

The State of Obesity:

BETTER POLICIES FOR A HEALTHIER AMERICA

2023

SPECIAL FEATURE:

20-Year Report Anniversary Retrospective



Acknowledgments

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View this report online at <https://www.tfah.org/report-details/state-of-obesity-2023>

The State of Obesity

LIST OF ACRONYMS AND ABBREVIATIONS

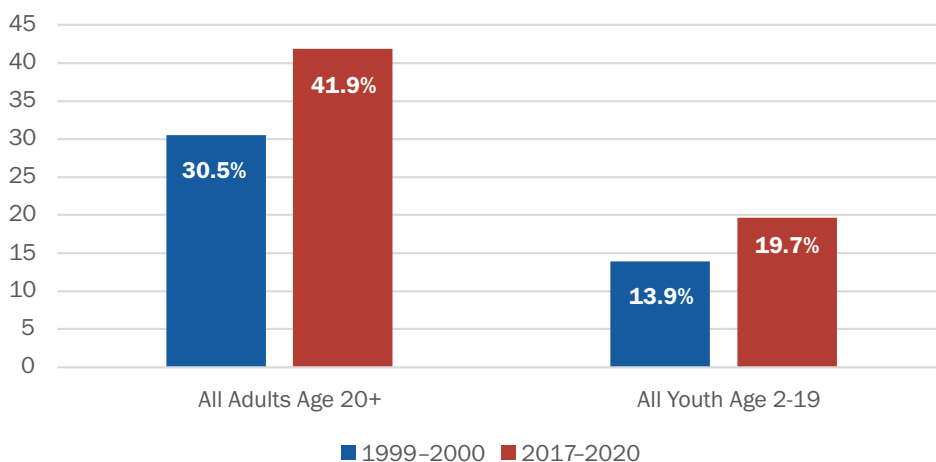
Addressing Conditions to Improve Population Health program	ACTION	National Health and Nutrition Examination Survey	NHANES
Affordable Care Act	ACA	National School Lunch Program	NSLP
American Indian and Alaska Native	AI/AN	New Markets Tax Credit	NMTC
Behavioral Risk Factor Surveillance System	BRFSS	Office of Personnel Management	OPM
Body Mass Index	BMI	Preventive Health and Health Services Block Grant	PHHS
Centers for Disease Control and Prevention	CDC	Racial and Ethnic Approaches to Community Health program	REACH
Centers for Medicare and Medicaid Services	CMS	Safe Routes to School program	SRTS
Child and Adult Care Food Program	CACFP	School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students	Healthy Schools
Child Care and Development Block Grant	CCDBG	Social Determinants of Health	SDOH
Childhood Obesity Research Demonstration project	CORD	Special Supplemental Nutrition Program for Women, Infants, and Children	WIC
Children's Health Insurance Program Reauthorization Act	CHIPRA	State Physical Activity and Nutrition program	SPAN
Community Development Financial Institutions Fund	CDFI	Summer Food Service Program	SFSP
Community Eligibility Program	CEP	Supplemental Nutrition Assistance Program	SNAP
Community Health Needs Assessments	CHNA	The George Washington University	GW
Diabetes Prevention Program	DPP	Trust for America's Health	TFAH
Division of Nutrition, Physical Activity and Obesity	DNPAO	U.S. Department of Agriculture	USDA
Early Care and Education	ECE	U.S. Department of Health and Human Services	HHS
Electronic Benefit Transfer	EBT	U.S. Department of Housing and Urban Development	HUD
Every Student Succeeds Act	ESSA	U.S. Department of Transportation	DOT
Federal Poverty Level	FPL	U.S. Food and Drug Administration	FDA
Fiscal Year	FY	U.S. Preventive Services Task Force	USPSTF
Food Insecurity Nutrition Incentive	FINI	USDA's Food and Nutrition Services	FNS
Fresh Fruit and Vegetable Program	FFVP	Youth Risk Behavior Survey	YRBS
Front-of-package	FOP		
Good Health and Wellness in Indian Country	GHWIC		
Gus Schumacher Nutrition Incentive Program	GusNIP		
Healthy Food Financing Initiative	HFFI		
Healthy Incentives Pilot	HIP		
Healthy, Hunger-Free Kids Act	HHFKA		
High Obesity Program	HOP		

The State of Obesity

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.^{1,2,3,4,5,6} We have also seen ultra-processed food consumption and food advertising increase.^{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.^{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

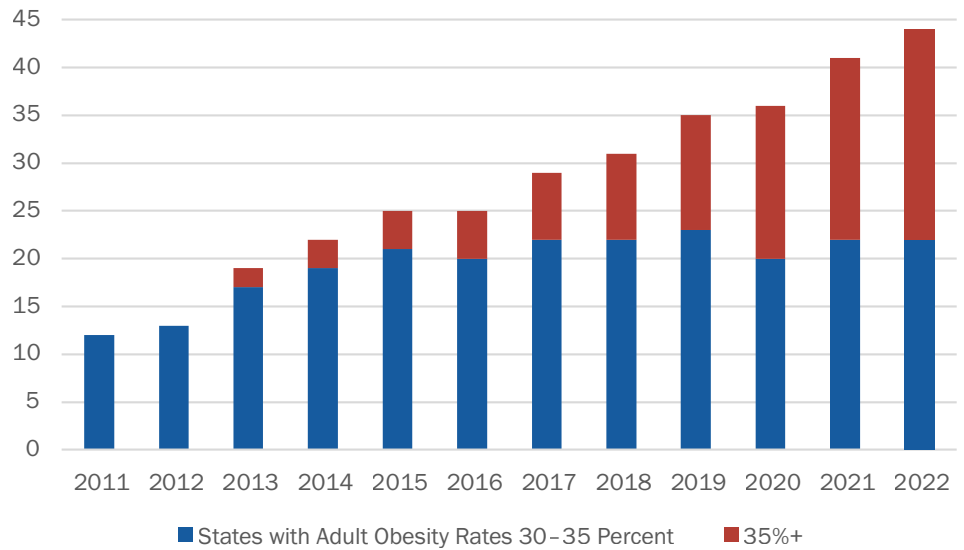


Source: NHANES

New 2022 state-level data from the Behavioral Risk Factor Surveillance System (BRFSS) confirm the long-term trend that adult obesity rates continue to climb, as they have been for decades (see Figure 2). This year, TFAH’s analysis finds 29 states have had statistically significant increases between 2017 and 2022, with 22 states now having an adult obesity rate at 35 percent or higher.^{14,15}

This report also includes a section that reviews the latest data available on adult and childhood obesity rates (see page 22), a section that examines key current and emerging policies (page 33), and, finally, a section that outlines recommended policy actions (page 57).

FIGURE 2: Number of States with Adult Obesity Rates At 30 Percent or Higher, 2011–2022



Source: TFAH analysis of BRFSS data

FACTS ABOUT OBESITY IN THE UNITED STATES

National Adult Obesity Rate, 2017–2020: **41.9 percent**

Change in Adult Obesity Rate from 1999–2000 to 2017–2020: **37 percent increase**

National Youth Obesity Rate, 2017–2020: **19.7 percent**

Change in Youth Obesity Rate from 1999–2000 to 2017–2020: **42 percent increase**

Source: NHANES

Number of States with Adult Obesity Rates Above 35 Percent, 2022: **22**

Number of States with Adult Obesity Rates Above 35 Percent, 2012: **0**

Source: TFAH analysis of BRFSS data

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).^{16,17,18} 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, and 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.^{44,45} 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.⁴⁶

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.⁴⁷ 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.⁴⁸ 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.⁴⁹

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.^{50,51} 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.⁵²

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:

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

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

BMI LEVELS FOR ADULTS AGES 20 AND OVER	
BMI Level	Weight Classification
Below 18.5	Underweight
18.5 to < 25	Healthy weight
25 to < 30	Overweight
30 and above	Obesity
40 and above	Severe Obesity

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 1994.⁵³

BMI LEVELS FOR CHILDREN AGES 2-19	
BMI Level	Weight Classification
Below 5th percentile	Underweight
5th to <85th percentile	Healthy weight
85th to < 95th percentile	Overweight
95th percentile and greater	Obesity

The State of Obesity

SPECIAL FEATURE: 20 Year Retrospective

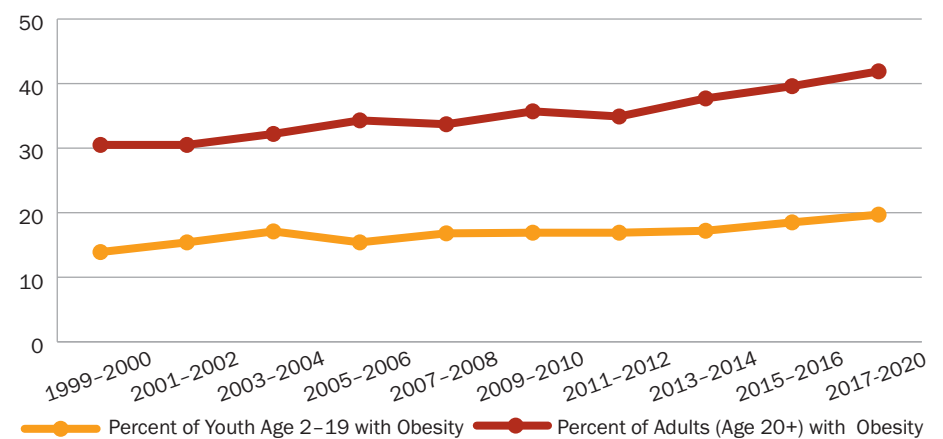
TFAH's first obesity report was published in October 2004 with a new report released annually ever since. Much of the 2004 report's content had similar themes to this current report: it also documented obesity rates in the United States, implications for health risk and costs, framed the issue as primarily 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).

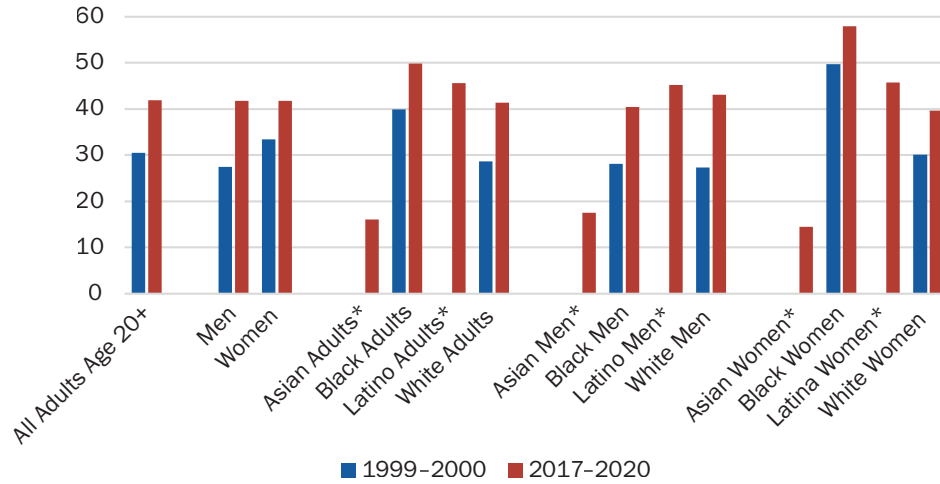
FIGURE 3: Percent of Adults and Youth with Obesity, 1999–2020



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).

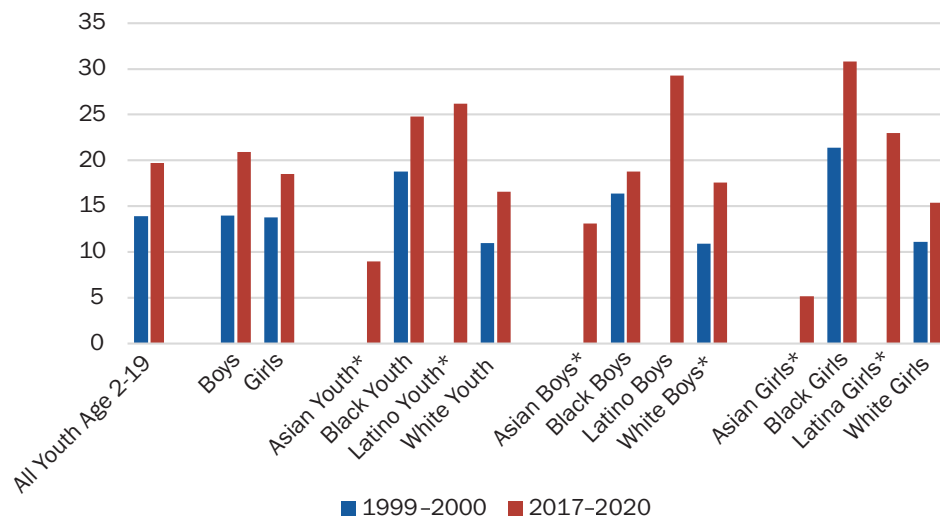
FIGURE 4: Adult Obesity Rates by Select Characteristics in 1999–2000 and 2017–2020



*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: 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 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: 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

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 interventions 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 “[o]besity 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 longstanding 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).⁶¹

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.^{62,63,64} It can include ridicule, bullying, and fewer social, educational, and employment opportunities, as well as a lower quality of healthcare.⁶⁵ Furthermore, experiencing weight-based stigma actually increases the risk of unhealthy eating and the avoidance of exercise and healthcare.⁶⁶ Even though it is one of the most common forms of

discrimination in society today, most people experiencing weight-based discrimination lack legal protection.⁶⁷

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).⁶⁸ 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.⁶⁹ 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.⁷⁰ (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.⁷¹ 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.”⁷² 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.

Major Policy Milestones to Improve Nutrition, Increase Physical Activity, and Prevent and Treat Obesity in the United States at Federal, State, and Local Levels, 2004–2023

Year	Policy	Description	Results
2004	Recognizing obesity as a disease	CMS removed language from its coverage manual that stated, “obesity is not an illness.” ⁹⁷	
2004	Child Nutrition and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Reauthorization Act of 2004	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. ⁹⁸	Research has shown that FFVP increases students’ consumption of fresh produce and is associated with a meaningful reduction in obesity for participating children. ^{99,100,101} An evaluation of CACFP found that participation in the program may reduce the prevalence of obesity. ¹⁰²
2005	Safe Routes to School	Congress funded Safe Routes to School programs in all 50 states. ¹⁰³	Safe Routes to School projects increased walking and biking to school by 37 percent. ¹⁰⁴
2006	Updated Nutrition Facts labels	Starting January 1, 2006, manufacturers were required to include transfat levels on Nutrition Facts labels. ¹⁰⁵	
2006	Medicare coverage of bariatric surgery	CMS announced it would begin covering bariatric surgery for Medicare beneficiaries effective February 2006. ¹⁰⁶	Bariatric surgery in the Medicare-eligible population is effective and leads to weight loss and decreased mortality. ^{107,108}
2008	Food, Conservation, and Energy Act of 2008 (“the 2008 Farm Bill”)	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. ¹⁰⁹	HIP increased participants’ produce consumption by 11 percent. ¹¹⁰ Research has shown FFVP increases students’ consumption of fresh produce and is associated with a meaningful reduction in obesity for participating children. ^{111,112,113}
2009	WIC food package revisions	Federal rule overhauling WIC food packages, adding more fruits, vegetables, and whole grains, and incentives to promote breastfeeding. ¹¹⁴	After the WIC nutritional requirements were strengthened, obesity rates among children in the program declined. ^{115,116}
2009	Children’s Health Insurance Program Reauthorization Act of 2009	CHIPRA authorized the Childhood Obesity Research Demonstration Project (CORD). ¹¹⁷ 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. ¹¹⁸	CORD 1.0 resulted in small but positive improvements in BMI and fruit and vegetable consumption among children at some sites. ¹¹⁹
2010	National Diabetes Prevention Program	Congress authorized CDC to establish and lead the National Diabetes Prevention Program (DPP). ¹²⁰	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. ^{121,122}
2010	Presidential Executive Order on President’s Council on Fitness, Sports, and Nutrition	Expanded Council’s mission to include education and promotion of good nutrition. ¹²³	
2010	Affordable Care Act	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. ^{124,125,126}	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. ¹²⁷ The menu requirements have had a small but positive impact in purchased meal quality in U.S. chain restaurants. ¹²⁸
2010	Healthy, Hunger-Free Kids Act of 2010 (HHFKA)	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. ¹²⁹	The new nutrition requirements reduced the prevalence of obesity among school lunch participants. ¹³⁰ Universal school meal programs have been found to be positively associated with increased food security and improved nutrition. ¹³¹

Major Policy Milestones to Improve Nutrition, Increase Physical Activity, and Prevent and Treat Obesity in the United States at Federal, State, and Local Levels, 2004–2023

Year	Policy	Description	Results
2012	Updated school meal nutrition standards	The federal rule by USDA strengthening school meal nutrition standards went into effect: the National School Lunch Program had to comply starting in the 2012–2013 school year and the School Breakfast Program in the 2013–2014 school year. ¹³²	The new nutrition requirements reduced the prevalence of obesity among school lunch participants. ¹³³
2013	Smart Snacks rule	The rule establishing nutrition standards for all food sold in schools went into effect, with implementation required by July 1, 2014. ¹³⁴	
2014	High Obesity Program (HOP)	CDC funded its first round of five-year HOP grants to 11 land grant universities to increase access to healthier food and safe places to be physically active in high-obesity counties. ¹³⁵	HOP grants have helped more than 2 million people have increased access to healthy food and places to be physically active. ¹³⁶
2014	Agricultural Act of 2014 (“2014 Farm Bill”)	The law created the Healthy Food Financing Initiative (HFFI) to increase access to healthy food in under-resourced communities; created the Food Insecurity Nutrition Incentive (FINI) program to pilot innovative approaches to increase fruit and vegetable purchases among SNAP participants; required SNAP retailers to carry healthier food options; and allowed SNAP benefits to be used at more retailers. ^{137,138}	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. ¹³⁹
2014	Office of Personnel Management (OPM) obesity coverage	OPM released guidance encouraging federal health plans to cover obesity treatments and prohibiting them from excluding coverage based on the belief that obesity is a lifestyle condition or that obesity treatment is cosmetic. ¹⁴⁰	
2014	Child Care and Development Block Grant (CCDBG) Act of 2014	The CCDBG reauthorization law helped support the development of state nutrition and physical activity standards for childcare centers. ¹⁴¹	
2015	Berkeley, California, beverage tax	Berkeley’s one-cent-per-ounce tax on the distribution of sugar-sweetened drinks went into effect. ¹⁴²	The tax led to a persistent long-term reduction in sugary beverage consumption. ¹⁴³
2015	Every Student Succeeds Act (ESSA)	ESSA designated school health and physical education as part of a student’s “well-rounded education,” allowing significant federal funding of these subjects. ¹⁴⁴	
2016	Nutrition label updates	Rules updating Nutrition Facts labels went into effect, requiring the labels to be reformatted to make them easier to read, to more accurately reflect serving sizes, and to include additional information, such as added sugars; large companies were required to comply by July 2018 and small companies by July 2019. ¹⁴⁵	A study found that those who accessed the new added sugar information on nutrition labels made healthier food choices. ¹⁴⁶
2016	Child and Adult Care Food Program (CACFP) nutrition standards	Federal rule aligning CACFP meal patterns with dietary guidelines as required by HHFKA went into effect, with compliance required by October 1, 2017. ¹⁴⁷	An evaluation of CACFP found that participation in the program may reduce the prevalence of obesity. ¹⁴⁸
2016	School wellness policy rule	Schools were required to meet HHFKA’s expanded school wellness policy requirements. ¹⁴⁹	
2017	Oakland, California beverage tax	Oakland’s one-cent-per-ounce tax on the distribution of sugar-sweetened drinks went into effect. ¹⁵⁰	The tax led to a substantial decline in sugary beverage purchases. ¹⁵¹
2017	Philadelphia, Pennsylvania beverage tax	Philadelphia’s 1.5 cent-per-ounce tax on the distribution of sweetened drinks went into effect. ¹⁵²	The tax led to a large reduction the sales of tax-eligible beverages. ¹⁵³
2018	Seattle, Washington beverage tax	Seattle’s 1.75 cent-per-ounce tax on the distribution of sugar-sweetened beverages went into effect. ¹⁵⁴	The law resulted in a net reduction in grams of sugar sold. ¹⁵⁵

Major Policy Milestones to Improve Nutrition, Increase Physical Activity, and Prevent and Treat Obesity in the United States at Federal, State, and Local Levels, 2004–2023

Year	Policy	Description	Results
2018	San Francisco, California, beverage tax	San Francisco's one-cent-per-ounce tax on distribution of sugar-sweetened drinks, syrups, and powders went into effect. ¹⁵⁶	After the tax, average sugar-sweetened beverage intake declined significantly. ¹⁵⁷
2018	Menu labels	Large chain restaurants were required to start posting calorie counts. ¹⁵⁸	The new rule led to a decrease in mean calories, saturated fat, and sugar in fast food meals. ¹⁵⁹
2018	Agriculture Improvement Act of 2018 ("2018 Farm Bill")	The bill created the Gus Schumacher Nutrition Incentive Program (GusNIP), expanding the FINI pilot program. ^{160,161}	An evaluation of GusNIP found a significant increase in fruit and vegetable intake among program participants. ¹⁶²
2018	Medicare Diabetes Prevention Program	On April 1, 2018, CMS began covering Medicare DPP as a preventive service for Medicare beneficiaries. ¹⁶³	A November 2022 evaluation of the Medicare DPP found that participants lost an average of 5.1 percent of their body weight. ¹⁶⁴
2019	SNAP Online Purchasing Pilot	USDA piloted a program allowing SNAP participants to spend their benefits online. ¹⁶⁵	
2020	Dietary guidelines by life stage	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. ¹⁶⁶	
2020	COVID-19 flexibilities	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. ^{167,168,169}	
2021	The Infrastructure Investment and Jobs Act	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. ¹⁷⁰	
2021	American Rescue Plan	The law temporarily tripled the cash-value benefit that allows WIC participants to purchase fruits and vegetables. ¹⁷¹	The benefit bump increased fruit and vegetable intake among children in the WIC program. ¹⁷²
2021	Thrifty Food Plan update	USDA updated the Thrifty Food Plan to reflect current eating habits and food costs. ¹⁷³	
2022	Universal school meals	California, Colorado, and Maine passed laws establishing free school meals for all. ^{174,175,176}	Universal school meal programs around the world have been found to be positively associated with increased food security and improved nutrition. ¹⁷⁷
2022	OPM Coverage for Obesity Medication	OPM announced that federal health plans must cover Food and Drug Administration (FDA)-approved obesity medications starting in 2023. ¹⁷⁸	
2022	Food Is Medicine policies	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. ¹⁷⁹	
2023	Summer EBT Program	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. ¹⁸⁰	
2023	Universal school meals	Massachusetts, Michigan, Minnesota, New Mexico, and Vermont passed free-school-meals-for-all laws. ¹⁸¹	Universal school meal programs around the world have been found to be positively associated with increased food security and improved nutrition. ¹⁸²

The State of Obesity

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.^{183,184,185,186} The latest NHANES data shows the adult obesity rate passing 40 percent nationally.¹⁸⁷ 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.¹⁸⁸

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.¹⁸⁹ 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.

