for state/local governments:

- **Expand Medicaid eligibility to provide insurance coverage to more people.** States that have not yet expanded Medicaid should leverage the newly established incentives in the American Rescue Plan Act to ensure coverage of as many individuals as possible.

- **Prioritize social determinants of health strategies.** States, insurers, and healthcare facilities should follow the Centers for Medicare and Medicaid Services’s guidelines and requirements on addressing patients’ social needs, and public health.
departments should partner with social service agencies, healthcare insurers, hospital systems, and community organizations to address SDOH. Such efforts could include promoting evidence-based policies that improve community conditions; supporting processes that center on community members’ views when setting goals and strategies; providing counsel and referral strategies to improve the use of electronic health records; establishing referrals to and funding for the National Diabetes Prevention Program, ParkRx, and other community-based programming; employing community health workers and promotores in low-resourced areas to provide culturally and linguistically appropriate health education and to connect residents with relevant safety-net and social-support resources; and aligning state and local efforts to national initiatives (such as CDC’s Million Hearts).

• **Cover adult and pediatric weight management and obesity-related services in Medicaid.** Medicaid should reimburse providers for evidence-based comprehensive pediatric weight management programs and services, such as Family-Based Behavioral Treatment programs and Integrated Chronic Care Models. State Medicaid programs should also expand coverage of obesity-related services, such as obesity and nutritional counseling provided by professionals like registered dieticians, obesity medications, and bariatric surgery.

• **Build and support capacity of community-based partners through Medicaid.** State Medicaid agencies should consider seeking 1115 waivers or state plan amendments that would allow Medicaid state agencies or managed care organizations to reimburse community-based organizations for chronic disease prevention activities in order to further incentivize cross-sector collaboration (e.g., food is medicine and fruit and vegetable prescriptions). State Medicaid agencies can also provide targeted technical assistance to further build the capacity of community-based organizations to engage with healthcare entities.
The appendix covers indicators spanning state-level conditions, policies, and performance measures across five themes: Community Conditions; Retrospective and Trends Over Time; Food Insecurity, Built Environment, Active Transportation, and Food Systems; Nutrition Assistance Programs, and Childcare and School Nutrition and Physical Activity. Some of the indicators are updated annually and are regularly included in the State of Obesity report, while others are based on one-time reports or were included this year since they particularly relate to the report’s special feature. The data included are the most recently available, although some items have a substantial delay before release.
## Community Conditions

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* Kaiser Family Foundation estimates based on U.S. Census Bureau’s American Community Survey.

** Sources and Notes:


* Kaiser Family Foundation estimates based on U.S. Census Bureau’s American Community Survey.
### Retrospective and Trends Over Time

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<td>How many state-level obesity-related policies did each state enact between 2009 and 2019?**</td>
<td>How did the state score (on a scale from 0-6) with respect to successful farm to school legislation from 2002 to 2020?**</td>
<td>What is the change in each state’s Making Strides score (a built environment and active transportation indicator) from 2016 to 2022?**</td>
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Alabama 4 6 -42  
Alaska 2 5 -15  
Arizona 3 0 -22  
Arkansas 13 6 -60  
California 96 6 3  
Colorado 16 4 -10  
Connecticut 16 3 -2  
Delaware 6 1 22  
D.C. 32 5 -9  
Florida 10 6 23  
Georgia 4 2 -35  
Hawaii 13 6 8  
Idaho 3 0 4  
Illinois 25 4 -9  
Indiana 4 0 -35  
Iowa 1 4 -4  
Kansas 0 0 -19  
Kentucky 3 2 -24  
Louisiana 21 6 -38  
Maine 24 2 13  
Maryland 26 6 -38  
Massachusetts 11 4 33  
Michigan 5 6 6  
Minnesota 2 5 -3  
Mississippi 12 1 -12  
Missouri 8 6 -52  
Montana 0 2 0  
Nebraska 5 1 -52  
Nevada 12 4 -7  
New Hampshire 8 1 -53  
New Jersey 57 3 13  
New Mexico 5 5 -14  
New York 27 6 -10  
North Carolina 12 6 -5  
North Dakota 1 0 -1  
Ohio 2 0 7  
Oklahoma 5 6 -14  
Oregon 15 5 11  
Pennsylvania 2 4 14  
Rhode Island 5 2 17  
South Carolina 4 3 -14  
South Dakota 1 0 -15  
Tennessee 6 2 -6  
Texas 17 4 15  
Utah 6 0 -17  
Vermont 11 6 -30  
Virginia 15 1 -18  
Washington 9 4 -1  
West Virginia 5 1 -22  
Wisconsin 3 6 -54  
Wyoming 0 2 -18  