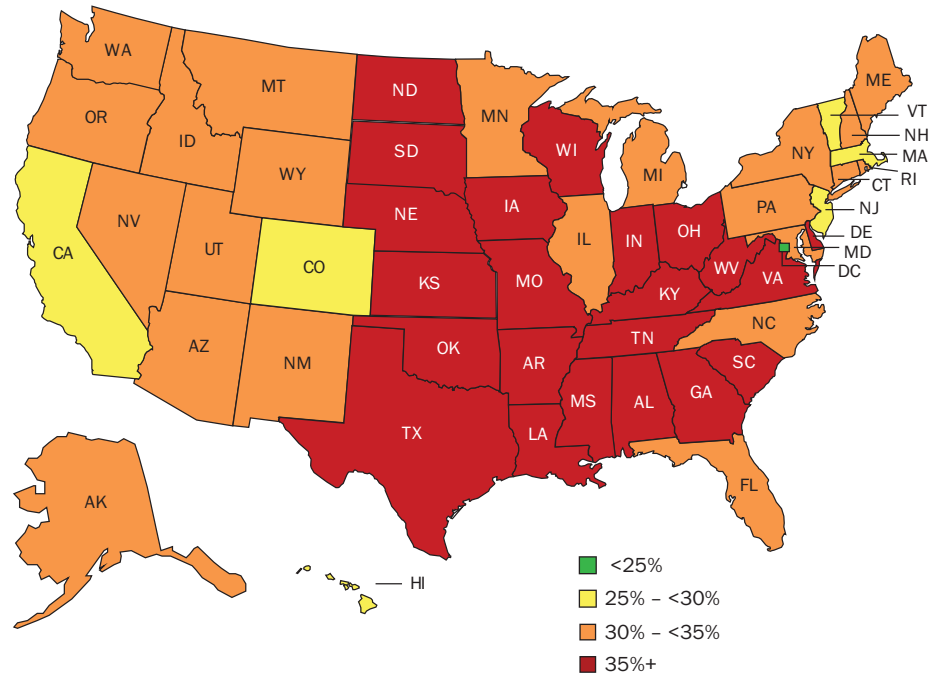
I. State trends (BRFSS)

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.

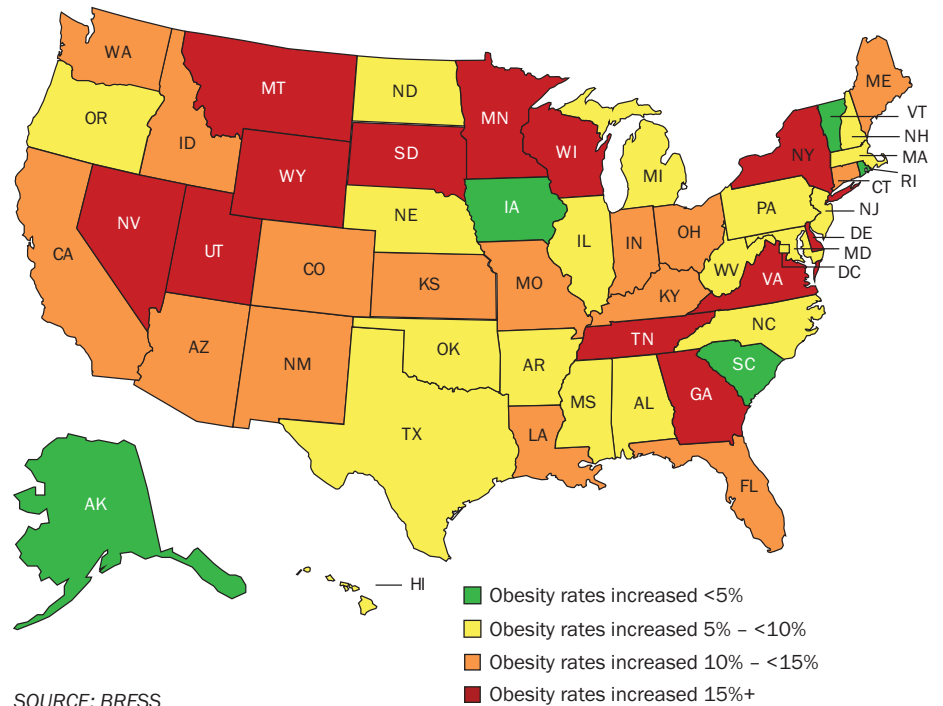
For additional state-level data from BRFSS, see the charts on pages 26 – 28.

Adult Obesity Rate by State, 2022



SOURCE: BRFSS

Percent Change in Adult Obesity Rate by State, 2017–2022



SOURCE: BRFSS

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.¹⁹⁰ 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.¹⁹¹ NHANES does not have state-level data, which is why TFAH also uses BRFSS data.

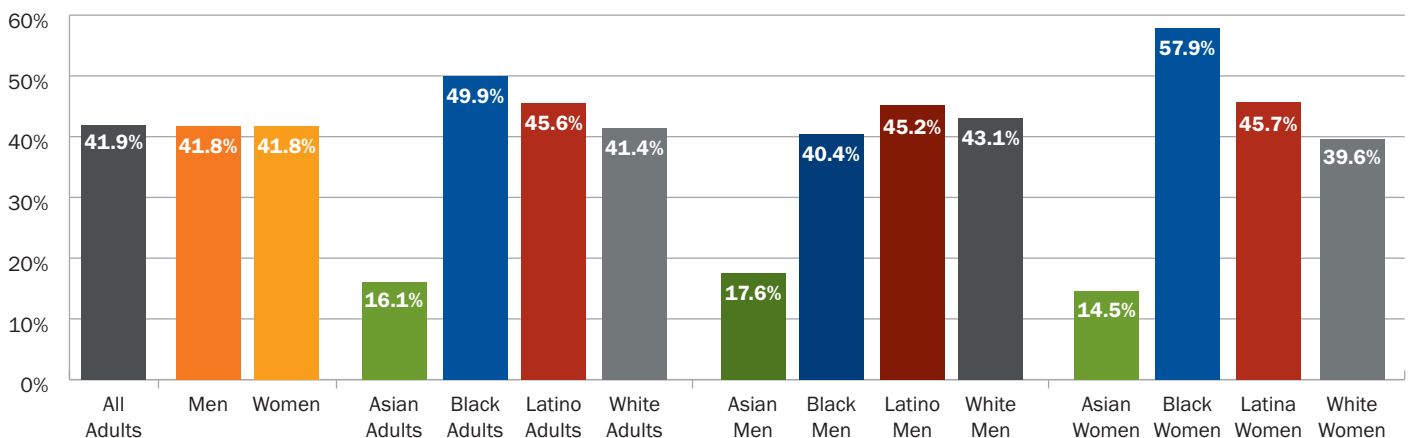
II. Demographic trends

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.¹⁹² 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



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).¹⁹³
- 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

States	Obesity		Overweight & Obesity		Diabetes		Physical Inactivity		Hypertension	
	Percent of Adults With Obesity	Rank	Percent of Adults With Obesity or Were Overweight	Rank	Percent of Adults with Diabetes	Rank	Percent of Adults Who Were Physically Inactive	Rank	Percent of Adults with Hypertension	Rank
Alabama	38.3	6	72.0	5	15.6	3	28.4	5	43.1	3
Alaska	32.1	35	68.6 +/-1.8	25	8.6 +/-1	46	21.2 +/-1.6	36	30.3	41
Arizona	33.2	30-T	66.7	37	12.9	14	22.8	25-T	31.2	32-T
Arkansas	37.4 +/-1.8	12-T	71 +/-1.8	10-T	16.3* +/-1.3	2	30.4 +/-1.7	2	40.7+/-2	4
California	28.1	46	62.8	46	11.2	30	20.9	38	28.2	48
Colorado	25.0	50	60.6	49	8.1	51	16.1	49	26.3	50
Connecticut	30.6	41	66.2	38-T	10.6	34	22.5	31	31.5	31
Delaware	37.9	8	71.8	6-T	14.1	8	22.6	28-T	36.4	11
D.C.	24.3 +/- 2.1	51	55.2 +/-2.5	541	8.3 +/-1.3	47-T	14.7 +/-1.8	51	28.5+/-2.1	47
Florida	31.6	37	66.1	40-T	12.8	15	23.2	22	n/a	--
Georgia	37.0	14	68.9	24	12.3	18	22.8	25-T	37.4	10
Hawaii	25.9	49	59.7	50	11.7*	24-T	21.1	37	29.9	43
Idaho	33.2 +/- 1.5	30-T	68.5 +/-1.5	26-T	9.8 +/-0.9	40	20.8 +/-1.3	39	30.5+/-1.3	39
Illinois	33.4	28-T	67.2	34	11.9	22-T	22.6	28-T	30.4	40
Indiana	37.7	9-T	71.0	10-T	13.1	12-T	27.3*	7	34.8+/-1.2	17
Iowa	37.4	12-T	71.2	9	11.7	24-T	25.3	12	31.9	28
Kansas	35.7	17	69.1	23	11.4	28	23.0	24	34.6	18
Kentucky	37.7	9-T	71.8	6-T	15.0	5	26.8	9	40.3	5
Louisiana	40.1	2	71.7	8	14.8	7	28.1	6	40.2	6
Maine	33.1	33	66.1	40-T	11.1	31-T	22.0	33	34.1+/-1.3	21-T
Maryland	33.2	30-T	67.6 +/-1.3	28-T	12.1 +/-0.8	20	20.2 +/-1	42	35.2	15-T
Massachusetts	27.2	47	61.9	47	10.4	35-T	20.4	40	30.8	38
Michigan	34.5	23	67.3	32-T	11.5	26-T	23.1	23	35.6	13
Minnesota	33.6	26	68.5	26-T	10.1	38	19.9	43	29.6+/-0.9	45
Mississippi	39.5	4	72.1	3-T	15.2	4	31.7	1	44.1	1
Missouri	36.4	16	70.4	16-T	11.9	22-T	25.5	11	35.2+/-1.3	15-T
Montana	30.5	42	66.0	42	8.3	47-T	19.5	45	30.9+/-1.4	37
Nebraska	35.3	20	70.4	16-T	10.8	33	23.9	18	32.5	27
Nevada	33.5 +/-2.6	27	67.4 +/-2.5	30-T	9.6 +/-1.4	41-T	26.1 +/-2.4	10	32.9+/-2.6	26
New Hampshire	30.2 +/- 1.7	43	66.9 +/-1.8	35-T	10 +/-0.9	39	19.6 +/-1.5	44	31.1+/-1.6	34-T
New Jersey	29.1	45	65.8	43	11.1	31-T	22.6	28-T	31.8	29
New Mexico	32.4 +/- 2.0	34	69.3 +/-1.9	21-T	12.7 +/-1.3	16-T	23.8 +/-1.8	19	33.2	25
New York	30.1	44	64.0	45	11.5	26-T	24.9	14	31.1	34-T
North Carolina	34.1	25	69.3	21-T	12.2	19	22.7	27	35.4	14
North Dakota	35.4 +/-1.8	19	71 +/-1.8	10-T	9.6 +/-1	41-T	23.5 +/-1.6	20-T	31.2+/-1.5	32-T
Ohio	38.1 +/-1.2	7	70.9 +/-1.1	13-T	13.1 +/-0.7	12-T	24.8 +/-1	15	36.0	12
Oklahoma	40.0	3	72.3	2	13.3	11	29.2	4	39.6+/-1.7	7
Oregon	30.9 +/- 1.5	39	66.9 +/-1.6	35-T	10.4 +/-1.1	35-T	18.3 +/-1.3	47	31.1+/-1.5	34-T
Pennsylvania	33.4	28-T	67.6	28-T	11.3	29	21.8	34-T	34.1	21-T
Rhode Island	30.8	40	67.4 +/-11.9	30-T	12 +/-1.1	21	24.1+/-1.7	16-T	33.4+/-1.7	23
South Carolina	35.0	22	69.8	20	13.4	10	25.0	13	37.9	9
South Dakota	36.8 +/-3.3	15	72.1 +/-2.9	3-T	9.5 +/-1.8	44	23.5 +/-2.8	20-T	34.2+/-2.7	20
Tennessee	38.9	5	70.9	13-T	14.9	6	27.1	8	38.1	8
Texas	35.5	18	70.2	18	13.8	9	24.1	16-T	33.3	24
Utah	31.1	38	65.3	44	8.3	47-T	16.0	50	26.9	49
Vermont	26.8	48	60.9	48	8.3	47-T	19.2	46	29.5+/-1.6	46
Virginia	35.2	21	67.3	32-T	12.7	16-T	20.3	41	34.5	19
Washington	31.7	36	66.2	38-T	9.6	41-T	17.0	48	30.2	42
West Virginia	41.0	1	74.4	1	17.7	1	29.7	3	43.7+/-1.5	2
Wisconsin	37.7 +/-1.3	9-T	70.6 +/-1.3	15	10.4 +/-0/7	35-T	21.8 +/-1.1	34-T	31.6	30
Wyoming	34.3	24	69.9	19	9.2	45	22.3	32	29.8+/-1.9	44

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.

Adult Obesity Rates by Race/Ethnicity and Sex, 2020–2022

States	American Indian/ Alaska Native*		Asian*		Black*		Latino*		White*	
	Percent of AI/AN Adults With Obesity	Rank	Percent of Asian Adults With Obesity	Rank	Percent of Black Adults With Obesity	Rank	Percent of Latino Adults With Obesity	Rank	Percent of White Adults With Obesity	Rank
Alabama	42.6	15	n/a	--	49.3 +/-2.3	2	36.8	17	36 +/-1.3	9
Alaska	37.1 +/-3.4	26-T	24.8	2	41.8	22	33.4	39-T	30.6 +/-1.4	32
Arizona	47.0	2	13.5	15-T	40.9	26	38.2 +/-1.9	12	27.9 +/-0.9	41-T
Arkansas	28.4 +/-8	43	n/a	--	46.6	6	33.5 +/-5.8	37-T	36.6 +/-1.2	7
California	37.0	29	11.1	28	42.5	18	37.8 +/-1.8	13	25.8 +/-1.3	46
Colorado	37.1	26-T	10.0	35	31.3	41	31.0	49	23.2	48
Connecticut	42.1	18	13.2	18	41.1	24	36.0	24	28.3 +/-1	40
Delaware	40.1	21	18.3	6	46.3 +/-3.4	9	35.9	25	33.5 +/-1.5	19
D.C.	n/a	--	10.2 +/-4.5	32-T	38.3 +/-2.3	30	27 +/-4.8	50	12.9 +/-1.3	50
Florida	n/a	--	n/a	--	n/a	--	n/a	--	n/a	--
Georgia	32.9	36	14.7	13	42.8	16	33.4	39-T	32.6 +/-1.1	22-T
Hawaii	n/a	--	17.3+/-1.3	9	31.2	42	31.4 +/-3.1	48	19.7 +/-1.4	49
Idaho	45.2	8	n/a	--	30.5	45	36.7	18-T	31.4 +/-0.9	29
Illinois	32.0	37	11.6	26	41.0	25	40.5	6	31.8 +/-1.4	27
Indiana	36.6	30-T	8.2	37-T	44.0	13	39.2	11	36.7 +/-0.8	5-T
Iowa	44.8	9	11.8	25	41.9	21	37.1	14	37.1 +/-0.8	4
Kansas	42.9 +/-6.9	13	10.2	32-T	39.6	28	40.6	5	35.2 +/-0.7	11-T
Kentucky	37.6	23	n/a	--	44.7	12	40.2	8-T	38 +/-1.2	2
Louisiana	43.7	11	19.9	4	46.5	7	35.4	30	36.1	8
Maine	36.1	32	n/a	--	36.9	34	34.6	34	31.9 +/-0.8	26
Maryland	24.8	47	13.4	17	41.6 +/-1.5	23	33.5 +/-2.4	37-T	30.2 +/-0.8	35
Massachusetts	25.2	46	10.6	31	36.0	37-T	33.0	42-T	26.1	45
Michigan	30.1	42	9.2	36	42.1	19	40.3	7	34.3 +/-0.9	16-T
Minnesota	45.9	4-T	18.8	5	36.0	37-T	35.5	27-T	32.2 +/-0.6	24-T
Mississippi	30.5	41	23.3	3	47.5 +/-1.9	4	44.7	1	34.8 +/-1.3	15
Missouri	33.6	35	12.4	23	42.6	17	36.5	20-T	35.5 +/-0.9	10
Montana	41.8	19	n/a	--	n/a	--	36.5	20-T	29.3 +/-0.9	38-T
Nebraska	43.3	12	12.6	20-T	37.5	31-T	36.9	15-T	35.2 +/-0.8	11-T
Nevada	45.4	7	15.8 +/-6.3	10	33.4	40	34.8 +/-3.3	32-T	31.3 +/-1.8	30-T
New Hampshire	34.9	34	10.9	29	33.7	39	36.7	18-T	30.5 +/-1	33
New Jersey	n/a	--	11.2	27	37.3	33	33.4	39-T	27.6 +/-1	43
New Mexico	45.5 +/-4	6	n/a	--	37.5	31-T	36.4 +/-1.7	22	25.7 +/-1.4	47
New York	30.9	40	12.6	20-T	36.3	35	33.0	42-T	27.9	41-T
North Carolina	38.3	22	15.5	11	48.2	3	32.9	44	31.3 +/-1.2	30-T
North Dakota	49.5 +/-5.6	1	27.6	1	25.0	49	35 +/-7	31	34.3 +/-1.1	16-T
Ohio	35.1	33	12.8	19	43.9	14	36.3	23	36.7 +/-0.7	5-T
Oklahoma	45.9	4-T	13.7	14	46.1 +/-4.3	10	39.7	10	37.4 +/-1.1	3
Oregon	37.2 +/-8.6	24-T	15.2 +/-4.4	12	31 +/-7.4	43	36.9 +/-3.2	15-T	29.3 +/-0.9	38-T
Pennsylvania	28.3	44	10.7	30	40.8	27	33.9	35-T	32.8 +/-1.2	20-T
Rhode Island	42.2	17	12.0	24	38.5	29	33.9	35-T	29.5 +/-1.2	37
South Carolina	40.3	20	17.5	8	44.9	11	32.7	45	32.6 +/-1.1	22-T
South Dakota	44.1	10	n/a	--	28.9	46	41.2	2	35.2 +/-1.8	11-T
Tennessee	31.6	38-T	n/a	--	46.4	8	34.8	32-T	35 +/-1.2	14
Texas	36.6	30-T	13.5	15-T	43.5	15	40.8	4	32.2	24-T
Utah	46.7	3	8.2	37-T	28.1	48	35.5	27-T	29.6 +/-0.7	36
Vermont	31.6	38-T	n/a	--	28.6	47	31.5	47	27.5 +/-1	44
Virginia	28.0	45	12.6	20-T	46.7	5	32.5	46	32.8 +/-0.9	20-T
Washington	42.7	14	10.2	32-T	36.1	36	35.8	26	30.3	34
West Virginia	37.1 +/-12.3	28	n/a	--	42 +/-6.1	20	41.1 +/-9.2	3	40.3 +/-1	1
Wisconsin	42.3	16	17.7	7	49.8	1	35.5	27-T	33.8 +/-1	18
Wyoming	37.2 +/-10.1	24-T	n/a	--	30.7 +/-16.2	44	40.2 +/-5	8-T	31.5 +/-1.2	28

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.

Adult Obesity Rates by Age, 2022

States	Male		Female		Ages 18-24		Ages 25-44		Ages 45-64		Ages 65+	
	Percent of Men With Obesity	Rank	Percent of Women With Obesity	Rank	Percent With Obesity	Rank	Percent With Obesity	Rank	Percent With Obesity	Rank	Percent With Obesity	Rank
Alabama	35.8	11-T	40.6	5	19.8	36	40.2	10	44.7	4	36.2 +/-3.1	2
Alaska	31.2 +/-2.3	37	33.3 +/-2.7	32	24.5	12-T	32.7 +/-3.2	35-T	37.2	35	28 +/-2.8	40
Arizona	32.7	27	33.8	29	23.3	19-T	34.4	29	38.4	31	30.4	29
Arkansas	35.3 +/-2.6	13-T	39.5 +/-2.7	9	27.6 +/-6.8	4	39.5+/-3.8	13	43.3+/-2.9	8-T	32.3 +/-2.6	21-T
California	28.4	46	27.7 +/-2	45-T	13.8	51	31.5	41	31.2	48	25.5 +/-2.6	47
Colorado	24.9	50	25.2	50	15.0	47	24.6	50	30.2	50	23.9	48-T
Connecticut	30.4	41	30.8	39-T	19.6	38-T	32.4	38-T	34.3	43	28.6	36
Delaware	35.3 +/-3.1	13-T	40.5	6-T	28.0	3	38.3	17	43.1	11	35 +/-3.5	6
D.C.	21.5	51	27.0	48	23.3 +/-9.1	19-T	19.8	51	33.5+/-4	46	23.2 +/-3.5	50
Florida	32.4	29-T	30.8	39-T	21.2	30	31.9	40	36.7	37	29.2	32-T
Georgia	34.1	23	39.9	8	25.9	9	40.0	11	41.1	20-T	32.3	21-T
Hawaii	27.1	48	24.6 +/-2.1	51	21.8	27-T	30.1	47	29.7+/-2.5	51	18 +/-2.7	51
Idaho	33.4	24-T	33.0	33	25.0	11	33.9	32	37.9	33	30.9	27
Illinois	31.0	38	35.7	22	19.9	35	31.2	43	41.8	17-T	31.6	24
Indiana	36.6	9-T	38.7	12	25.3	10	41.0	8	43.3+/-2	8-T	32.4	20
Iowa	35.8	11-T	39.1	10	23.5	17	39.2	14	43.2+/-2.3	10	35.1 +/-2.3	5
Kansas	34.7	18	36.8	17	24.5	12-T	39.9	12	39.6	24	31.5	25
Kentucky	38.7	2	36.7	18-T	24.1	15	41.2	7	42.0	16	33.7	13
Louisiana	37.6	5	42.5	2	23.3	19-T	42.9	3	45.5	3	37.3	1
Maine	32.6 +/-1.9	28	33.6	30-T	23.4	18	34.8	28	38.6+/-2.3	29	28.4	37
Maryland	31.5 +/-1.8	36	34.8 +/-1.8	26	22.2	24-T	35.4	26-T	38.5+/-2	30	27.9 +/-1.9	41
Massachusetts	28.0	47	26.5	49	14.0	50	27.4	49	32.3	47	27.0	44
Michigan	33.4	24-T	35.6	23	19.7	37	36.0	24-T	39.5	25	33.4	14
Minnesota	34.6	19	32.6	34	19.6	38-T	34.3	30	39.3+/-1.7	26	32.0	23
Mississippi	37.0	7-T	41.9	3	26.3	7	42.6	4	46.9	2	32.7	18
Missouri	35.2 +/-2.2	15-T	37.6	13	22.1	26	37.8	18-T	42.9	12	33.3 +/-2.7	15-T
Montana	30.3 +/-1.9	42	30.8	39-T	18.3	41	32.4+/-2.9	38-T	35.2+/-2.5	41	28.1 +/-2.1	38-T
Nebraska	35.2	15-T	35.4	24	23.0	23	35.4	26-T	41.1	20-T	34.6	8
Nevada	31.9 +/-3.5	33	35.3 +/-3.8	25	27.0	5	36.4	22-T	36+/-4.4	40	28.7 +/-4.2	35
New Hampshire	30.2	43	30.3 +/-2.4	43-T	15.8	46	30.3	46	36.5+/-2.7	38	27.4 +/-2	42
New Jersey	30.7	39	27.4	47	14.5	49	30.4	45	34.0	45	27.3	43
New Mexico	32.4	29-T	32.4 +/-2.7	35	21.4	29	37.8	18-T	38.2+/-3.5	32	23.9 +/-2.8	48-T
New York	29.9	44	30.3	43-T	20.1	34	30.8	44	34.5	42	28.1	38-T
North Carolina	32.1	32	36.1	21	21.1	31-T	34.2	31	42.1	15	30.1	31
North Dakota	37 +/-2.5	7-T	33.6 +/-2.7	30-T	23.1 +/-5.5	22	36.4+/-3.5	22-T	42.2+/-3.2	14	33.3 +/-2.8	15-T
Ohio	37.2	6	39.0	11	26.6	6	39.1	15	43.4	7	35.3 +/-1.9	4
Oklahoma	38.4	3	41.6 +/-2.2	4	29.7	2	44.1	1	44.0	6	34.2	11
Oregon	30.5 +/-2.1	40	31.4 +/-2.2	38	17.8 +/-5.1	44	32.5	37	37.7+/-2.7	34	25.9	46
Pennsylvania	32.4	29-T	34.3	27	16.0	45	32.9	33	39.0	27	34.3	10
Rhode Island	29.8	45	31.9 +/-2.6	36	24.5	12-T	31.4	42	34.1	44	29.2 +/-2.9	32-T
South Carolina	32.8	26	37.2	15	21.8	27-T	38.5	16	40.1	23	30.6 +/-1.9	28
South Dakota	36.6	9-T	37 +/-4.7	16	19.3	40	41.8	6	41.5+/-5.8	19	32.6 +/-5	19
Tennessee	35.1	17	42.7	1	24.0	16	42.5	5	44.4	5	33.8	12
Texas	34.4	20	36.7	18-T	20.9	33	36.0	24-T	42.7	13	33.1	17
Utah	31.7	34	30.5	42	18.2	42	32.8	34	37.1	36	30.2 +/-2.4	30
Vermont	26 +/-2	49	27.7	45-T	14.7	48	28.0	48	30.7	49	26.5 +/-2.6	45
Virginia	34.2	21-T	36.3	20	17.9	43	37.1	20	40.2	22	34.8	7
Washington	31.6	35	31.8	37	21.1	31-T	32.7	35-T	36.1	39	29.0	34
West Virginia	41.6	1	40.5 +/-2.3	6-T	30.8	1	43 +/-3.7	2	47.2 +/-2.8	1	35.8 +/-2.6	3
Wisconsin	38.0	4	37.3	14	26.0	8	40.5	9	41.8	17-T	34.4 +/-2	9
Wyoming	34.2 +/-2.6	21-T	34.2	28	22.2 +/-7.6	24-T	37 +/-3.8	21	38.8+/-3	28	31.2	26

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.^{202,203} 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.²⁰⁴ 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.²⁰⁵ 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.²⁰⁶

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

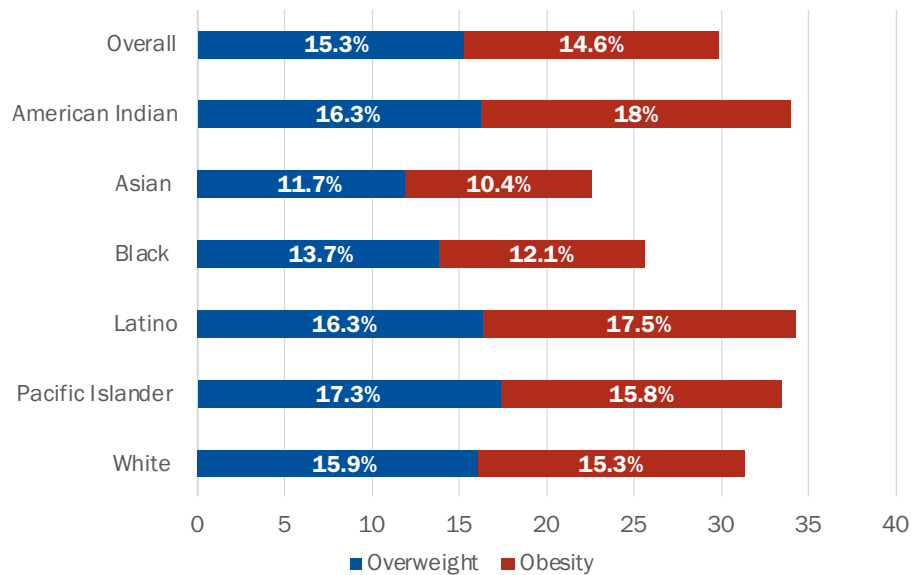
overall tripled, with the obesity rates of teens ages 12 to 19 quadrupling.²⁰⁷

- **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



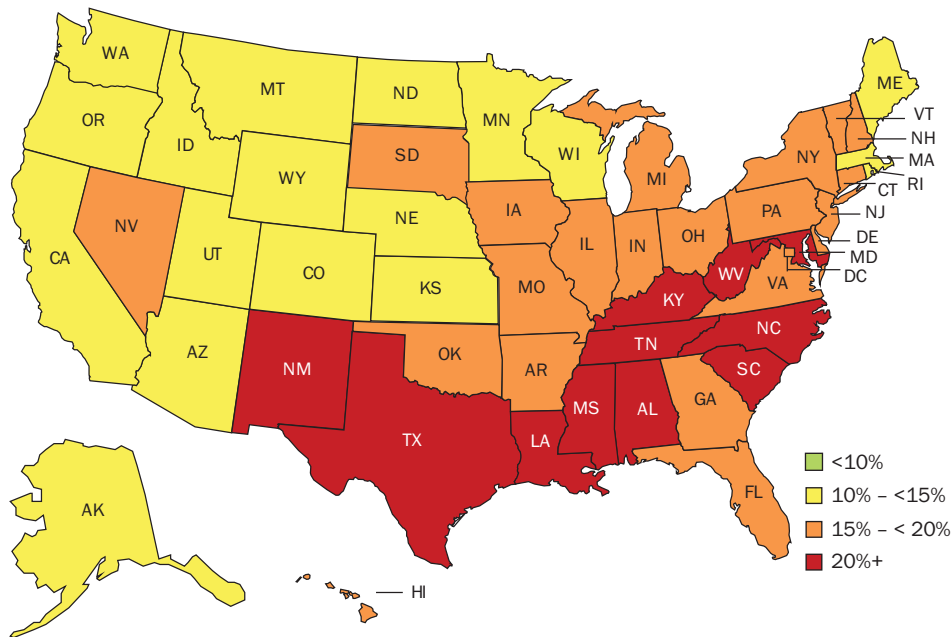
Source: USDA

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).²¹¹ See chart on page 32 for more state data.

Percent of Children Ages 10–17 with Obesity by State, 2020–2021



Source: National Survey of Children's Health

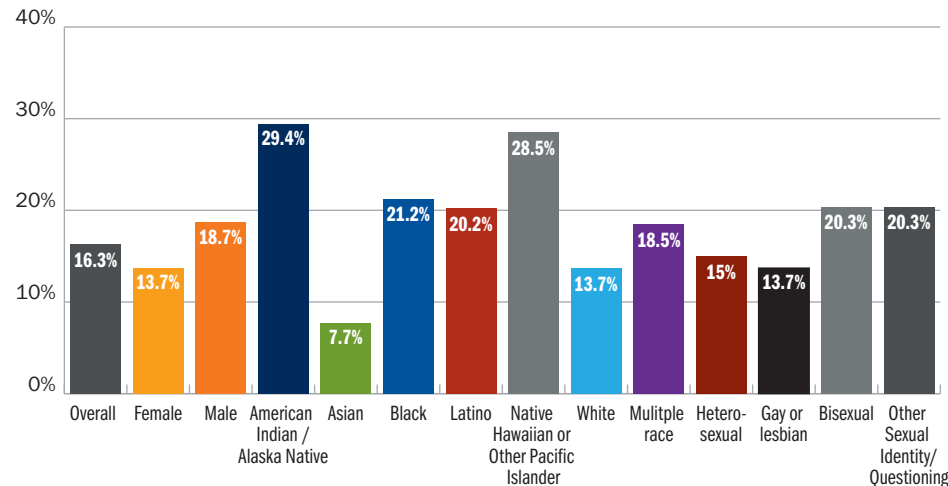
IV. High School Obesity Rates (YRBS)

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.^{212,213}

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

FIGURE 8: Percent of High School Students with Obesity by Select Demographics, 2021



Source: Youth Risk Behavior Survey

(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

States	Young Children: Obesity, 2020	Children and Teenagers: Obesity and Physical Activity, 2020-2021			High School (HS) Students: Obesity, Overweight, Physical Activity, 2021		
	Percent of Low- Income Children Ages 2-4 With Obesity	Percent of Children Ages 10-17 With Obesity	Ranking	Percent of Children Ages 6-17 Who Participated in 60 Minutes of Physical Activity Every Day	Percent of HS Students With Obesity	Percent of HS Students Who Were Overweight	Percent of HS Students Who Were Physically Active 60 Minutes Every Day of the Week
Alabama	15.6	22.1	46	23.8	13.9	18.7	25.3
Alaska	20.1	14.2	13	26.9	n/a	n/a	n/a
Arizona	13.3	14.4	14-T	16.8	14.9	16.6	22.0
Arkansas	13.9	19.1	40	24.1	19.4	16.3	25.6
California	17.0	14.4	14-T	17.3	n/a	n/a	n/a
Colorado	8.8	10.8	2	22.5	10.6	12.8	22.1
Connecticut	14.6	17.0	30	21.9	15.1	16.6	21.7
Delaware	18.5	16.8	28-T	22.7	17.0	15.4	21.6
D.C.	12.9	17.3	33	16.3	20.4	16.9	16.9
Florida	13.5	16.2	27	17.9	16.4	16.5	22.5
Georgia	13.1	16.8	28-T	21.8	17.0	18.8	23.2
Hawaii	11.0	17.1	31-T	17.4	14.9	14.0	23.1
Idaho	11.8	13.4	8-T	22.9	11.9	12.2	18.4
Illinois	16.4	16.1	25-T	23.1	15.6	14.8	24.1
Indiana	13.9	15.5	20	25.0	17.6	14.8	19.2
Iowa	16.0	17.6	35-T	24.8	15.8	16.0	29.2
Kansas	12.8	13.6	10-T	24.4	17.0	18.4	27.1
Kentucky	15.4	25.5	50	23.6	19.6	16.2	25.3
Louisiana	13.7	24.0	49	17.5	18.7	17.8	24.0
Maine	14.3	14.6	17	25.0	15.0	14.4	22.5
Maryland	16.9	20.3	41	20.0	16.0	15.3	19.6
Massachusetts	16.8	13.8	12	19.4	13.6	15.2	23.5
Michigan	13.8	17.1	31-T	22.3	15.6	14.3	22.3
Minnesota	11.8	13.4	8-T	24.8	n/a	n/a	n/a
Mississippi	14.4	23.1	48	25.2	23.2	18.5	25.5
Missouri	12.7	18.9	38-T	26.2	16.9	16.2	28.0
Montana	10.9	10.2	1	27.8	11.8	14.0	25.9
Nebraska	16.0	13.6	10-T	26.4	19.2	15.4	30.6
Nevada	11.9	18.2	37	13.9	15.9	18.0	19.4
New Hampshire	16.0	15.2	19	24.0	13.3	13.7	22.9
New Jersey	15.4	16.1	25-T	17.3	13.8	15.7	22.1
New Mexico	12.7	20.9	43	20.7	20.0	17.9	26.4
New York	13.8	15.6	21	19.7	16.1	15.4	19.4
North Carolina	14.8	21.0	44	19.1	19.0	13.7	19.1
North Dakota	15.6	12.6	5	29.8	16.3	15.6	30.3
Ohio	13.0	15.8	23	25.5	18.8	13.4	25.8
Oklahoma	13.2	17.5	34	21.6	17.6	16.8	32.4
Oregon	14.7	14.5	16	21.0	n/a	n/a	n/a
Pennsylvania	13.8	16.0	24	25.0	17.3	14.5	21.1
Rhode Island	16.5	13.2	6	18.5	15.5	17.2	21.2
South Carolina	13.1	21.6	45	20.4	17.9	16.9	24.0
South Dakota	15.6	18.9	38-T	24.3	16.6	15.3	28.2
Tennessee	14.9	22.5	47	20.7	18.3	15.3	23.0
Texas	15.8	20.7	42	15.6	22.1	17.2	25.7
Utah	8.8	12.0	4	17.8	10.2	12.1	21.7
Vermont	14.5	15.7	22	25.2	13.6	14.0	28.0
Virginia	15.6	17.6	35-T	20.0	16.4	15.3	21.9
Washington	14.8	13.3	7	22.6	n/a	n/a	n/a
West Virginia	16.4	26.0	51	27.5	27.0	17.4	22.7
Wisconsin	15.2	14.9	18	23.4	13.5	16.1	28.0
Wyoming	11.8	11.5	3	29.7	n/a	n/a	n/a

SOURCE: WIC
Participants and Program
Characteristics Survey,
USDA

SOURCE: National Survey of Children's Health, HRSA
NOTE: For rankings, 1 = Highest Rate, and 51 = Lowest Rate.
T= Tie.

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.²¹⁴ A recent meta-analysis of 62 studies found that such taxes effectively discourage consumption.²¹⁵ These taxes can also raise funds to support other public health priorities^{216,217} and to incentivize manufacturers to reduce the sugar content in their products.^{218,219,220} At least 85 countries currently impose some sort of beverage tax.²²¹

In the United States, sugary beverages are a leading source of added sugar in the American diet,²²² and researchers estimate a national tax could prevent half a million cases of childhood obesity over a decade.²²³ Eight U.S. cities have imposed beverage taxes,²²⁴ and multiple peer-reviewed studies have demonstrated these taxes have reduced purchases and consumption of sugary drinks.^{225,226,227,228,229} Despite their effectiveness, beverage taxes have faced political headwinds in

recent years, in part due to lobbying by the beverage industry.^{230,231,232} In 2022, the West Virginia legislature voted to repeal its 71-year-old soda tax effective July 2024.²³³ 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.²³⁴

Healthy Food Financing Initiative

An estimated 40 million Americans lack easy access to fresh and nutritious food.²³⁵ 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.²³⁶ The program is a public-private partnership funded by USDA and administered by the Reinvestment Fund, an independent community development financial institution.²³⁷ 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.²³⁸

HFFI funds efforts such as:

- Northeast Grocers, a northeast Kansas City, Kansas, neighborhood coalition working to develop a cooperative, community-owned grocery store;^{239,240}

- 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

Industry marketing of “toddler milk”—products similar to baby formula that have added sugars and are not recommended by the American Academy of Pediatrics or

Dietary Guidelines for Americans—has particularly targeted the Latino/a community.^{273,274} A 2021 study found that Latino/a parents are more likely to have purchased toddler milk than non-Latino/a parents.²⁷⁵ These drinks are often cross-promoted with infant formula, resulting in consumer confusion and the dangerous practice of feeding these drinks to infants, even though they do not meet infants’ unique nutritional needs.²⁷⁶

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}

As a component of its nutrition service, WIC actively promotes breastfeeding, and participants' breastfeeding rates

have been steadily climbing over the past decade.^{285,286} In 2011, 28 percent of babies in the program were breastfed, compared with 34 percent in 2021, a growth rate of 21 percent.²⁸⁷ 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.²⁸⁸

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.^{289,290} 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.²⁹³ 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 1946.³⁰³ 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.³⁰⁴

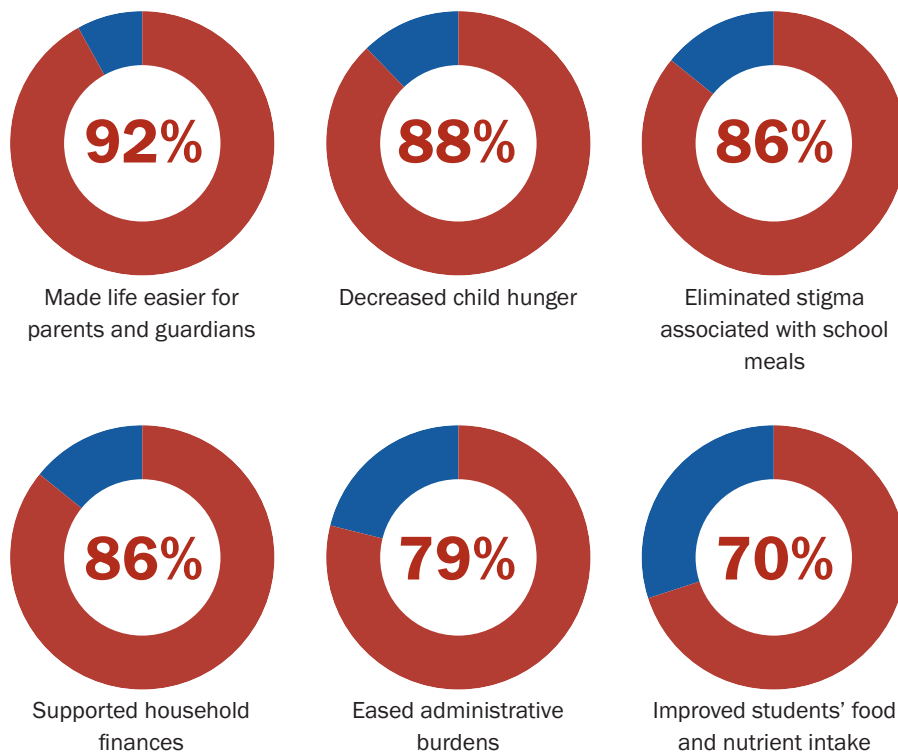
NSLP is the largest of the programs: it fed more than 30 million children in FY 2022,³⁰⁵ while the School Breakfast Program fed 15.7 million.³⁰⁶ Both programs serve nutritious meals to children in schools and residential childcare institutions at low or no cost.^{307,308} Schools that do not participate in either program, or who have half-day students, can participate in the Special Milk Program, which reimburses schools for the milk they serve.³⁰⁹ CACFP reimburses childcare centers, after-school programs, and adult daycare centers for the cost of meals they serve.³¹⁰ The Fresh Fruit and Vegetable Program provides fresh fruits and vegetables as a healthy snack option for students,³¹¹ 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.³¹²

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 2022.³¹³ 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.³¹⁴ 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.³¹⁵ 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.³¹⁶

Reported Benefits of Free Meals for All from 91 Large School Districts



Source: Food Research and Action Center ³¹⁷

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.³¹⁸ However, as discussed in more detail below, some states have continued to provide universal free school meals to students with state dollars.^{319,320}

To support schoolchildren from low-income families during the summer, FNS sponsors two complementary programs that work together to reduce seasonal hunger.³²¹

- 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.³²² 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.^{323,324}
- The Summer EBT program provides funds to families they can use to buy groceries.³²⁵ 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.³²⁶ As part of the FY 2023 omnibus spending bill, Congress made the program permanent beginning in Summer 2024.^{327,328,329} 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.^{330,331,332}