Sources and Notes:
   *Using a database of legislation covering 2009–2019, researchers categorized obesity-related legislation by status (proposed/enacted), topic (e.g. food access, food assistance, marketing/advertising to children, general obesity, physical activity and built environment, etc), and the environment where policies were enacted.*

   *Score of 4-6 = “Sustaining Farm to School” (funded grant programs, coordinator positions, and/or local procurement incentives); 2 or 3 = “Growing Farm to School” (pilot, local preference, and/or unfunded program); 1 = “Seeding Farm to School” (resolutions, a database, and/or task force/councils); 0= no Farm to School legislation.*

   *See Complete Streets indicators on next page for more information on scoring.*
## Built Environment, Active Transportation, and Food Systems

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</tbody>
</table>

**Total** | 76% | 76% | 35 states and DC | 17 states | 18 states and DC with plan; 11 states in development

**Sources and Notes:**
6. Venson, Ebony. “Complete Streets Policy scores range from 0-20. 0 indicates a state has not adopted a Complete Streets policy. For states with a policy, points from 1 to 20 are awarded, with more points awarded for stronger policy, as measured by the National Complete Streets Coalition scoring criteria (20*NCSCE score/60).”
7. The report cards for each state summarize a total of 27 indicators spanning four core topic areas: Complete Streets and Active Transportation Policy and Planning, Federal and State Active Transportation Funding, Safe Routes to School Funding and Supportive Practices, and Active Neighborhoods and Schools. In each of these topic areas, states can play a significant role—through policies, funding, and other support—in increasing the number of children and adults walking, bicycling, and being physically active. Each state is given an overall score out of 200.
10. According to the American Planning Association, “Food systems planning is concerned with improving a community’s food system. A food system is generally understood to be the chain of activities connecting food production, processing, distribution, consumption, and waste management.”

**Note:**
- **8** According to the American Planning Association, “Food systems planning is concerned with improving a community’s food system. A food system is generally understood to be the chain of activities connecting food production, processing, distribution, consumption, and waste management.”

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## Nutrition Assistance Programs

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<tr>
<td>What percentage of eligible people participate in SNAP?**</td>
<td>What percentage of eligible people participate in WIC?**</td>
<td>What is the percentage of breastfed infants (fully or partially breastfed) among WIC participants in the state?</td>
<td>Does the state have an approved or pending 1115 Medicaid waiver addressing nutrition support or food-related programs?**</td>
<td>Which states are conducting a farm-to-food-bank project in FY 2022?</td>
<td>What is the total cost of food delivered to states under the Emergency Food Assistance Program?**</td>
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| Total 82% 50% 6 states 27 states | | | | $915,136,734 |

Sources and Notes:


*Final shrinkage estimates for FY 2017 and FY 2018 presented in this report differ slightly from the estimates of previous reports. The estimator uses data from three years to estimate participation rates for each year and it incorporates a regression model that is updated each year.


*Food costs are the value of entitlement and bonus commodities delivered to State warehouses during the fiscal year.
### Childcare and School Nutrition and Physical Activity

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<tr>
<th>State</th>
<th>Total PE Score (2022)</th>
<th>PE Requirements Score (2022)</th>
<th>Universal Free School Meals (as of August 2023)</th>
<th>Community Eligibility Provision (2022–2023)</th>
<th>School Breakfast Program (2021–2022)</th>
<th>What is each state’s score in terms of physical education requirements (out of a total possible score of 15)?*</th>
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<td>15**</td>
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</tbody>
</table>

Sources and Notes:


* A state’s overall score out of 100 is based on the degree to which the state included 47 science-based standards for obesity prevention in early care and education settings within the following categories: infant feeding, nutrition, physical activity/screen time.
References


89 Ibid.


151 Ibid.


153 Ibid.


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