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.^{333,334} 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.^{335,336,337} 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.³³⁸ 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.³³⁹

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 \$3 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.^{340,341}

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.³⁴² Almost 40 percent of households that use SNAP include children.³⁴³ 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.³⁴⁴

The federal government pays for SNAP benefits and shares the cost of administering the program with the states.³⁴⁵ SNAP benefits can be used to buy any food with the exception of prepared or hot food, vitamins, live animals, and alcohol.³⁴⁶ 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.³⁴⁷

During the COVID-19 pandemic, Congress made a number of temporary changes to the SNAP program, relaxing requirements and increasing benefits.^{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.³⁵⁰ These changes have now expired, cutting benefits for SNAP recipients.^{351,352,353} The Center on Budget and Policy Priorities estimates these cuts will average \$90 per person per month.³⁵⁴ The expiration of the benefits increase is on top of other pandemic assistance ending, including the expanded child tax credit.³⁵⁵

Meanwhile, grocery prices have soared, rising by 12 percent between June 2021 and June 2022, the largest 12-month increase since the 1970s.³⁵⁶ SNAP benefit levels are tied to the Thrifty Food Plan, a USDA calculus 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.^{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.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.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.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.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.^{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.^{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.^{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.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;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;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.^{374,375}

Congress funded SNAP at \$153.9 billion for FY 2023, including \$506 million for SNAP-Ed.^{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.³⁷⁸ 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.^{379,380} 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.³⁸¹

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.³⁸²

In FY 2023, USDA anticipates funding \$36.3 million in Nutrition Incentive Program grants³⁸³ and \$10.8 million in Produce Prescription Program grants.³⁸⁴

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.³⁸⁵ 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.³⁸⁶

Head Start programs provide healthy food to their participants via either CACFP or NSLP.³⁸⁷ The program also supports breastfeeding and provides free formula to families.³⁸⁸ Since 2016, federal standards have required the program to actively engage in obesity prevention both in the classroom and through its family partnership process.³⁸⁹

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.^{390,391} 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.³⁹²

The FY 2023 omnibus bill included \$12 billion for Head Start, a \$960 million increase over FY 2022.^{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.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.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.^{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.^{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.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.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.⁴⁰³

School districts are required to assess their local wellness policies every three years;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.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.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 2020.⁴⁰⁷ It focuses on healthy eating for all life stages, including infancy, toddlerhood, childhood, adolescence, pregnancy, lactation, and older adulthood.⁴⁰⁸

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.⁴⁰⁹ 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.⁴¹⁰

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,⁴¹¹ though another study found knowledge of MyPlate among adolescents to be associated with a lower consumption of sugary drinks.⁴¹²

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.⁴¹³

Packaged Food Labels

To help consumers make informed decisions, the FDA requires that manufacturers include Nutrition Facts labels on most packaged food.⁴¹⁴ 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.⁴¹⁵ Nutrition Facts labels are typically found on the back of packages,⁴¹⁶ 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.⁴¹⁷ Such front-of-package (FOP) labels are not mandatory and, while health claims must comply with FDA rules to ensure accuracy,^{418,419} they can sometimes be misleading.⁴²⁰ 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.⁴²¹ Unlike some countries, the United States does not have a mandatory FOP labeling system or require warning labels on unhealthy foods.^{422,423} Such systems can positively

influence consumer purchasing decisions as well as spur industry to improve the nutritional quality of their products.^{424,425,426}

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*.⁴²⁷ 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.^{428,429} 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.⁴³⁰ Breakfast cereal manufacturers have protested, noting 95 percent of cereals on the market could not meet the added sugars standard, and threatened legal action.⁴³¹ 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.⁴³²

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,^{452,453} national menu requirements appear to have had a positive—if modest—impact on consumption.⁴⁵⁴ 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}

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.

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.^{465,466} 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.⁴⁶⁷

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.^{468,469,470,471}

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.⁴⁷² Another review of existing studies found an association between traffic-related air pollution and childhood obesity.^{473,474}

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;^{475,476,477}

- 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;^{478,479}
- Building and maintaining playgrounds, parks, and other green spaces, which support physical activity and social connection and improve air pollution.^{480,481} (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)⁴⁸²; 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.^{483,484,485}

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.⁴⁸⁶ 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.⁴⁸⁷ The disparities are particularly acute for Black cyclists, who are 4.5 times more likely to die while cycling than white cyclists.⁴⁸⁸

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.⁴⁸⁹ In contrast, communities with better street connectivity, high-density housing, and a mix of land uses in close proximity encourage active transportation.⁴⁹⁰ 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.⁴⁹¹

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.⁴⁹²

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.⁴⁹³ Research has found that SRTS initiatives are cost-effective and associated with a significant increase in active transportation to and from school.⁴⁹⁴ 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.⁴⁹⁵



Since 2015, SRTS has supported projects in 17,000 schools benefitting nearly 7 million students.⁴⁹⁶ 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.^{497,498}

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.⁴⁹⁹ 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.^{500,501,502,503,504,505}

As discussed above, neighborhoods that suffer from problems like deteriorating infrastructure, high crime, and poverty also typically have high rates of obesity.^{506,507} 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 2023.⁵⁰⁸

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.⁵²¹ 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.⁵²²

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.^{523,524}

- 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.^{525,526}

PHHS received \$160 million in funding in FY 2023, the same amount as in FY 2022.⁵²⁷

SELECT OBESITY-RELATED FUNDING OPPORTUNITIES FROM CDC

Name	Grant Number	Goal	Length	Number of Grants	Annual Size	Total Program Funding
State Physical Activity and Nutrition (SPAN) Program ^{528,529}	23-0012	Improve nutrition and physical activity at the state and local level	5 years beginning September 30, 2023	Recipients in 17 states	Average one-year award amount: \$880,000	\$75.5 million over 5 years (2023–2028)
High Obesity Program (HOP) ^{530,531}	23-0013	Increase access to healthy foods and safe places for physical activity in high-obesity areas	5 years beginning September 30, 2023	16 land-grant universities in states with eligible counties	Average one-year award amount: \$712,000	\$57 million over 5 years (2023–2028)
Preventive Health and Health Services (PHHS) Block Grant ^{532,533,534}	23-2304	Provide each state with flexible support to address its most important health needs	Annual	61 including 50 states, DC, 2 American Indian tribes, 5 U.S. territories, and 3 freely associated states	\$9.5 million on nutrition and \$2.8 million on physical activity in FY 2020	\$160 million in FY 2023
Racial and Ethnic Approaches to Community Health (REACH) ^{535,536}	23-0014	Reduce racial and ethnic health disparities in chronic disease	5 years beginning September 30, 2023	40 state and local health departments, tribes, universities, and community-based organizations	Average one-year award amount: \$1,112,000, of which \$722,000 is for projects that must include nutrition and physical activity	\$228 million over 5 years (2023–2028), of which \$148 million is for projects that must include nutrition and physical activity
School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students (Healthy Schools) ⁵³⁷	23-0002	Increase students’ physical activity, healthy dietary behaviors, and self-management of chronic health conditions, as well as promote health equity and reduce disparities	5 years beginning in 2023	State education agencies in 16 states	Average one-year award amount: \$390,000	\$31.5 million over 5 years (2023–28)

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.⁵³⁸ 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.^{539,540,541} For the upcoming 2023–2028 grants, proposed projects must include work in nutrition and physical activity.⁵⁴²

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.⁵⁴³

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.⁵⁴⁴

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.⁵⁴⁵ Total funding for the five-year grants is \$39 million.⁵⁴⁶

National Diabetes Prevention Program

Because obesity is the leading risk factor for developing type 2 diabetes,⁵⁴⁷ 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.^{548,549} 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.^{550,551}

In FY 2023, the National DPP received \$37.3 million in funding, a \$4 million increase over FY 2022.⁵⁵²

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.^{553,554,555,556} 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.⁵⁵⁷

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.⁵⁵⁸

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.⁵⁵⁹ 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.⁵⁶⁰

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.⁵⁶¹ CDC awarded \$82 million to fund 77 grantees in year one for activities beginning in June 2023.⁵⁶²
- Hospitals Promoting Breastfeeding, funded at \$9.75 million for FY 2023, helps strengthen lactation supports and reduce breastfeeding disparities.⁵⁶³
- 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.^{564,565}
- 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.⁵⁶⁶
- CDC's Farm-to-Education Program, funded at \$2 million in FY 2023, supports research and education promoting healthy eating habits in ECE settings.⁵⁶⁷

MODEL STATE AND LOCAL PROGRAMS: UNIVERSAL FREE SCHOOL MEALS

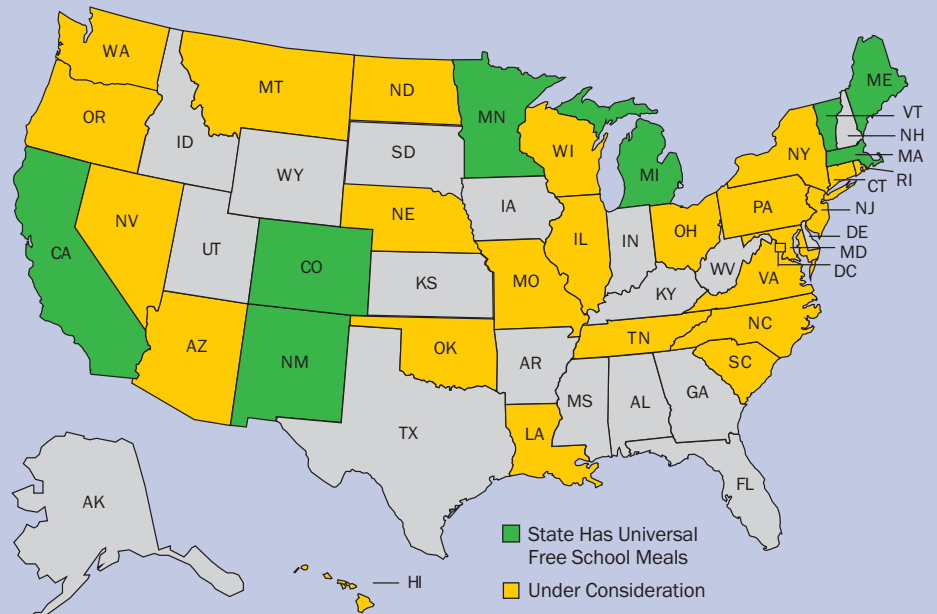
Providing free school meals to all students regardless of income ensures that every student has access to nutritious meals every school day. Without universal school meals, students may be prevented from accessing breakfast or lunch at school because of stigma associated with qualifying for free or reduced-cost 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}

Universal Free School Meals



See Appendix on page 67 for sources.

- **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}
- **Michigan's** State School Aid Budget was signed into law by Governor Gretchen Whitmer in July 2023. The Budget funds breakfast and lunch for free for all public school students in the state, grades Pre-K to 12.⁵⁸¹
- **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.^{586,587} 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.⁵⁸⁸ 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.⁵⁸⁹ 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.^{590,591} 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.⁵⁹²

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.⁵⁹³

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.⁵⁹⁸ 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,⁵⁹⁴ 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,⁵⁹⁵ which are estimated to be more than \$170 billion per year.^{596,597}

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,⁵⁹⁹
- Intensive behavioral therapy for beneficiaries with an obesity diagnosis,⁶⁰⁰

- The Medicare Diabetes Prevention Program for beneficiaries with prediabetes;⁶⁰¹ and
- 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.⁶⁰²

Medicare does not cover weight-loss programs, such as Weight Watchers⁶⁰³ and is prohibited by federal law from covering obesity medications.⁶⁰⁴

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,⁶⁰⁵ an already small number given that it is the most effective treatment for severe obesity.⁶⁰⁶

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.^{607,608,609} Medicare's lack of coverage influences the entire healthcare market, as many private insurers follow Medicare's lead with respect to pharmaceutical coverage.⁶¹⁰ A diverse coalition of drug manufacturer and public health advocates has been lobbying Congress to allow Medicare to cover obesity medication,^{611,612,613} and there is bipartisan support for this change.^{614,615} 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.^{616,617}

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.^{636,637} Americans collectively make 1 billion physician office visits each year.⁶³⁸ 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.^{639,640} Accordingly, many health professionals lack competency in nutrition-related issues and knowledge of and confidence in treating obesity.^{641,642,643} 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.⁶⁴⁴ 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.⁶⁴⁵ Importantly, medical school training and continuing education both need to incorporate the rapidly expanding pharmacological treatments for obesity.⁶⁴⁶

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.⁶⁴⁷ 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.^{648,649,650}

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.⁶⁵¹ 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.⁶⁵²

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.⁶⁵³

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.⁶⁵⁴ Providers should also follow the USPSTF clinical preventive service recommendations related to obesity.^{655,656,657,658}

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:

- Excelsa 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

The State of Obesity

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 disease⁶⁹² 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 interventions⁶⁹³ 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.^{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.^{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*.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.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.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 \$230.42⁷⁰² while the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provided healthy foods and nutrition services to 6.2 million participants.⁷⁰³ However, millions more people are eligible but not signed up for these critical benefits.⁷⁰⁴ 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:

- **Guarantee healthy school meals for all.** Congress should make healthy school meals for all permanent as a step to end child hunger and ensure access to healthy foods. Doing so would provide free meals to children regardless of income, eliminate school meal debt and lunch shaming, reduce program financial loss⁷⁰⁵ and administrative costs, and incentivize local food procurement. Congress should also increase outreach to ensure children and families eligible for school meals and Summer Electronic Benefit Transfer (EBT) sign up and align the nutrition standards of summer programs with the *Dietary Guidelines for Americans* and school meals.
- **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.⁷⁰⁶ 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.⁷⁰⁷ 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.⁷⁰⁸
- **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.⁷⁰⁹ 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.⁷¹⁰
- **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.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.^{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,^{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.^{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.⁷¹⁸ 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.⁷¹⁹ Breastfeeding has been shown to contribute to multiple positive health outcomes, including the prevention of childhood obesity.⁷²⁰ 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.^{721,722}
- **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.⁷²³ Federal and other facilities should improve the nutritional quality of food they provide by uniformly implementing the Food Service Guidelines for Federal Facilities.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.⁷²⁵

3. Change the Marketing and Pricing Strategies That Lead to Health Disparities.

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.⁷³⁴

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.⁷³⁶ 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.⁷³⁷
- **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.⁷³⁸

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.^{739,740} 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, that 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."⁷⁴¹

Recommendations for the federal government:

- **Expand access to healthcare coverage.** Congress, the administration, and state lawmakers should continue to expand access to and improve affordability of health insurance, including extending marketplace subsidies that are set to expire after 2025,⁷⁴² extending incentives for the expansion of Medicaid in remaining states, and ensuring that all eligible beneficiaries maintain Medicaid coverage during the unwinding period.⁷⁴³

- **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.⁷⁴⁴ 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 opportunities for public health and healthcare coordination.** Agencies and Congress should explore opportunities to expand the capacity of healthcare providers and payers to screen and refer individuals to social services by

leveraging existing billing-code options; coordinating care delivered among healthcare, social service, and nutrition programs; sufficiently reimbursing social-services providers, and more fully integrating social needs data into electronic medical record systems.

- **Address root causes of health disparities.** Congress should pass the Health Equity and Accountability Act, a comprehensive bill that broadly addresses healthcare disparities and aims to improve the health and well-being of communities of color, rural communities, and other underserved populations across the United States.⁷⁴⁵
- **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 dietitians,⁷⁴⁶ 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.⁷⁴⁷ State Medicaid programs should also expand coverage of obesity-related services, such as obesity and nutritional counseling provided by professionals like registered dietitians, 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 State of Obesity

Obesity-Related Indicators and Policies By State

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

	Poverty (2021)			Food Insecurity (2021)			Educational Attainment (2021)	Health Insurance Coverage (2021)
	What percentage of residents live below the poverty level? ^{1*}	What percentage of children live below the poverty level? ^{1*}	How much higher is the poverty rate for Black residents compared with white residents? ^{1*}	What percentage of households experience low or very low food security? (Average 2019–2021) ²	What percentage of children (under 18) are food insecure? ³	What percentage of older adults (age 60+) are food insecure? ⁴	What percentage of residents age 25 and older have a bachelor's degree or higher? ⁵	What percentage of residents ages 0–64 are uninsured? ^{6**}
Alabama	16%	23%	38%	13%a	18%	9%	27%	9%
Alaska	12%	17%	N/A	10%	13%	8%	33%	16%
Arizona	13%	17%	N/A	10%	14%	7%	32%	12%
Arkansas	17%	25%	62%	15%a	19%	8%	25%	11%
California	12%	15%	51%	10%a	13%	7%	36%	9%
Colorado	8%	10%	N/A	11%	11%	7%	44%	8%
Connecticut	8%	8%	N/A	10%	12%	6%	42%	7%
Delaware	12%	17%	40%	11%	14%	6%	36%	8%
D.C.	14%	21%	79%	9%a	14%	11%	63%	5%
Florida	13%	20%	55%	10%	14%	9%	33%	16%
Georgia	14%	20%	59%	10%	13%	8%	35%	14%
Hawaii	11%	15%	N/A	9%	18%	4%	35%	5%
Idaho	9%	12%	N/A	10%	9%	5%	31%	11%
Illinois	11%	14%	69%	9%	11%	8%	37%	8%
Indiana	11%	13%	N/A	10%	13%	6%	29%	6%
Iowa	10%	12%	72%	7%a	9%	4%	31%	8%
Kansas	7%	9%	N/A	10%	13%	5%	35%	10%
Kentucky	16%	20%	53%	12%a	15%	7%	27%	9%
Louisiana	18%	26%	57%	15%a	22%	13%	26%	10%
Maine	9%	13%	N/A	10%	15%	4%	36%	5%
Maryland	8%	8%	28%	9%a	12%	7%	43%	8%
Massachusetts	8%	10%	49%	8%a	8%	6%	47%	3%
Michigan	12%	15%	59%	11%	13%	6%	32%	4%
Minnesota	7%	10%	N/A	7%a	9%	4%	39%	4%
Mississippi	18%	23%	56%	15%a	19%	13%	25%	13%
Missouri	12%	18%	62%	12%	13%	8%	32%	9%
Montana	11%	14%	N/A	10%	12%	4%	35%	7%
Nebraska	8%	10%	N/A	11%	12%	5%	34%	7%
Nevada	13%	18%	65%	10%	19%	5%	28%	13%
New Hampshire	7%	9%	N/A	5%a	9%	3%	40%	7%
New Jersey	8%	9%	59%	8%a	10%	6%	43%	6%
New Mexico	18%	27%	53%	12%	19%	6%	30%	13%
New York	13%	16%	52%	10%	15%	7%	40%	7%
North Carolina	12%	16%	48%	11%	15%	7%	35%	9%
North Dakota	9%	11%	63%	8%a	8%	3%	32%	7%
Ohio	12%	15%	67%	11%	15%	5%	31%	7%
Oklahoma	15%	19%	54%	14%a	19%	9%	28%	16%
Oregon	9%	14%	N/A	10%	12%	7%	36%	8%
Pennsylvania	11%	17%	71%	9%a	12%	5%	35%	7%
Rhode Island	10%	14%	N/A	8%a	13%	5%	37%	4%
South Carolina	14%	20%	68%	13%a	13%	10%	32%	10%
South Dakota	9%	13%	N/A	9%a	11%	3%	32%	6%
Tennessee	11%	14%	46%	11%	13%	7%	31%	12%
Texas	14%	18%	53%	14%a	18%	9%	33%	19%
Utah	8%	9%	N/A	11%	10%	5%	37%	10%
Vermont	8%	9%	N/A	8%a	10%	4%	44%	3%
Virginia	10%	15%	60%	8%a	9%	5%	42%	7%
Washington	8%	9%	N/A	8%a	12%	4%	39%	8%
West Virginia	17%	23%	52%	14%a	14%	10%	24%	8%
Wisconsin	9%	13%	71%	10%	11%	6%	33%	7%
Wyoming	10%	12%	N/A	11%	12%	7%	29%	10%
Total	12%	16%	58%	10%	13%	7%	35%	10%

Sources and Notes:

- Kaiser Family Foundation. "Poverty Rate by Race/Ethnicity." 2021. <https://www.kff.org/other/state-indicator/poverty-rate-by-race-ethnicity-cps/>. Accessed June 14, 2023.
- Kaiser Family Foundation. "Poverty Rate by Age." 2021. <https://www.kff.org/other/state-indicator/poverty-rate-by-age-cps/>. Accessed July 14, 2023.
- * Kaiser Family Foundation estimates based on U.S. Census Bureau's American Community Survey.
- Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, Anita Singh, September 2022. Household Food Security in the United States in 2021, ERR-309, U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/webdocs/publications/104656/err-309.pdf?v=2335.9>. Accessed June 15, 2023.
- a. Difference from U.S. average was statistically significant with 90% confidence.
- Feeding America, Map the Meal Gap. "Food Insecurity among Child (<18 years) Population in the United States." <https://map.feedingamerica.org/county/2021/child>. Accessed June 15, 2023.
- Feeding America, Map the Meal Gap. "Food Insecurity among Senior (age 60+) Population in the United States." <https://map.feedingamerica.org/county/2021/senior-60-plus/>. Accessed June 15, 2023.
- U.S. Census Bureau, "2021 American Community Survey 1-Year Estimates: Educational Attainment." <https://data.census.gov/>
- Kaiser Family Foundation. "Uninsured Rates for the Nonelderly by Race/Ethnicity." 2021. <https://www.kff.org/other/state-indicator/uninsured-rates-for-the-nonelderly-by-race-ethnicity-cps/>. Accessed June 15, 2023.
- * Kaiser Family Foundation estimates based on U.S. Census Bureau's American Community Survey.

Retrospective and Trends Over Time

	Obesity Prevention Policies Enacted (2009-2019)	Successful Farm to School Legislation (2002-2020)	Built Environment and Active Transportation (2016-2022)
	How many state-level obesity-related policies did each state enact between 2009 and 2019? ^{1*}	How did the state score (on a scale from 0-6) with respect to successful farm to school legislation from 2002 to 2020? ^{2*}	What is the change in each state's Making Strides score (a built environment and active transportation indicator) from 2016 to 2022? ^{3*}
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:

1. Cleveland, Lauren P. et al. "Obesity prevention across the US: A review of state-level policies from 2009 to 2019." *Obesity Science and Practice*. 9(2): 95-102, June, 2022. <https://doi.org/10.1002/osp4.621>.

*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.

2. National Farm to School Network and Vermont Law School's Center for Agriculture and Food Systems. "State Farm to School Policy Handbook 2002-2020." July 2021. [https://assets.website-files.com/5c469df2395cd53c3d913b2d/611055ea25a740645f082f18_State Farm to School Policy Handbook.pdf](https://assets.website-files.com/5c469df2395cd53c3d913b2d/611055ea25a740645f082f18_State%20Farm%20to%20School%20Policy%20Handbook.pdf). Accessed July 15, 2022.

*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.

3. Lieberman, Michelle, Margo Pedroso, and Sara Zimmerman. "Making Strides 2016 State Report Cards." March 2016. <https://saferoutespartnership.org/sites/default/files/Making%20Strides%20State%20Report%20Cards.pdf>. Accessed June 6, 2023.

Jones, Marisa and Micelle Lieberman. "State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities" Safe Routes Partnership. https://www.saferoutespartnership.org/sites/default/files/resource_files/060722-srp-making-strides-2022-final.pdf. Accessed June 19, 2023.

*See Complete Streets indicators on next page for more information on scoring.

Built Environment, Active Transportation, and Food Systems

	Neighborhood Sidewalks and Parks (2020-2021)		Complete Streets Policy Adoption (2021)	Complete Streets Policy Strength (2022)	Walking/Biking/Safe Routes to School Criteria (2022)	Making Strides Indicator Overall Score (2022)	Food System Plan/Charter (2021)
	What percentage of children live in neighborhoods with sidewalks/walking paths? ¹	What percentage of children live in neighborhoods with parks/playgrounds? ²	Which states have adopted a complete streets policy? ³	How strong is a state's Complete Streets policy score (out of a total possible score of 20)? ^{4*}	Do the state's school guidelines contain criteria encouraging or requiring consideration of walking, biking, or Safe Routes to School in school setting and/or design? ⁴	What is the state's overall Making Strides score - a Built Environment and Active Transportation indicator (out of a total possible score of 200)? ^{4***}	Does the state have a food system plan/charter? ^{5*}
Alabama	51%	52%		0		47	No Plan
Alaska	70%	73%		0	√	43	In Development
Arizona	85%	80%		0	√	33	In Development
Arkansas	55%	52%		0		41	No Plan
California	91%	84%	√	17	√	164	Active
Colorado	90%	88%	√	18	√	130	Active
Connecticut	72%	80%	√	16	√	73	In Development
Delaware	73%	70%	√	11	√	112	No Information
D.C.	99%	90%	√	11		125	Active
Florida	76%	72%	√	8	√	146	No Information
Georgia	61%	60%	√	13		50	No Plan
Hawaii	84%	87%	√	11	√	88	In Development
Idaho	76%	73%		0		65	No Information
Illinois	87%	85%	√	3		98	No Plan
Indiana	69%	66%	√	11		81	In Development
Iowa	82%	79%	√	18		72	Active
Kansas	77%	76%		0		62	No Information
Kentucky	63%	60%	√	7		42	No Plan
Louisiana	57%	55%	√	15		60	No Plan
Maine	63%	70%	√	12	√	114	Active
Maryland	83%	83%	√	11	√	96	Active
Massachusetts	85%	84%	√	19	√	164	Active
Michigan	76%	79%	√	14		145	Active
Minnesota	80%	87%	√	16		149	Active
Mississippi	44%	47%	√	5		59	In Development
Missouri	70%	70%	√	2		28	No Information
Montana	72%	73%		0		65	No Plan
Nebraska	87%	80%		0		33	No Plan
Nevada	90%	79%	√	16		74	Active
New Hampshire	62%	73%		0		23	Active
New Jersey	88%	91%	√	13		153	In Development
New Mexico	79%	79%	√	1		51	Active
New York	83%	87%	√	13		97	No Plan
North Carolina	58%	79%	√	11		65	Active
North Dakota	80%	79%		0		45	In Development
Ohio	77%	76%		0	√	110	Active
Oklahoma	56%	64%		0		26	No Information
Oregon	81%	81%	√	6		141	In Development
Pennsylvania	74%	77%	√	9	√	105	No Plan
Rhode Island	78%	81%	√	11	√	90	Active
South Carolina	51%	52%	√	15	√	65	Active
South Dakota	81%	81%		0		40	No Plan
Tennessee	51%	58%	√	13		87	No Information
Texas	72%	75%	√	5		66	No Plan
Utah	93%	89%	√	6	√	116	No Plan
Vermont	67%	74%	√	8		94	Active
Virginia	73%	74%	√	12		88	Active
Washington	78%	79%	√	11		157	Active
West Virginia	52%	55%	√	14		55	In Development
Wisconsin	74%	78%		0		35	No Plan
Wyoming	81%	77%		0	√	54	In Development
Total	76%	76%	35 states and DC		17 states		18 states and DC with plan; 11 states in development

Sources and Notes:

1. Data and Resource Center for Child and Adolescent Health. "In your neighborhood, are there sidewalks or walking paths?" <https://nschdata.org/browse/survey/allstates?q=9574>. Accessed June 16, 2023.

2. Data and Resource Center for Child and Adolescent Health. "Children live in neighborhoods with a park or a playground?" <https://nschdata.org/browse/survey/allstates?q=9575>. June 16, 2023.

3. Venson, Ebony. "Complete Streets Policy adoption continues to grow across the country" Smart Growth America, September 29, 2022. <https://smartgrowthamerica.org/complete-streets-policy-adoption-continues-to-grow-across-the-country/>. Accessed June 16, 2023.

4. Jones, Marisa and Micelle Lieberman. "State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities" Safe Routes Partnership. https://www.saferoutespartnership.org/sites/default/files/resource_files/060722-srp-making-strides-2022-final.pdf. Accessed June 19, 2023.

* Complete Streets policy strength 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*NCSC score/60).

**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.

5. Hoey, Lesli, et al. "Participatory state and regional food system plans and charters in the U.S." Michigan State University's Center for Regional Food Systems, August 2021. <https://www.canr.msu.edu/foodsystems/uploads/files/National-Food-System-Plans-and-Charter-Report-Sept-2021.pdf>. Accessed June 19, 2023.

*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."

Nutrition Assistance Programs

	Special Nutrition Assistance Program Participation (2019)	Special Supplemental Nutrition Program for Women, Infant, and Children Participation (2020)	Women, Infant, and Children Breastfeeding Performance Measurements (FY 2021)	Section 1115 Medicaid Waiver for Nutrition Support Programs (as of June 2023)	Farm-to-Food-Bank Project Funding (as of FY 2023)	Emergency Food Assistance Program Food Costs (FY 2022)
	What percentage of eligible people participate in SNAP? ^{1*}	What percentage of eligible people participate in WIC? ^{2*}	What is the percentage of breastfed infants (fully or partially breastfed) among WIC participants in the state? ³	Does the state have an approved or pending 1115 Medicaid waiver addressing nutrition support or food-related programs? ⁴	Which states are conducting a farm-to-food-bank project in FY 2022? ⁵	What is the total cost of food delivered to states under the Emergency Food Assistance Program? ^{6*}
Alabama	80%	52%	11%			\$14,322,097
Alaska	89%	48%	46%			\$2,384,266
Arizona	76%	51%	30%		√	\$24,034,808
Arkansas	64%	36% ^a	14%	Approved	√	\$11,076,185
California	70%	65% ^a	40%		√	\$115,252,032
Colorado	84%	46% ^a	36%		√	\$16,601,324
Connecticut	95%	46% ^a	36%			\$6,620,856
Delaware	100%	42% ^a	33%	Pending	√	\$3,372,430
D.C.	97%	58% ^a	51%			\$1,763,536
Florida	81%	50% ^a	37%		√	\$60,759,227
Georgia	78%	39% ^a	27%		√ ^a	\$27,769,830
Hawaii	88%	55% ^a	50%		√	\$2,123,130
Idaho	82%	41% ^a	44%		√	\$4,713,462
Illinois	100%	37% ^a	28%		√	\$35,367,471
Indiana	73%	55% ^a	29%		√	\$16,103,186
Iowa	92%	53% ^a	30%		√	\$8,648,215
Kansas	71%	45% ^a	29%			\$6,190,314
Kentucky	69%	53% ^a	23%		√	\$12,767,288
Louisiana	85%	38% ^a	16%		√ ^a	\$15,127,510
Maine	81%	40% ^a	32%			\$4,881,176
Maryland	91%	60% ^a	44%			\$7,898,210
Massachusetts	100%	61% ^a	37%	Approved		\$14,894,138
Michigan	90%	58% ^a	24%		√	\$27,705,633
Minnesota	80%	61% ^a	38%		√	\$10,861,600
Mississippi	65%	49%	15%			\$10,457,580
Missouri	85%	41% ^a	23%		√	\$16,167,210
Montana	83%	36% ^a	35%			\$2,565,463
Nebraska	83%	53%	34%			\$3,774,396
Nevada	94%	48%	30%			\$12,846,490
New Hampshire	82%	44% ^a	36%			\$2,911,238
New Jersey	80%	49%	45%	Approved		\$21,760,421
New Mexico	100%	41% ^a	39%			\$7,269,824
New York	89%	52% ^a	48%			\$59,297,547
North Carolina	76%	56% ^a	29%	Approved	√	\$26,536,787
North Dakota	70%	44% ^a	30%			\$1,319,939
Ohio	90%	42% ^a	16%		√	\$33,774,483
Oklahoma	90%	49%	17%			\$12,180,715
Oregon	100%	56% ^a	39%	Approved	√	\$11,230,264
Pennsylvania	100%	43% ^a	20%		√	\$31,782,581
Rhode Island	100%	55% ^a	31%			\$2,154,455
South Carolina	74%	38% ^a	21%			\$17,733,083
South Dakota	84%	49%	31%			\$2,579,796
Tennessee	88%	37% ^a	27%			\$19,579,639
Texas	73%	51%	57%		√	\$92,489,118
Utah	79%	36% ^a	40%			\$92,489,118
Vermont	100%	59% ^a	49%			\$1,059,249
Virginia	78%	45% ^a	22%		√	\$14,899,152
Washington	100%	48% ^a	42%		√	\$19,733,369
West Virginia	96%	46% ^a	16%		√	\$5,730,198
Wisconsin	100%	50%	23%		√	\$12,272,285
Wyoming	55%	45%	31%		√	\$1,674,798
Total	82%	50%		6 states	27 states	\$915,136,734

Sources and Notes:

1. USDA Food and Nutrition Service. "Empirical Bayes Shrinkage Estimates of State Supplemental Nutrition Assistance Program Participation Rates in Fiscal Year 2017 to Fiscal Year 2019 for All Eligible People and Working Poor People." February 2023. <https://fns-prod.azureedge.us/sites/default/files/resource-files/snap-tech-partrate2017-2019.pdf>. Accessed June 21, 2023.

*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.

2. USDA Food and Nutrition Service. "National and State Level Estimates of WIC Eligibility and Program Reach in 2020" January 2023. <https://www.fns.usda.gov/wic/eligibility-and-program-reach-estimates-2020#>. Accessed June 21, 2023.

a. Difference from national coverage rate was statistically significant at the 95 percent confidence level.

*These values capture eligibility and participation across all WIC participant categories. Eligibility can vary across states and localities based on income unit, income period, and income limits. This data includes territories in total.

3. USDA Food and Nutrition Service. "Fiscal Year 2021 WIC Breastfeeding Data Local Agency Report." November 2022. <https://fns-prod.azureedge.us/sites/default/files/resource-files/FY2021-BF-DLA-Report.pdf>. Accessed June 21, 2023

4. Kaiser Family Foundation. "Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State." <https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/#Table3>. Accessed June 21, 2023.

*Section 1115 waivers generally reflect priorities identified by the states and CMS. Waiver provisions, including expansions and restrictions, are related to eligibility, benefits, and social determinants of health. This indicator captures waivers related to social determinants of health that specifically mention nutrition support or other food-related assistance.

5. USDA Food and Nutrition Service. "Fiscal Year 2023 Farm to Food Bank Project Summaries." December 2022. <https://www.fns.usda.gov/tefap/fy-2023-farm-food-bank-project-summaries>. Accessed June 21, 2023.

a. Newly participating states in FY 2023

6. USDA Food and Nutrition Service. "The Emergency Food Assistance Program (TEFAP) Total Food Costs" May 2023. <https://fns-prod.azureedge.us/sites/default/files/resource-files/22te-fap-5.pdf>. Accessed June 21, 2023.

*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

	Embedding Obesity Prevention in Early Care & Education (2021)	School Breakfast Program (2021-2022)	Community Eligibility Provision (2022-2023)	Universal Free School Meals (as of August 2023)	PE Requirements Score (2022)
	How well do the state's licensing regulations for child care centers support high-impact obesity prevention standards over time (score out of 100)? ^{1*}	What percentage of the children in the School Lunch Program are in the School Breakfast Program? ²	What percentage of eligible school districts have adopted the school meal community eligibility provision? ^{3**}	Which states have passed or are considering legislation for universal free school meals? ^{4*}	What is each state's score in terms of physical education requirements (out of a total possible score of 15)? ^{5**}
Alabama	75	59%	50%		10
Alaska	71	51%	83%		0
Arizona	52	48%	69%	Considering	0
Arkansas	72	65%	58%		7
California	48	50%	79%	Passed	12
Colorado	71	47%	35%	Passed	0
Connecticut	55	47%	78%	Considering	3
Delaware	77	58%	74%		3
D.C.	74	82%	98%	Considering	11
Florida	69	47%	67%		7
Georgia	69	58%	84%		7
Hawaii	67	30%	100%	Considering	11
Idaho	32	44%	47%		0
Illinois	62	45%	61%	Considering	0
Indiana	39	43%	41%		3
Iowa	65	39%	20%		3
Kansas	46	46%	22%		3
Kentucky	61	65%	97%		3
Louisiana	71	58%	91%	Considering	10
Maine	60	59%	66%	Passed	3
Maryland	71	56%	61%	Considering	3
Massachusetts	44	42%	76%	Passed	0
Michigan	69	54%	56%	Passed	3
Minnesota	66	48%	55%	Passed	0
Mississippi	70	61%	77%		7
Missouri	51	59%	62%	Considering	7
Montana	64	57%	64%	Considering	7
Nebraska	63	37%	37%	Considering	3
Nevada	67	56%	93%	Considering	3
New Hampshire	69	47%	20%		3
New Jersey	61	49%	50%	Considering	13
New Mexico	69	70%	91%	Passed	3
New York	60	55%	79%	Considering	10
North Carolina	74	59%	72%	Considering	3
North Dakota	50	44%	100%	Considering	7
Ohio	50	53%	82%	Considering	3
Oklahoma	64	56%	43%	Considering	2
Oregon	46	53%	91%	Considering	11
Pennsylvania	45	48%	60%	Considering	3
Rhode Island	74	51%	61%	Considering	7
South Carolina	54	60%	79%	Considering	6
South Dakota	37	40%	82%		3
Tennessee	79	60%	79%	Considering	5
Texas	81	53%	61%		3
Utah	70	32%	88%		3
Vermont	72	64%	89%	Passed	3
Virginia	71	57%	96%	Considering	3
Washington	80	42%	99%	Considering	8
West Virginia	49	82%	95%		6
Wisconsin	69	52%	55%	Considering	3
Wyoming	43	50%	100%		0
Total	62	52%	68%	8 states passed, 24 states and DC considering	

Sources and Notes:

1. National Resource Center for Health and Safety in Child Care and Early Education. "2021 Annual Report Achieving a State of Healthy Weight." 2022. <https://nrckids.org/files/ASHW.2021.Report.pdf>. Accessed June 22, 2023.

*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.

2. Food Research and Action Center. "The Reach of School Breakfast and Lunch During the 2021-2022 School Year." March 2023. <https://frac.org/wp-content/uploads/school-meals-2023.pdf>. Accessed June 22, 2023.

3. Food Research and Action Center. "Community Eligibility: The Key to Hunger-Free Schools School Year 2022-2023." May 2023. <https://frac.org/wp-content/uploads/cep-report-2023.pdf>. Accessed June 22, 2023.

*Community eligibility allows high-poverty schools and school districts to offer free meals to all students, and it eliminates the need for household school meal applications.

4. Butz, Leah. "States that Have Passed Universal Free School Meals (so far)." Hunter College Food Policy Center, June 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed June 22, 2023.

LeBlanc, Steve. "Massachusetts joins a small but growing number of states adopting universal free school meals." Associated Press, August 2023. <https://www.boston.com/news/schools/2023/08/09/massachusetts-joins-a-small-but-growing-number-of-states-adopting-universal-free-school-meals/>. Accessed August 15, 2023.

*States that have passed universal free school meals legislation include those that have made the policy permanent as well as those who have not. States that are considering universal free school meals legislation include those who are currently planning, drafting, discussing, or negotiating expanded free school meal legislation.

5. Safe Routes Partnership. "Making Strides 2022: State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities." 2022. https://www.saferoutespartnership.org/sites/default/files/resource_files/060722-srp-making-strides-2022-final.pdf. Accessed June 22, 2023.

*The Total PE score is calculated based on the minimum weekly number of minutes of PE required for elementary, middle, and high schools and whether or not the state requires PE for high school graduation.

References

- 1 Fryar, Cheryl D., Margaret D. Carroll, and Joseph Afful. "Prevalence of Overweight, Obesity, and Severe Obesity Among Children and Adolescents Aged 2–19 Years: United States, 1963–1965 Through 2017–2018." National Center for Health Statistics, Health E-Stats, 2020. <https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/overweight-obesity-child-H.pdf>. Accessed August 9, 2023.
- 2 Fryar, Cheryl D., Margaret D. Carroll, and Cynthia L. Ogden. *Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960–1962 Through 2009–2010*. Hyattsville, MD: National Center for Health Statistics, September 2012. https://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.htm. Accessed August 9, 2023.
- 3 Hales, Craig M., Cheryl D. Fryar, Margaret D. Carroll, et al. "Trends in Obesity and Severe Obesity Prevalence in US Youth and Adults by Sex and Age, 2007–2008 to 2015–2016." *JAMA*, 319(16): 1723–1725, April 14, 2018. <https://jamanetwork.com/journals/jama/fullarticle/2676543>. Accessed August 9, 2023.
- 4 Stierman, Bryan, Joseph Afful, Margaret D. Carroll, et al. "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files Development of Files and Prevalence Estimates for Selected Health Outcomes." *National Center for Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 5 Ogden, Cynthia L., Molly M. Lamb, Margaret D. Carroll, et al. "Obesity and Socioeconomic Status in Adults: United States, 2005–2008." National Center for Health Statistics, Data Brief No. 50, 2010. <https://www.cdc.gov/nchs/products/databriefs/db50.htm>. Accessed August 9, 2023.
- 6 Ogden, Cynthia L., Tala H. Fakhouri, Margaret D. Carroll, et al. "Prevalence of Obesity Among Adults, by Household Income and Education – United States, 2011–2014." *Morbidity and Mortality Weekly Report*, 66(50): 1369–1373, 2017. <https://www.cdc.gov/mmwr/volumes/66/wr/mm6650a1.htm>. Accessed August 9, 2023.
- 7 Temple, Norman J. "The Origins of the Obesity Epidemic in the USA—Lessons for Today." *Nutrients*, 4(20): 4253, October 2022. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9611578/>. Accessed August 9, 2023.
- 8 Messina, Kristin. "Rudd Center: New Study Finds Fast-Food Companies Spending More on Advertising, Disproportionately Targeting Black and Latino Youth." *UConn Today*, June 17, 2021. <https://today.uconn.edu/2021/06/rudd-center-new-study-finds-fast-food-companies-spending-more-on-advertising-disproportionately-targeting-black-and-latino-youth/#>. Accessed August 9, 2023.
- 9 Juul, Filippa, Niyati Parekh, Euridice Martinez-Steele, et al. "Ultra-Processed Food Consumption Among US Adults from 2001 to 2018." *The American Journal of Clinical Nutrition*, 115(1): 211–221, January 2022. <https://pubmed.ncbi.nlm.nih.gov/34647997/>. Accessed August 9, 2023.
- 10 Ansai, Nicolas, and Edwina A. Wambogo. "Fruit and Vegetable Consumption Among Adults in the United States, 2015–2018." National Center of Health Statistics, Data Brief No. 397, February 2021. <https://www.cdc.gov/nchs/products/databriefs/db397.htm>. Accessed August 9, 2023.
- 11 "Highly processed foods form bulk of U.S. youths' diets." *NIH Research Matters*, August 2021. <https://www.nih.gov/news-events/nih-research-matters/highly-processed-foods-form-bulk-us-youths-diets>. Accessed August 9, 2023.
- 12 Kumanyika, Shiriki. "A Health Equity Approach to Obesity Efforts: A Workshop." National Academies of Sciences, Engineering, and Medicine Meeting, April 1, 2019. <https://nap.nationalacademies.org/catalog/25409/a-health-equity-approach-to-obesity-efforts-proceedings-of-a>. Accessed August 9, 2023.
- 13 Zulqarnain, Javed, Javier Valero-Elizondo, Muhammad Haisum Maqsood, et al. "Social Determinants of Health and Obesity: Findings from a National Study of US Adults." *Obesity*, 30(2): 491–502, February 2022. <https://pubmed.ncbi.nlm.nih.gov/35088551/>. Accessed August 9, 2023.
- 14 Centers for Disease Control and Prevention. "Behavioral Risk Factor Surveillance System." Updated August 29, 2023. <https://www.cdc.gov/brfss/index.html>. Accessed August 29, 2023.
- 15 Trust for America's Health. "State Obesity Rates." <https://www.tfah.org/report-details/state-of-obesity-2023>. Accessed September 21, 2023.
- 16 Temple, Norman J. "The Origins of the Obesity Epidemic in the USA—Lessons for Today." *Nutrients*, 4(20): 4253, October 2022. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9611578/>. Accessed August 9, 2023.
- 17 Zulqarnain, Javed, Javier Valero-Elizondo, Muhammad Haisum Maqsood, et al. "Social Determinants of Health and Obesity: Findings from a National Study of US Adults." *Obesity*, 30(2): 491–502, February 2022. <https://pubmed.ncbi.nlm.nih.gov/35088551/>. Accessed August 9, 2023.
- 18 Kumanyika, Shiriki. "A Health Equity Approach to Obesity Efforts: A Workshop." National Academies of Sciences, Engineering, and Medicine Meeting, April 1, 2019. <https://nap.nationalacademies.org/catalog/25409/a-health-equity-approach-to-obesity-efforts-proceedings-of-a>. Accessed August 9, 2023.
- 19 Kompaniyets, Lyudmyla, Alyson B. Goodman, Brook Belay, et al. "Body Mass Index and Risk for COVID-19-Related Hospitalization, Intensive Care Unit Admission, Invasive Mechanical Ventilation, and Death—United States, March–December 2020." *Morbidity and Mortality Weekly Report*, 70(10): 355–361, 2021. <https://www.cdc.gov/mmwr/volumes/70/wr/mm7010e4.htm>. Accessed August 9, 2023.
- 20 The Global BMI Mortality Collaboration. "Body-Mass Index and All-Cause Mortality: Individual Participant-Data Meta-Analysis of 239 Prospective Studies in Four Continents." *The Lancet*, 388(10046): 776–786, 2016. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)30175-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30175-1/fulltext). Accessed August 9, 2023.
- 21 Flegal, Katherine M., Brian K. Kit, Heather Orpana, et al. "Association of All-Cause Mortality with Overweight and Obesity Using Standard Body Mass Index Categories: A Systematic Review and Meta-Analysis." *JAMA*, 309(1): 71–82, 2013. <https://jamanetwork.com/journals/jama/fullarticle/1555137>. Accessed August 9, 2023.
- 22 Greenberg, James A. "Obesity and Early Mortality in the United States." *Obesity*, 21(2): 405–412, 2013. <https://www.ncbi.nlm.nih.gov/pubmed/23404873>. Accessed August 9, 2023.
- 23 NHLBI Obesity Education Initiative Expert Panel. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: National Heart, Lung, and Blood Institute, September 1998. <https://www.ncbi.nlm.nih.gov/books/NBK2003/>. Accessed August 9, 2023.
- 24 National Institute of Diabetes and Digestive and Kidney Diseases. "Health Risks of Overweight & Obesity." Updated February 2018. <https://www.niddk.nih.gov/health-information/weight-management/adult-overweight-obesity/health-risks>. Accessed August 9, 2023.

- 25 NHLBI Obesity Education Initiative Expert Panel. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: National Heart, Lung, and Blood Institute, September 1998. <https://www.ncbi.nlm.nih.gov/books/NBK2003/>. Accessed August 9, 2023.
- 26 Leddy, Meaghan A., Michael L. Power, and Jay Schulkin. "The Impact of Maternal Obesity on Maternal and Fetal Health." *Reviews in Obstetrics and Gynecology*, 1(4): 170-178, 2008. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2621047/>. Accessed August 9, 2023.
- 27 Cedergren, Marie I. "Maternal Morbid Obesity and the Risk of Adverse Pregnancy Outcome." *Obstetrics & Gynecology*, 103(2): 219-224, 2004. <https://www.ncbi.nlm.nih.gov/pubmed/14754687>. Accessed August 9, 2023.
- 28 Howard, Elisabeth. "Sounding the Alarm: The Effects of Obesity on Perinatal Care Delivery and Outcomes." *Journal of Perinatal & Neonatal Nursing*, 33(1): 4-6, March 2019. https://www.nursingcenter.com/journalarticle?Article_ID=4896213&Journal_ID=54008&Issue_ID=4896206. Accessed August 9, 2023.
- 29 O'Brien, Tara E., Joel G. Ray, and Wee-Shian Chan. "Maternal Body Mass Index and the Risk of Preeclampsia: A Systematic Overview." *Epidemiology*, 14(3): 368-374, 2003. <https://www.ncbi.nlm.nih.gov/pubmed/12859040>. Accessed August 9, 2023.
- 30 Lauby-Secretan, Béatrice, Chiara Scoccianti, Dana Loomis, et al. "Body Fatness and Cancer—Viewpoint of the IARC Working Group." *The New England Journal of Medicine*, 375(8): 794-798, 2016. <https://www.proquest.com/docview/1814894103>. Accessed August 9, 2023.
- 31 Dyck, Lydia, and Lydia Lynch. "Diverse Effects of Obesity on Antitumor Immunity and Immunotherapy." *Trends in Molecular Medicine*, 29(2): 112-123, December 2022. <https://doi.org/10.1016/j.molmed.2022.11.004>. Accessed August 9, 2023.
- 32 Zhang, Fang Fang, Frederick Cudhea, Zhilei Shan, et al. "Preventable Cancer Burden Associated with Poor Diet in the United States." *JNCI Cancer Spectrum*, 3(2), June 2019. <https://academic.oup.com/jncics/article/3/2/pkz034/5492023>. Accessed August 9, 2023.
- 33 Pulgaron, Elizabeth R., and Alan M. Delamater. "Obesity and Type 2 Diabetes in Children: Epidemiology and Treatment." *Current Diabetes Reports*, 14(8): 508, 2014. <https://link.springer.com/article/10.1007%2Fs11892-014-0508-y>. Accessed August 9, 2023.
- 34 Shrivastava, Saurabh Ram Bihari Lal, Prateek Saurabh Shrivastava, and Jegadeesh Ramasamy. "Childhood Obesity: A Determinant of Adolescent and Adult Hypertension." *International Journal of Preventive Medicine*, 5(Suppl. 1): S71-S72, 2014. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3990923/>. Accessed August 9, 2023.
- 35 Llewellyn, A., M. Simmonds, C.G. Owen, and N. Woolacott. "Childhood Obesity as a Predictor of Morbidity in Adulthood: A Systematic Review and Meta-Analysis." *Obesity Reviews*, 17: 56-67, 2016. <https://onlinelibrary.wiley.com/doi/abs/10.1111/obr.12316>. Accessed August 9, 2023.
- 36 Carey, Felicia R., Gopal K. Singh, H. Shelton Brown, and Anna V. Wilkinson. "Educational Outcomes Associated with Childhood Obesity in the United States: Cross-Sectional Results from the 2011–2012 National Survey of Children's Health." *International Journal of Behavioral Nutrition and Physical Activity*, 12(Suppl. 1): S3, 2015. <https://www.ncbi.nlm.nih.gov/pubmed/26222699>. Accessed August 9, 2023.
- 37 Simmonds, M., A. Llewellyn, C.G. Owen, et al. "Predicting Adult Obesity from Childhood Obesity: A Systematic Review and Meta-Analysis." *Obesity Review*, 17(2): 95-107, February 2016. <https://pubmed.ncbi.nlm.nih.gov/26696565/>. Accessed August 9, 2023.
- 38 Kompaniyets, Lyudmyla, Nickolas T. Agathis, Jennifer M. Nelson, et al. "Underlying Medical Conditions Associated with Severe COVID-19 Illness Among Children." *JAMA Network Open*, 4(6): e2111182, June 1, 2021. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2780706>. Accessed August 9, 2023.
- 39 Ward, Zachary J., Sara N. Bleich, Michael W. Long, et al. "Association of Body Mass Index with Health Care Expenditures in the United States by Age and Sex." *PLoS One*, 16(3): e0247307, March 2021. <https://doi.org/10.1371/journal.pone.0247307>. Accessed August 9, 2023.
- 40 Wang, Y. Claire, John Pamplin, Michael W. Long, et al. "Severe Obesity in Adults Cost State Medicaid Programs Nearly \$8 Billion in 2013." *Health Affairs*, 34(11), November 2015. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0633>. Accessed August 9, 2023.
- 41 Harris, Benjamin H., and Aurite Werman. "Obesity Costs Evident at the State Level." *Brookings Institution*, December 2014. <https://www.brookings.edu/blog/up-front/2014/12/12/obesity-costs-evident-at-the-state-level/>. Accessed August 9, 2023.
- 42 Hammond, Ross A., and Ruth Levine. "The Economic Impact of Obesity in the United States." *Diabetes, Metabolic Syndrome and Obesity*, 3: 285-295, 2010. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047996/>. Accessed August 9, 2023.
- 43 Dyck, Lydia, and Lydia Lynch. "Diverse Effects of Obesity on Antitumor Immunity and Immunotherapy." *Trends in Molecular Medicine*, 29(2): 112-123, December 2022. <https://doi.org/10.1016/j.molmed.2022.11.004>. Accessed August 9, 2023.
- 44 Centers for Disease Control and Prevention. "About Adult BMI." Updated June 3, 2022. https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/. Accessed August 9, 2023.
- 45 National Institute of Diabetes and Digestive and Kidney Diseases. "Overweight & Obesity Statistics." Updated September 2021. <https://www.niddk.nih.gov/health-information/health-statistics/overweight-obesity>. Accessed August 9, 2023.
- 46 National Academies of Sciences, Engineering, and Medicine. "BMI and Beyond: Considering Context in Measuring Obesity and its Applications: Proceedings of a Workshop—in Brief." <https://nap.nationalacademies.org/read/27185/chapter/1>. Accessed July 31, 2023.
- 47 Eknoyan, Garabed. "Adolphe Quetelet (1796–1874)—The Average Man and Indices of Obesity." *Nephrology Dialysis Transplantation*, 23(1): 47-51, January 2008. <https://doi.org/10.1093/ndt/gfm517>. Accessed July 31, 2023.
- 48 National Academies of Sciences, Engineering, and Medicine. "BMI and Beyond: Considering Context in Measuring Obesity and its Applications: Proceedings of a Workshop—in Brief." <https://nap.nationalacademies.org/read/27185/chapter/1>. Accessed July 31, 2023.
- 49 Stanford, Fatima Cody, Minyi Lin, and Chin Hur. "Letter to the Editor: Race, Ethnicity, Sex, and Obesity: Is it Time to Personalize the Scale?" *Mayo Clinic Proceedings*, 94(2): 362-369, February 2019. [https://www.mayoclinicproceedings.org/article/S0025-6196\(18\)30807-3/pdf](https://www.mayoclinicproceedings.org/article/S0025-6196(18)30807-3/pdf). Accessed August 9, 2023.

- 50 National Academies of Sciences, Engineering, and Medicine. "BMI and Beyond: Considering Context in Measuring Obesity and its Applications: Proceedings of a Workshop—in Brief." <https://nap.nationalacademies.org/read/27185/chapter/1>. Accessed July 31, 2023.
- 51 Eknoyan, Garabed. "Adolphe Quetelet (1796–1874)—The Average Man and Indices of Obesity." *Nephrology Dialysis Transplantation*, 23(1): 47-51, January 2008. <https://doi.org/10.1093/ndt/gfm517>. Accessed July 31, 2023.
- 52 American Medical Association. "AMA Adopts New Policy Clarifying Role of BMI as a Measure in Medicine." June 14, 2023. <https://www.ama-assn.org/press-center/press-releases/ama-adopts-new-policy-clarifying-role-bmi-measure-medicine>. Accessed July 31, 2023.
- 53 Centers for Disease Control and Prevention. "About Child & Teen BMI." Updated September 24, 2022. https://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html. Accessed August 9, 2023.
- 54 National Heart, Lung, and Blood Institute and The National Institute of Diabetes and Digestive and Kidney Diseases. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*. Bethesda, MD: National Institutes of Health, NIH Publications No. 98-4083, September 1998. https://www.nhlbi.nih.gov/files/docs/guidelines/ob_gdlns.pdf. Accessed August 9, 2023.
- 55 Kyle, Theodore K., Emily J. Dhurandhar, and David B. Allison. "Regarding Obesity as a Disease: Evolving Policies and Their Implications." *Endocrinology and Metabolism Clinics of North America*, 45(3): 511-20, September 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4988332/>. Accessed August 9, 2023.
- 56 Mayor, Susan. "New US Medicare Policy Changes Ruling that Obesity Is Not an Illness." *The BMJ*, 329(7460): 252, July 31, 2004. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC498065/>. Accessed August 9, 2023.
- 57 Pollack, Andrew. "A.M.A. Recognizes Obesity as a Disease." *The New York Times*, July 13, 2018. <https://www.nytimes.com/2013/06/19/business/ama-recognizes-obesity-as-a-disease.html>. Accessed July 11, 2023.
- 58 "Public Health: Recognition of Obesity as a Disease H-440.842." American Medical Association, 2013. <https://policysearch.ama-assn.org/policyfinder/detail/obesity?uri=%2FAMADoc%2FHOD.xml-0-3858.xml>. Accessed August 9, 2023.
- 59 "Obesity in America: Polling Presentation." *Morning Consult*, November 2021. https://assets.obesitycareadvocacynetwork.com/Morning_Consult_Polling_Presentation_Obesity_in_America_OCAN_11_2021_d6255b4176/Morning_Consult_Polling_Presentation_Obesity_in_America_OCAN_11_2021_d6255b4176.pdf. Accessed July 11, 2023.
- 60 Hearne, Shelley A., Laura M. Segal, Patti J. Unruh, et al. *F as in Fat: How Obesity Policies Are Failing in America*. Washington, DC: Trust for America's Health, October 2004. <https://www.tfah.org/report-details/fas-in-fat-2004/>. Accessed August 9, 2023.
- 61 "Obesity/Chronic Disease Reports." Trust for America's Health. https://www.tfah.org/reports/?fwp_report_type_filter=state-of-obesity-series. Accessed July 11, 2023.
- 62 Rubino, Francesco, Rebecca M. Puhl, and John B. Dixon. "Joint International Consensus Statement for Ending Stigma of Obesity." *Nature Medicine*, 26: 485-497, 2020. <https://www.nature.com/articles/s41591-020-0803-x>. Accessed August 9, 2023.
- 63 O'Keeffe, Majella, Stuart W. Flint, Krista Watts, et al. "Knowledge Gaps and Weight Stigma Shape Attitudes Toward Obesity." *The Lancet Diabetes and Endocrinology*, 8(5): 363-365, 2020. [https://www.thelancet.com/journals/landia/article/PIIS2213-8587\(20\)30073-5/fulltext](https://www.thelancet.com/journals/landia/article/PIIS2213-8587(20)30073-5/fulltext). Accessed August 9, 2023.
- 64 Puhl, Rebecca, and Kelly D. Brownell. "Bias, Discrimination, and Obesity." *Obesity Research*, 9(12): 788-805, 2001. <https://pubmed.ncbi.nlm.nih.gov/11743063/>. Accessed August 9, 2023.
- 65 Rubino, Francesco, Rebecca M. Puhl, and John B. Dixon. "Joint International Consensus Statement for Ending Stigma of Obesity." *Nature Medicine*, 26: 485-497, 2020. <https://www.nature.com/articles/s41591-020-0803-x>. Accessed August 9, 2023.
- 66 Brown, Adrian, Stuart W. Flint, and Rachel L. Batterham. "Pervasiveness, Impact and Implications of Weight Stigma." *eClinicalMedicine*, 47: 101408, 2022. [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(22\)00138-9/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(22)00138-9/fulltext). Accessed August 9, 2023.
- 67 Rubino, Francesco, Rebecca M. Puhl, and John B. Dixon. "Joint International Consensus Statement for Ending Stigma of Obesity." *Nature Medicine*, 26: 485-497, 2020. <https://www.nature.com/articles/s41591-020-0803-x>. Accessed August 9, 2023.
- 68 National Academies of Sciences, Engineering, and Medicine. "BMI and Beyond: Considering Context in Measuring Obesity and its Applications: Proceedings of a Workshop—in Brief." <https://nap.nationalacademies.org/read/27185/chapter/1>. Accessed July 31, 2023.
- 69 National Academies of Sciences, Engineering, and Medicine. "BMI and Beyond: Considering Context in Measuring Obesity and its Applications: Proceedings of a Workshop—in Brief." <https://nap.nationalacademies.org/read/27185/chapter/1>. Accessed July 31, 2023.
- 70 American Medical Association. "AMA Adopts New Policy Clarifying Role of BMI as a Measure in Medicine." June 14, 2023. <https://www.ama-assn.org/press-center/press-releases/ama-adopts-new-policy-clarifying-role-bmi-measure-medicine>. Accessed July 31, 2023.
- 71 Brown, Adrian, Stuart W. Flint, and Rachel L. Batterham. "Pervasiveness, Impact and Implications of Weight Stigma." *eClinicalMedicine*, 47: 101408, 2022. [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(22\)00138-9/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(22)00138-9/fulltext). Accessed August 9, 2023.
- 72 Levi, Jeffrey, Laura Segal, Rebecca St. Laurent, et al. *State of Obesity: Better Policies for a Healthier America, 2014*. Washington, DC: Trust for America's Health, September 2014. <https://www.tfah.org/report-details/the-state-of-obesity-better-policies-for-a-healthier-america/>. Accessed August 9, 2023.
- 73 Fischer, Edward F., Tatiana Paz Lemus, Alexandra Reichert, et al. *Reframing Childhood Obesity: Cultural Insights on Nutrition, Weight, and Food Systems*. Nashville, TN: Vanderbilt Cultural Contexts of Health Initiative, 2022. <https://www.vanderbilt.edu/cultural-contexts-health/wp-content/uploads/sites/350/2022/06/Reframing-Childhood-Obesity-CCH-Report.pdf>. Accessed August 9, 2023.
- 74 The White House. "Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health." September 2022. <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>. Accessed July 11, 2023.

- 75 “Fact Sheet: The Biden-Harris Administration Announces More Than \$8 Billion in New Commitments as Part of Call to Action for White House Conference on Hunger, Nutrition, and Health.” White House Briefing Room, September 28, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/28/fact-sheet-the-biden-harris-administration-announces-more-than-8-billion-in-new-commitments-as-part-of-call-to-action-for-white-house-conference-on-hunger-nutrition-and-health/>. Accessed July 11, 2023.
- 76 “Fact Sheet: Biden-Harris Administration Launches the White House Challenge to End Hunger and Build Healthy Communities, Announces New Public & Private Sector Actions to Continue Momentum from Historic Hunger, Nutrition, and Health Conference.” White House Briefing Room, March 24, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/24/fact-sheet-biden-harris-administration-launches-the-white-house-challenge-to-end-hunger-and-build-healthy-communities-announces-new-public-private-sector-actions-to-continue-momentum-from-hist/>. Accessed July 11, 2023.
- 77 Kumanyika, Shiriki. “A Health Equity Approach to Obesity Efforts: A Workshop.” National Academies of Sciences, Engineering, and Medicine Meeting, April 1, 2019. <https://nap.nationalacademies.org/catalog/25409/a-health-equity-approach-to-obesity-efforts-proceedings-of-a>. Accessed August 9, 2023.
- 78 Zulqarnain, Javed, Javier Valero-Elizondo, Muhammad Haisum Maqsood, et al. “Social Determinants of Health and Obesity: Findings from a National Study of US Adults.” *Obesity*, 30(2): 491-502, February 2022. <https://pubmed.ncbi.nlm.nih.gov/35088551/>. Accessed August 9, 2023.
- 79 Lin, Biing-Hwan, Joanne Guthrie, and Travis Smith. “Dietary Quality by Food Source and Demographics in the United States, 1977–2018.” U.S. Department of Agriculture Economic Research Service, *Economic Information Bulletin*, 249, March 2023. <https://www.ers.usda.gov/publications/pub-details/?pubid=105955>. Accessed August 9, 2023.
- 80 Menichetti, Giulia, Babak Ravandi, Dariush Mozaffarian, et al. “Machine Learning Prediction of the Degree of Food Processing.” *Nature Communication*, 14(2312), April 2023. <https://www.nature.com/articles/s41467-023-37457-1>. Accessed August 9, 2023.
- 81 Messina, Kristin. “Rudd Center: New Study Finds Fast-Food Companies Spending More on Advertising, Disproportionately Targeting Black and Latino Youth.” *UConn Today*, June 17, 2021. <https://today.uconn.edu/2021/06/rudd-center-new-study-finds-fast-food-companies-spending-more-on-advertising-disproportionately-targeting-black-and-latino-youth/#>. Accessed July 11, 2023.
- 82 Temple, Norman J. “The Origins of the Obesity Epidemic in the USA—Lessons for Today.” *Nutrients*, 4(20): 4253, October 2022. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9611578/>. Accessed August 2, 2023.
- 83 Rao, Mayuree, Ashkan Afshin, Gitanjali Singh, et al. “Do Healthier Foods and Diet Patterns Cost More Than Less Healthy Options? A Systematic Review and Meta-Analysis.” *The BMJ*, 3(12): e004277, December 5, 2013. <https://bmjopen.bmj.com/content/3/12/e004277.full?sid=820d6e1a-280e-47a6-b8c5-498bfa4657e3>. Accessed August 9, 2023.
- 84 Kern, David M., Amy H. Auchincloss, Mark F. Stehr, et al. “Neighborhood Prices of Healthier and Unhealthier Foods and Associations with Diet Quality: Evidence from the Multi-Ethnic Study of Atherosclerosis.” *International Journal of Environmental Research and Public Health*, 14(11): 1394, November 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5708033/>. Accessed August 9, 2023.
- 85 Cooksey-Stowers, Kristen, Marlene B. Schwartz, and Kelly D. Brownell. “Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States.” *International Journal of Environmental Research and Public Health*, 14(11): 1366, November 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5708005/>. Accessed August 9, 2023.
- 86 “What Are Ultraprocessed Foods and Why Are They Bad for You?” *Tufts Now*, May 2023. <https://now.tufts.edu/2023/05/08/what-are-ultraprocessed-foods-and-why-are-they-bad-you>. Accessed August 9, 2023.
- 87 Fazzino, Tera L., Kaitlyn Rohde, and Debra. K. Sullivan. “Hyper-Palatable Foods: Development of a Quantitative Definition and Application to the US Food System Database.” *Obesity*, 27(11): 1761-1768, November 2019. <https://pubmed.ncbi.nlm.nih.gov/31689013/>. Accessed August 2, 2023.
- 88 Juul, Filippa, Niyati Parekh, Euridice Martinez-Steele, et al. “Ultra-Processed Food Consumption Among US Adults from 2001 to 2018.” *The American Journal of Clinical Nutrition*, 115(1): 211-221, January 2022. <https://pubmed.ncbi.nlm.nih.gov/34647997/>. Accessed August 9, 2023.
- 89 Ibid.
- 90 Ansai, Nicolas, and Edwina A. Wambogo. “Fruit and Vegetable Consumption Among Adults in the United States, 2015–2018.” *National Center of Health Statistics, Data Brief No. 397*, February 2021. <https://www.cdc.gov/nchs/products/databriefs/db397.htm>. Accessed July 11, 2023.
- 91 Reynolds, Sharon. “Highly Processed Foods Form Bulk of U.S. Youths’ Diets.” *National Institutes of Health, NIH Research Matters*, August 2021. <https://www.nih.gov/news-events/nih-research-matters/highly-processed-foods-form-bulk-us-youths-diets>. Accessed August 9, 2023.
- 92 Hearne, Shelley A., Laura M. Segal, Patti J. Unruh, et al. *F as in Fat: How Obesity Policies Are Failing in America*. Washington, DC: Trust for America’s Health, October 2004. <https://www.tfah.org/report-details/fas-in-fat-2004/>. Accessed August 9, 2023.
- 93 Grants.gov. “CDC-RFA-DP18-1807: State Physical Activity and Nutrition Program: Department of Health and Human Services: Centers for Disease Control—NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=299540>. Accessed August 9, 2023.
- 94 Grants.gov. “CDC-RFA-DP-23-0012: The State Physical Activity and Nutrition Program (SPAN): Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342954>. Accessed August 9, 2023.
- 95 Division of Nutrition, Physical Activity, and Obesity. “State and Local Programs: Funding by State.” Centers for Disease Control and Prevention, December 14, 2022. <https://www.cdc.gov/nccdpdp/dnpao/state-local-programs/funding.html>. Accessed August 9, 2023.
- 96 Messina, Kristin. “Rudd Center: New Study Finds Fast-Food Companies Spending More on Advertising, Disproportionately Targeting Black and Latino Youth.” *UConn Today*, June 17, 2021. <https://today.uconn.edu/2021/06/rudd-center-new-study-finds-fast-food-companies-spending-more-on-advertising-disproportionately-targeting-black-and-latino-youth/#>. Accessed August 9, 2023.

- 97 Kyle, Theodore K., Emily J. Dhurandhar, and David B. Allison. "Regarding Obesity as a Disease: Evolving Policies and Their Implications." *Endocrinology and Metabolism Clinics of North America*, 45(3): 511-520, 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4988332/>. Accessed August 9, 2023.
- 98 Child Nutrition and WIC Reauthorization Act of 2004, Public Law 108-265. <https://www.congress.gov/108/plaws/publ265/PLAW-108publ265.pdf>. Accessed August 9, 2023.
- 99 Davis, Elaine M., Karen Weber Cullen, Kathleen B. Watson, et al. "A Fresh Fruit and Vegetable Program Improves High School Students' Consumption of Fresh Produce." *Journal of the American Dietetic Association*, 109(7): 1227-1231, 2009. <https://doi.org/10.1016/j.jada.2009.04.017>. Accessed August 9, 2023.
- 100 Bartlett, Susan, Lauren Olsho, Jacob Klerman, et al. *Evaluation of the Fresh Fruit and Vegetable Program (FFVP): Final Evaluation Report, 2013*. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service. <https://fns-prod.azureedge.us/sites/default/files/FFVP.pdf>. Accessed August 9, 2023.
- 101 Qian, Yiwei, Rodolfo M. Nayga Jr., Michael R. Thomsen, et al. "The Effect of the Fresh Fruit and Vegetable Program on Childhood Obesity." *Applied Economic Perspectives and Policy*, 38(2): 260-275, 2016. <https://doi.org/10.1093/aep/ppv017>. Accessed August 9, 2023.
- 102 Korenman, Sanders, Kristin S. Abner, Robert Kaestner, et al. "The Child and Adult Care Food Program and the Nutrition of Preschoolers." *Early Childhood Research Quarterly*, 28(2): 325-336, 2013. <https://www.sciencedirect.com/science/article/abs/pii/S0885200612000750?via%3Dihub>. Accessed August 9, 2023.
- 103 "History of Safe Routes to School." Safe Routes Partnership. <https://www.saferoutespartnership.org/safe-routes-school/101/history>. Accessed August 9, 2023.
- 104 "Benefits of Safe Routes to School." Safe Routes Partnership. <https://www.saferoutespartnership.org/safe-routes-school/101/benefits>. Accessed August 9, 2023.
- 105 Food and Drug Administration. "Food Labeling: Trans." *Federal Register*, 68: 41433, July 11, 2003. <https://www.federalregister.gov/documents/2003/07/11/03-17525/food-labeling-trans>. Accessed August 9, 2023.
- 106 Phurrough, Steve, Marcel E. Salive, Ross J. Brechner, et al. "Decision Memo for Bariatric Surgery for the Treatment of Morbid Obesity (CAG-00250R)." *National Coverage Determination*, No. 100-3, Centers for Medicare and Medicaid Services, February 21, 2006. <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=57&ncdver=5&keyword-type=starts&keyword=bari&bc=0>. Accessed August 9, 2023.
- 107 Panagiotou, Orestis A., Georgios Markozannes, Rishi Kowalski, et al. *Short- and Long-Term Outcomes after Bariatric Surgery in the Medicare Population*. Rockville, Maryland: Agency for Healthcare Research and Quality, 2018. <https://europepmc.org/article/nbk/nbk544890>. Accessed August 9, 2023.
- 108 Petrick, Anthony T. Jason E. Kuhn, David M. Parker, et al. "Bariatric Surgery Is Safe and Effective in Medicare Patients Regardless of Age: An Analysis of Primary Gastric Bypass and Sleeve Gastrectomy Outcomes." *Surgery for Obesity and Related Diseases*, 15(10): 1704-1711, 2019. <https://doi.org/10.1016/j.soard.2019.07.010>. Accessed August 9, 2023.
- 109 Food, Conservation, and Energy Act of 2008, Public Law 110-246. <https://www.congress.gov/110/plaws/publ246/PLAW-110publ246.pdf>. Accessed August 9, 2023.
- 110 Bartlett, Susan, Jacob Klerman, Lauren Olsho, et al. *Evaluation of the Healthy Incentives Pilot (HIP): Final Report*. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, September 2014. <https://fns-prod.azureedge.us/sites/default/files/ops/HIP-Final.pdf>. Accessed August 9, 2023.
- 111 Davis, Elaine M., Karen Weber Cullen, Kathleen B. Watson, et al. "A Fresh Fruit and Vegetable Program Improves High School Students' Consumption of Fresh Produce." *Journal of the American Dietetic Association*, 109(7): 1227-1231, 2009. <https://doi.org/10.1016/j.jada.2009.04.017>. Accessed August 9, 2023.
- 112 Bartlett, Susan, Lauren Olsho, Jacob Klerman, et al. *Evaluation of the Fresh Fruit and Vegetable Program (FFVP): Final Evaluation Report, 2013*. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service. <https://fns-prod.azureedge.us/sites/default/files/FFVP.pdf>. Accessed August 9, 2023.
- 113 Qian, Yiwei, Rodolfo M. Nayga Jr., Michael R. Thomsen, et al. "The Effect of the Fresh Fruit and Vegetable Program on Childhood Obesity." *Applied Economic Perspectives and Policy*, 38(2): 260-275, 2016. <https://doi.org/10.1093/aep/ppv017>. Accessed August 9, 2023.
- 114 U.S. Department of Agriculture, Food and Nutrition Service. "Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages." *Federal Register*, 72: 68965, December 6, 2007. <https://www.federalregister.gov/documents/2007/12/06/E7-23033/special-supplemental-nutrition-program-for-women-infants-and-children-wic-revisions-in-the-wic-food>. Accessed August 9, 2023.
- 115 Daepf, Madeleine I.G., Steven L. Gortmaker, Y. Claire Wang, et al. "WIC Food Package Changes: Trends in Childhood Obesity Prevalence." *Pediatrics*, 143(5): e20182841, 2019. <https://pediatrics.aappublications.org/content/early/2019/03/28/peds.2018-2841?versioned=true>. Accessed August 9, 2023.
- 116 Dietz, William H. "Better Diet Quality in the Healthy Hunger-Free Kids Act and WIC Package Reduced Childhood Obesity." *Pediatrics*, 147(4): e2020032375, April 2021. <https://doi.org/10.1542/peds.2020-032375>. Accessed August 9, 2023.
- 117 Children's Health Insurance Program Reauthorization Act of 2009, Public Law 111-3. <https://www.congress.gov/111/plaws/publ3/PLAW-111publ3.pdf>. Accessed August 9, 2023.
- 118 Centers for Disease Control and Prevention. "Childhood Obesity Research Demonstration (CORD) 1.0." Updated June 17, 2022. <https://www.cdc.gov/obesity/initiatives/cord/cord1.html>. Accessed August 9, 2023.
- 119 U.S. Government Accountability Office. *Childhood Obesity Research Demonstration: Efforts to Identify Effective Strategies for Low-Income Children*. Washington, DC: Government Accountability Office, GAO 20-30, October 2019. <https://www.gao.gov/assets/gao-20-30.pdf>. Accessed August 9, 2023.
- 120 The National Association of Chronic Disease Directors and Centers for Disease Control and Prevention. "Timeline for the National DPP – 1996 to 2016." *The National Diabetes Prevention Program Coverage Toolkit*. Updated July 25, 2023. <https://coveragetoolkit.org/about-national-dpp/timeline/>. Accessed August 9, 2023.

- 121 Centers for Disease Control and Prevention. “National Diabetes Prevention Program: About the National DPP.” Updated August 1, 2023. <https://www.cdc.gov/diabetes/prevention/about.htm>. Accessed August 9, 2023.
- 122 National Institute of Diabetes and Digestive and Kidney Diseases. “Diabetes Prevention Program (DPP).” Updated May 2022. <https://www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp>. Accessed August 9, 2023.
- 123 White House Office of the Press Secretary. “Executive Order 13545—President’s Council on Fitness, Sports, and Nutrition.” [Press Release] June 23, 2010. <https://obamawhitehouse.archives.gov/realitycheck/the-press-office/executive-order-presidents-council-fitness-sports-and-nutrition>. Accessed September 8, 2023.
- 124 Trust for America’s Health. “The Prevention and Public Health Fund: Preventing Disease and Reducing Long-Term Health Costs.” August 2022. https://www.tfah.org/wp-content/uploads/2022/08/PPHF_Background_August_2022.pdf. Accessed August 9, 2023.
- Patient Protection and Affordable Care Act, Public Law 111-148. <https://www.congress.gov/111/plaws/publ148/PLAW-111publ148.pdf>. Accessed August 9, 2023.
- 125 Jaffe, Susan. “Diabetes, Obesity, and the Affordable Care Act.” *The Lancet: Diabetes & Endocrinology*, 2(7): P543, 2014. [https://doi.org/10.1016/S2213-8587\(14\)70122-6](https://doi.org/10.1016/S2213-8587(14)70122-6). Accessed August 9, 2023.
- 126 Medicaid.gov. “Reducing Obesity.” <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/reducing-obesity/index.html>. Accessed August 9, 2023.
- 127 Rdesinski, Rebecca, Irina Chamine, Steele Valenzuela, et al. “Impact of the Affordable Care Act Medicaid Expansion on Weight Loss Among Community Health Center Patients with Obesity.” *The Annals of Family Medicine*, 21(Suppl. 1): 3731, 2023. https://www.annfam.org/content/21/Supplement_1/3731. Accessed August 9, 2023.
- 128 Petimar, Joshua, Fang Zhang, Eric B. Rimm, et al. “Changes in the Calorie and Nutrient Content of Purchased Fast Food Meals After Calorie Menu Labeling: A Natural Experiment.” *PLoS Medicine*, 18(7): e1003714, 2021. <https://doi.org/10.1371/journal.pmed.1003714>. Accessed August 9, 2023.
- 129 Healthy, Hunger-Free Kids Act of 2010. Public Law 111-296. <https://www.congress.gov/111/plaws/publ296/PLAW-111publ296.pdf>. Accessed May 15, 2023.
- 130 Dietz, William H. “Better Diet Quality in the Healthy Hunger-Free Kids Act and WIC Package Reduced Childhood Obesity.” *Pediatrics*, 147(4): e2020032375, April 2021. <https://doi.org/10.1542/peds.2020-032375>. Accessed August 9, 2023.
- 131 Cohen, Juliana F.W., Amelie A. Hecht, Gabriella M. McLoughlin, et al. “Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review.” *Nutrients*, 13(3): 911, 2021. <https://doi.org/10.3390/nu13030911>. Accessed August 9, 2023.
- 132 U.S. Department of Agriculture, Food and Nutrition Service. “Nutrition Standards in the National School Lunch and School Breakfast Programs.” *Federal Register*, 77: 4087, January 26, 2012. <https://www.federalregister.gov/documents/2012/01/26/2012-1010/nutrition-standards-in-the-national-school-lunch-and-school-breakfast-programs>. Accessed August 9, 2023.
- 133 Dietz, William H. “Better Diet Quality in the Healthy Hunger-Free Kids Act and WIC Package Reduced Childhood Obesity.” *Pediatrics*, 147(4): e2020032375, April 2021. <https://doi.org/10.1542/peds.2020-032375>. Accessed August 9, 2023.
- 134 U.S. Department of Agriculture, Food and Nutrition Service. “National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010.” *Federal Register*, 78: 39067, June 28, 2013. <https://www.federalregister.gov/documents/2013/06/28/2013-15249/national-school-lunch-program-and-school-breakfast-program-nutrition-standards-for-all-foods-sold-in>. Accessed August 9, 2023.
- 135 Centers for Disease Control and Prevention. “High Obesity Program (2014-2018).” Updated April 9, 2020. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/hop-1809/past-program.html>. Accessed August 9, 2023.
- 136 Murriel, Ashleigh L., Sahra Kahin, Anu Pejavar, et al. “The High Obesity Program: Overview of the Centers for Disease Control and Prevention and Cooperative Extension Services Efforts to Address Obesity.” *Preventing Chronic Disease*, 17: E25, March 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7085913/>. Accessed August 9, 2023.
- 137 U.S. Department of Agriculture. “Healthy Food Financing Initiative.” <https://www.rd.usda.gov/about-rd/initiatives/healthy-food-financing-initiative>. Accessed August 9, 2023.
- 138 Agricultural Act of 2014, Public Law 113-79. <https://www.congress.gov/bill/113th-congress/house-bill/2642/text>. Accessed August 9, 2023.
- 139 Gretchen Swanson Center for Nutrition, GusNIP NTAE Center Project Lead. *Gus Schumacher Nutrition Incentive: Program Training, Technical Assistance, Evaluation, and Information Center (GusNIP NTAE): Impact Findings: Year 2: September 1, 2020 to August 31, 2021*. Omaha, NE: Gretchen Swanson Center for Nutrition, 2022. <https://www.nutritionincentivehub.org/media/fjohmr2n/gusnip-ntae-impact-findings-year-2.pdf>. Accessed August 9, 2023.
- 140 U.S. Office of Personnel Management. “FEHB Program Carrier Letter: Letter No. 2014-04.” March 20, 2014. <https://www.opm.gov/healthcare-insurance/healthcare/carriers/2014/2014-04.pdf>. Accessed August 9, 2023.
- 141 Child Care and Development Block Grant Act of 2014, Public Law 113-186. <https://www.congress.gov/113/plaws/publ186/PLAW-113publ186.pdf>. Accessed August 9, 2023.
- 142 Lee, Matthew M., Jennifer Falbe, Dean Schillinger, et al. “Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax.” *American Journal of Public Health*, 109(4): 637-639, 2019. <https://ajph.aphapublications.org/doi/10.2105/AJPH.2019.304971>. Accessed August 9, 2023.
- 143 Ibid.
- 144 “Every Student Succeeds Act.” Public Law 114-95. <https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>. Accessed August 9, 2023.
- 145 Food and Drug Administration. “Food Labeling: Revision of the Nutrition and Supplement Facts Labels.” *Federal Register*, 81: 33741, May 27, 2016. <https://www.federalregister.gov/documents/2016/05/27/2016-11867/food-labeling-revision-of-the-nutrition-and-supplement-facts-labels>. Accessed August 9, 2023.

- 146 Kim, Elizabeth Jiyeon, Brenna Ellison, Brandon McFadden, et al. "Consumers' Decisions to Access or Avoid Added Sugars Information on the Updated Nutrition Facts Label." *PLoS One*, 16(3): e02493552021. <https://doi.org/10.1371/journal.pone.0249355>. Accessed August 9, 2023.
- 147 Food and Drug Administration. "Food Labeling: Revision of the Nutrition and Supplement Facts Labels." *Federal Register*, 81: 33741, May 27, 2016. <https://www.federalregister.gov/documents/2016/05/27/2016-11867/food-labeling-revision-of-the-nutrition-and-supplement-facts-labels>. Accessed August 9, 2023.
- 148 Korenman, Sanders, Kristin S. Abner, Robert Kaestner, et al. "The Child and Adult Care Food Program and the Nutrition of Preschoolers." *Early Childhood Research Quarterly*, 28(2): 325-336, 2013. <https://www.sciencedirect.com/science/article/abs/pii/S0885200612000750?via%3Dihub>. Accessed August 9, 2023.
- 149 U.S. Department of Agriculture, Food and Nutrition Service. "Local School Wellness Policy Implementation Under the Healthy, Hunger-Free Kids Act of 2010." *Federal Register*, 81: 50151, July 29, 2016. <https://www.federalregister.gov/documents/2016/07/29/2016-17230/local-school-wellness-policy-implementation-under-the-healthy-hunger-free-kids-act-of-2010>. Accessed August 9, 2023.
- 150 White, Justin S., Sanjay Basu, Scott Kaplan, et al. "Evaluation of the Sugar-Sweetened Beverage Tax in Oakland, United States, 2015–2019: A Quasi-Experimental and Cost-Effectiveness Study." *PLoS Medicine*, 20(4): e1004212, 2023. <https://doi.org/10.1371/journal.pmed.1004212>. Accessed August 9, 2023.
- 151 Ibid.
- 152 Petimar, Joshua, Laura A. Gibson, Jiali Yan, et al. "Sustained Impact of the Philadelphia Beverage Tax on Beverage Prices and Sales Over 2 Years." *American Journal of Preventive Medicine*, 62(6): 921-929, 2022. <https://doi.org/10.1016/j.amepre.2021.12.012>. Accessed August 9, 2023.
- 153 Ibid.
- 154 Krieger, Jim. "Sweet Success: Seattle's Sugary Drink Tax Is Reducing Health Inequities." *The Seattle Times*, February 3, 2023. <https://www.seattletimes.com/opinion/sweet-success-seattles-sugary-drink-tax-is-reducing-health-inequities/>. Accessed August 9, 2023.
- 155 Powell, Lisa M., Julien Leider, and Vanessa M. Oddo. "Evaluation of Changes in Grams of Sugar Sold After the Implementation of the Seattle Sweetened Beverage Tax." *JAMA Network Open*, 4(11): e2132271, 2021. <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2785907>. Accessed August 9, 2023.
- 156 Silver, Lynn D., Alisa A. Padon, Libo Li, et al. "Changes in Sugar-Sweetened Beverage Consumption in the First Two Years (2018–2020) of San Francisco's Tax: A Prospective Longitudinal Study." *PLoS Global Public Health*, 3(1): e0001219, 2023. <https://doi.org/10.1371/journal.pgph.0001219>. Accessed August 9, 2023.
- 157 Ibid.
- 158 Food and Drug Administration. "Food Labeling; Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments; Extension of Compliance Date; Request for Comments." *Federal Register*, 82: 20825, May 4, 2017. <https://www.federalregister.gov/documents/2017/05/04/2017-09029/food-labeling-nutrition-labeling-of-standard-menu-items-in-restaurants-and-similar-retail-food>. Accessed August 9, 2023.
- 159 Petimar, Joshua, Fang Zhang, Eric B. Rimm, et al. "Changes in the Calorie and Nutrient Content of Purchased Fast Food Meals After Calorie Menu Labeling: A Natural Experiment." *PLoS Medicine*, 18(7): e1003714, 2021. <https://doi.org/10.1371/journal.pmed.1003714>. Accessed August 9, 2023.
- 160 Agriculture Improvement Act of 2018, Public Law 115–334. <https://www.congress.gov/115/plaws/publ334/PLAW-115publ334.pdf>. Accessed August 9, 2023.
- 161 U.S. Department of Agriculture, National Institute of Food and Agriculture. "Gus Schumacher Nutrition Incentive Program." <https://www.nifa.usda.gov/grants/programs/gus-schumacher-nutrition-incentive-program>. Accessed August 9, 2023.
- 162 Gretchen Swanson Center for Nutrition, GusNIP NTAE Center Project Lead. *Gus Schumacher Nutrition Incentive: Program Training, Technical Assistance, Evaluation, and Information Center (GusNIP NTAE): Impact Findings: Year 2: September 1, 2020 to August 31, 2021*. Omaha, NE: Gretchen Swanson Center for Nutrition, 2022. <https://www.nutritionincentivehub.org/media/fjohmr2n/gusnip-ntae-impact-findings-year-2.pdf>. Accessed August 9, 2023.
- 163 Centers for Medicare and Medicaid Services. "Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule and Other Revisions to Part B for CY 2017; Medicare Advantage Bid Pricing Data Release; Medicare Advantage and Part D Medical Loss Ratio Data Release; Medicare Advantage Provider Network Requirements; Expansion of Medicare Diabetes Prevention Program Model; Medicare Shared Savings Program Requirements." *Federal Register*, 81: 80170, November 15, 2016. <https://www.federalregister.gov/documents/2016/11/15/2016-26668/medicare-program-revisions-to-payment-policies-under-the-physician-fee-schedule-and-other-revisions>. Accessed August 9, 2023.
- 164 Hoerger, Thomas J., Sara Jacobs, Melissa Romaire, et al. *Evaluation of the Medicare Diabetes Prevention Program: Second Evaluation Report*. Washington, DC: RTI International, November 2022. <https://innovation.cms.gov/data-and-reports/2022/mdpp-2ndannevalrpt>. Accessed August 9, 2023.
- 165 U.S. Department of Agriculture, Food and Nutrition Service. "SNAP Online Purchasing Pilot." Updated August 4, 2022. <https://www.fns.usda.gov/snap/online-purchasing-pilot>. Accessed August 9, 2023.
- 166 U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. Washington, DC: U.S. Department of Agriculture, 9th Edition, December 2020. <https://www.dietaryguidelines.gov/>. Accessed August 9, 2023.
- 167 U.S. Department of Agriculture, Food and Nutrition Service. "Child Nutrition COVID-19 Waivers." Updated July 12, 2022. <https://www.fns.usda.gov/disaster-assistance/child-nutrition-covid-19-waivers>. Accessed August 9, 2023.
- 168 U.S. Department of Agriculture, Food and Nutrition Service. "WIC COVID-19 Waivers." Updated February 21, 2023. <https://www.fns.usda.gov/disaster-assistance/wic-covid-19-waivers>. Accessed August 9, 2023.
- 169 U.S. Department of Agriculture, Food and Nutrition Service. "SNAP COVID-19 Waivers." Updated February 21, 2023. <https://www.fns.usda.gov/disaster-assistance/snap-covid-19-waivers>. Accessed August 9, 2023.

- 170 Infrastructure Investment and Jobs Act, Public Law 117-58. <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>. Accessed August 9, 2023.
- 171 American Rescue Plan Act of 2021, Public Law 117-2. <https://www.congress.gov/bill/117th-congress/house-bill/1319/text>. Accessed August 9, 2023.
- 172 Ritchie, Lorrene, Danielle Lee, Celeste Felix, et al. “Multi-State WIC Participant Survey: Cash Value Benefit Increase During COVID.” The National WIC Association and Nutrition Policy Institute, University of California Division of Agriculture and Natural Resources, March 2022. <https://s3.amazonaws.com/aws.upl/nwica.org/nwa-multi-state-cvb-report-march-2022.pdf>. Accessed August 9, 2023.
- 173 U.S. Department of Agriculture, Food and Nutrition Service. “USDA Modernizes the Thrifty Food Plan, Updates SNAP Benefits: First Update in More Than 45 Years Reflects Current Cost Realities.” August 16, 2021. <https://www.fns.usda.gov/news-item/usda-0179.21>. Accessed August 9, 2023.
- 174 Garcia, Karen, and Jon Healey. “Free for All California Public School Students: At Least Two Meals a Day.” *Los Angeles Times*, August 15, 2022. <https://www.latimes.com/california/story/2022-08-15/free-for-all-california-public-school-students-at-least-two-meals-a-day>. Accessed August 9, 2023.
- 175 Feinberg, Robbie. “Maine Makes Free School Lunches Permanent After Federal Funding Ends.” *NPR*, August 31, 2022. <https://www.npr.org/2022/08/31/1120223479/maine-makes-free-school-lunches-permanent-after-federal-funding-ends>. Accessed August 9, 2023.
- 176 Daley, John. “Universal Free Lunch Ballot Measure Passes Easily in Colorado.” *NPR*, November 9, 2022. <https://www.npr.org/2022/11/09/1134832752/colorado-free-school-lunch-results-measure-mid-terms>. Accessed August 9, 2023.
- 177 Cohen, Juliana F.W., Amelie A. Hecht, Gabriella M. McLoughlin, et al. “Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review.” *Nutrients*, 13(3): 911, 2021. <https://doi.org/10.3390/nu13030911>. Accessed August 9, 2023.
- 178 U.S. Office of Personnel Management. “FEHB Program Carrier Letter: Letter Number 2022-03.” February 17, 2022. <https://www.opm.gov/healthcare-insurance/healthcare/carriers/2022/2022-03.pdf>. Accessed August 9, 2023.
- 179 Centers for Medicare and Medicaid Services. “All-State Medicaid and CHIP Call: December 6, 2022.” <https://www.medicare.gov/resources-for-states/downloads/covid19allstatecall12062022.pdf>. Accessed May 16, 2023.
- 180 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 181 LeBlanc, Steve. “Massachusetts joins a small but growing number of states adopting universal free school meals.” *Associated Press*, August 9, 2023. <https://www.boston.com/news/schools/2023/08/09/massachusetts-joins-a-small-but-growing-number-of-states-adopting-universal-free-school-meals/>. Accessed August 15, 2023.
- 182 Cohen, Juliana F.W., Amelie A. Hecht, Gabriella M. McLoughlin, et al. “Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review.” *Nutrients*, 13(3): 911, 2021. <https://doi.org/10.3390/nu13030911>. Accessed August 9, 2023.
- 183 Fryar, Cheryl D., Margaret D. Carroll, and Cynthia L. Ogden. “Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960–1962 Through 2009–2010.” Centers for Disease Control and Prevention, National Center for Health Statistics, September 2012. https://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.htm. Accessed August 9, 2023.
- 184 Hales, Craig M., Cheryl D. Fryar, Margaret D. Carroll, et al. “Trends in Obesity and Severe Obesity Prevalence in US Youth and Adults by Sex and Age, 2007–2008 to 2015–2016.” *JAMA*, 319(16): 1723-1725, April 14, 2018. <https://jamanetwork.com/journals/jama/fullarticle/2676543>. Accessed August 9, 2023.
- 185 Fryar, Cheryl D., and Cynthia L. Ogden. “Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018.” National Center for Health Statistics Data Brief, 360, February 2020. <https://www.cdc.gov/nchs/data/databriefs/db360-h.pdf>. Accessed August 9, 2023.
- 186 Trust for America’s Health. “State and Regional Data from the Behavioral Risk Factor Surveillance System.” https://www.tfah.org/wp-content/uploads/2021/09/BRFSS_States2011_2020.pdf. Accessed August 9, 2023.
- 187 Stierman, Bryan, Joseph Afful, Maraget D. Carroll, et al. “National Health and Nutrition Examination Survey 2017–March 2020 Pre-pandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes.” *National Center for Health Statistics, National Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 188 National Center for Health Statistics, Centers for Disease Control and Prevention. “National Health and Nutrition Examination Survey: NHANES 2015–2016 Overview.” <https://www.cdc.gov/nchs/nhanes/continuousnhanes/Overview.aspx?BeginYear=2015>. Accessed August 9, 2023.
- 189 Centers for Disease Control and Prevention. “Behavioral Risk Factor Surveillance System: Annual Survey Data.” https://www.cdc.gov/brfss/annual_data/annual_data.htm. Accessed August 9, 2023.
- 190 Ward, Zachary J., Michael W. Long, Stephen C. Resch, et al. “Redrawing the US Obesity Landscape: Bias-Corrected Estimates of State-Specific Adult Obesity Prevalence.” *PLoS One*, March 2016. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150735>. Accessed August 9, 2023.
- 191 Yun, S., B.P. Zhu, W. Black, and R.C. Brownson. “A Comparison of National Estimates of Obesity Prevalence from the Behavioral Risk Factor Surveillance System and the National Health and Nutrition Examination Survey.” *International Journal of Obesity*, 30(1): 164-170, 2006. <https://www.ncbi.nlm.nih.gov/pubmed/16231026>. Accessed August 9, 2023.
- 192 Kumanyika, Shiriki. “A Health Equity Approach to Obesity Efforts: A Workshop.” National Academies of Sciences, Engineering, and Medicine Meeting, April 1, 2019. <https://nap.nationalacademies.org/catalog/25409/a-health-equity-approach-to-obesity-efforts-proceedings-of-a>. Accessed August 9, 2023.

- 193 Stierman, Bryan, Joseph Afful, Maraget D. Carroll, et al. "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes." *National Center for Health Statistics, National Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 194 National Center for Health Statistics. "Percentage of Obesity for Adults Aged 18 and Over, United States, 2019–2020." *National Health Interview Survey*. https://www.cdc.gov/NHISDataQueryTool/SHS_adult/index.html. Accessed August 9, 2023.
- 195 Editors. "Screening Thresholds: One Size Does Not Fit All." *The Lancet Diabetes & Endocrinology*, 6(4): 259, 2018. <https://pubmed.ncbi.nlm.nih.gov/29571505/>. Accessed August 9, 2023.
- 196 Centers for Disease Control and Prevention. "Diabetes and Asian Americans." Updated November 21, 2022. <https://www.cdc.gov/diabetes/library/spotlights/diabetes-asian-americans.html>. Accessed August 9, 2023.
- 197 National Center for Health Statistics. "Percentage of Obesity for Adults Aged 18 and Over, United States, 2019–2020." *National Health Interview Survey*. https://www.cdc.gov/NHISDataQueryTool/SHS_adult/index.html. Accessed August 9, 2023.
- 198 Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. "HHS Poverty Guidelines for 2023." <https://aspe.hhs.gov/poverty-guidelines>. Accessed August 9, 2023.
- 199 Stierman, Bryan, Joseph Afful, Maraget D. Carroll, et al. "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes." *National Center for Health Statistics, National Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 200 Lundeen, Elizabeth A., Sohyun Park, Liping Pan, et al. "Obesity Prevalence Among Adults Living in Metropolitan and Nonmetropolitan Counties—United States, 2016." *Morbidity and Mortality Weekly Report*, 67: 653–658, 2018. <http://dx.doi.org/10.15585/mmwr.mm6723a1>. Accessed August 9, 2023.
- 201 Hales, Craig M., Cheryl D. Fryar, Margaret D. Carroll, et al. "Differences in Obesity Prevalence by Demographic Characteristics and Urbanization Level Among Adults in the United States, 2013–2016." *JAMA*, 2319(23): 2419–2429, 2018. doi:10.1001/jama.2018.7270. Accessed August 9, 2023.
- 202 Fryar, Cheryl D., Margaret D. Carroll, and Joseph Afful. "Prevalence of Overweight, Obesity, and Severe Obesity Among Children and Adolescents Aged 2–19 Years: United States, 1963–1965 Through 2017–2018." *National Center for Health Statistics Health E-Stats*, 2020. <https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/overweight-obesity-child-H.pdf>. Accessed August 9, 2023.
- 203 Stierman, Bryan, Joseph Afful, Maraget D. Carroll, et al. "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes." *National Center for Health Statistics, National Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 204 The income requirement for WIC eligibility varies by state. For more information, see U.S. Department of Agriculture, Food and Nutrition Service. "WIC Eligibility Requirements." Updated April 4, 2023. <https://www.fns.usda.gov/wic/wic-eligibility-requirements>. Accessed August 9, 2023.
- 205 Sherry, Bettylou, Maria Elena Jeffers, and Laurence M Grummer-Strawn. "Accuracy of Adolescent Self-Report of Height and Weight in Assessing Overweight Status: A Literature Review." *Archives of Pediatrics & Adolescent Medicine*, 161(12): 1154–1161, 2007. <https://www.ncbi.nlm.nih.gov/pubmed/18056560>. Accessed August 9, 2023.
- 206 Division of Adolescent and School Health, Centers for Disease Control and Prevention. "YRBSS Frequently Asked Questions." Updated April 27, 2023. <https://www.cdc.gov/healthyyouth/data/yrbs/faq.htm>. Accessed August 9, 2023.
- 207 Fryar, Cheryl D., Margaret D. Carroll, and Joseph Afful. "Prevalence of Overweight, Obesity, and Severe Obesity Among Children and Adolescents Aged 2–19 Years: United States, 1963–1965 Through 2017–2018." *National Center for Health Statistics Health E-Stats*, 2020. <https://www.cdc.gov/nchs/data/hestat/obesity-child-17-18/overweight-obesity-child-H.pdf>. Accessed August 9, 2023.
- 208 Stierman, Bryan, Joseph Afful, Maraget D. Carroll, et al. "National Health and Nutrition Examination Survey 2017–March 2020 Prepandemic Data Files—Development of Files and Prevalence Estimates for Selected Health Outcomes." *National Center for Health Statistics, National Health Statistics Reports*, 158, June 2021. <https://stacks.cdc.gov/view/cdc/106273>. Accessed August 9, 2023.
- 209 Kline, Nicole, Polina Zvavitch, Kathy Wroblewska, et al. *WIC Participant and Program Characteristics 2020*. Washington, DC: U.S. Department of Agriculture, Food and Nutrition Service, February 2022. <https://fns-prod.azureedge.us/sites/default/files/resource-files/WICPC2020-1.pdf>. Accessed August 9, 2023.
- 210 Kline, Nicole, Polina Zvavitch, Kathy Wroblewska, et al. *WIC Participant and Program Characteristics 2020: Appendices*. U.S. Department of Agriculture, Food and Nutrition Service, February 2022. <https://fns-prod.azureedge.us/sites/default/files/resource-files/WICPC2020-Appendix.pdf>. Accessed August 9, 2023.
- 211 Data Resource Center for Child and Adolescent Health. "The National Survey of Children's Health (2016-present)." <https://www.childhealthdata.org/browse/survey>. Accessed August 9, 2023.
- 212 Division of Adolescent and School Health, Centers for Disease Control and Prevention. "YRBS Explorer: Explore Youth Risk Behavior Survey Questions—United States, 2019." <https://yrbs-explorer.services.cdc.gov/#/>. Accessed August 9, 2023.
- 213 Centers for Disease Control and Prevention. "1991–2021 High School Youth Risk Behavior Survey Data." <https://nccd.cdc.gov/youthonline/App/>. Accessed August 9, 2023.
- 214 World Health Organization. "WHO Calls on Countries to Tax Sugar-Sweetened Beverages to Save Lives." December 13, 2022. <https://www.who.int/news/item/13-12-2022-who-calls-on-countries-to-tax-sugar-sweetened-beverages-to-save-lives>. Accessed August 9, 2023.
- 215 Andreyeva, Tatiana, Keith Marple, Samantha Marinello, et al. "Outcomes Following Taxation of Sugar-Sweetened Beverages: A Systematic Review and Meta-analysis." *JAMA Network Open*, 5(6): e2215276, 2022. <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2792842>. Accessed August 9, 2023.

- 216 Roache, Sarah A., and Lawrence O. Gostin. "The Untapped Power of Soda Taxes: Incentivizing Consumers, Generating Revenue, and Altering Corporate Behavior." *International Journal of Health Policy and Management*, 6(9): 489-493, September 1, 2017. https://www.ijhpm.com/article_3376.html. Accessed August 9, 2023.
- 217 World Health Organization. "WHO Calls on Countries to Tax Sugar-Sweetened Beverages to Save Lives." December 13, 2022. <https://www.who.int/news/item/13-12-2022-who-calls-on-countries-to-tax-sugar-sweetened-beverages-to-save-lives>. Accessed August 9, 2023.
- 218 Obesity Hub Network. "Countries That Have Taxes on Sugar-Sweetened Beverages (SSBs)." <https://www.obesityevidencehub.org.au/collections/prevention/countries-that-have-implemented-taxes-on-sugar-sweetened-beverages-ssbs>. Accessed August 9, 2023.
- 219 Roache, Sarah A., and Lawrence O. Gostin. "The Untapped Power of Soda Taxes: Incentivizing Consumers, Generating Revenue, and Altering Corporate Behavior." *International Journal of Health Policy and Management*, 6(9): 489-493, September 1, 2017. https://www.ijhpm.com/article_3376.html. Accessed August 9, 2023.
- 220 World Health Organization. "WHO Calls on Countries to Tax Sugar-Sweetened Beverages to Save Lives." December 13, 2022. <https://www.who.int/news/item/13-12-2022-who-calls-on-countries-to-tax-sugar-sweetened-beverages-to-save-lives>. Accessed August 9, 2023.
- 221 Ibid.
- 222 Centers for Disease Control and Prevention. "Nutrition: Get the Facts: Sugar-Sweetened Beverages and Consumption." Updated April 11, 2022. <https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html>. Accessed August 9, 2023.
- 223 Gortmaker, Steven L., Y. Claire Wang, Michael W. Long, et al. "Three Interventions that Reduce Childhood Obesity Are Projected to Save More Than They Cost to Implement." *Health Affairs*, 34(11): 1932-1939, November 2015. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0631>. Accessed August 9, 2023.
- 224 The Urban Institute. "Soda Taxes." <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/soda-taxes>. Accessed August 9, 2023.
- 225 Lee, Matthew M., Jennifer Falbe, Dean Schillinger, et al. "Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax." *American Journal of Public Health*, 109(4): 637-639, 2019. <https://ajph.aphapublications.org/doi/10.2105/AJPH.2019.304971>. Accessed April 12, 2023.
- 226 White, Justin S., Sanjay Basu, Scott Kaplan, et al. "Evaluation of the Sugar-Sweetened Beverage Tax in Oakland, United States, 2015–2019: A Quasi-Experimental and Cost-Effectiveness Study." *PLoS Medicine*, 20(4): e1004212, 2023. <https://doi.org/10.1371/journal.pmed.1004212>. Accessed August 9, 2023.
- 227 Petimar, Joshua, Laura A. Gibson, Jiali Yan, et al. "Sustained Impact of the Philadelphia Beverage Tax on Beverage Prices and Sales Over 2 Years." *American Journal of Preventive Medicine*, 62(6): 921-929, 2022. <https://doi.org/10.1016/j.amepre.2021.12.012>. Accessed August 9, 2023.
- 228 Powell, Lisa M., Julien Leider, and Vanessa M. Oddo. "Evaluation of Changes in Grams of Sugar Sold After the Implementation of the Seattle Sweetened Beverage Tax." *JAMA Network Open*, 4(11): e2132271, 2021. <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2785907>. Accessed August 9, 2023.
- 229 Silver, Lynn D., Alisa A. Padon, Libo Li, et al. "Changes in Sugar-Sweetened Beverage Consumption in the First Two Years (2018–2020) of San Francisco's Tax: A Prospective Longitudinal Study." *PLoS Global Public Health*, 3(1): e0001219, 2023. <https://doi.org/10.1371/journal.pgph.0001219>. Accessed August 9, 2023.
- 230 Young, Samantha. "Another Soda Tax Bill Dies. Another Win for Big Soda." *KFF Health News*, April 21, 2021. <https://www.healthleadersmedia.com/strategy/another-soda-tax-bill-dies-another-win-big-soda>. Accessed August 9, 2023.
- 231 White, Jeremy B. "Is Big Soda Winning the Soft Drink Wars?" *Politico*, August 13, 2019. <https://www.politico.com/agenda/story/2019/08/13/soda-tax-california-public-health-000940>. Accessed August 9, 2023.
- 232 Dewey, Caitlin. "Why Chicago's Soda Tax Fizzled After Two Months—And What It Means for the Anti-Soda Movement." *The Washington Post*, October 10, 2017. <https://www.washingtonpost.com/news/wonk/wp/2017/10/10/why-chicagos-soda-tax-fizzled-after-two-months-and-what-it-means-for-the-anti-soda-movement/>. Accessed August 9, 2023.
- 233 Pierson, Lacie. "WV Legislature Completes Work on Soda Tax Repeal." *Charleston Gazette-Mail*, March 12, 2022. https://www.wvgazette.com/news/legislative_session/wv-legislature-completes-work-on-soda-tax-repeal/article_034c2d2e-6cba-5e4c-980e-fc39337547fa.html. Accessed August 9, 2023.
- 234 Editors. "In 1st Move as Minister, Smotrich Orders Taxes on Plasticware, Sugary Drinks Nixed." *The Times of Israel*, January 1, 2023. <https://www.timesofisrael.com/in-1st-move-as-minister-smotrich-orders-taxes-on-plasticware-sugary-drinks-nixed/>. Accessed August 9, 2023.
- 235 Reinvestment Fund. "America's Healthy Food Financing Initiative." <https://www.investinginfood.com/>. Accessed August 9, 2023.
- 236 U.S. Department of Agriculture. "Healthy Food Financing Initiative." <https://www.rd.usda.gov/about-rd/initiatives/healthy-food-financing-initiative>. Accessed August 9, 2023.
- 237 Ibid.
- 238 Reinvestment Fund. "Reinvestment Fund Awards \$22.6 Million to Improve Healthy Food Access in Underserved Communities." June 9, 2022. <https://www.investinginfood.com/2021-awards-announcement/>. Accessed August 9, 2023.
- 239 Ibid.
- 240 Groundwork Northeast Revitalization Group. "Food Sovereignty." <https://www.northeastkck.org/food-sovereignty>. Accessed August 9, 2023.
- 241 Reinvestment Fund. "Reinvestment Fund Awards \$22.6 Million to Improve Healthy Food Access in Underserved Communities." June 9, 2022. <https://www.investinginfood.com/2021-awards-announcement/>. Accessed August 9, 2023.
- 242 Manuel's Food Market. "Manuel's Awarded HFFI Grant." <https://www.manuelsfoodmarket.com/blog/healthy-food-financing-initiative>. Accessed August 9, 2023.

- 243 Reinvestment Fund. “Reinvestment Fund Awards \$22.6 Million to Improve Healthy Food Access in Underserved Communities.” June 9, 2022. <https://www.investinginfood.com/2021-awards-announcement/>. Accessed August 9, 2023.
- 244 Local Farm Co-op. “The Local Farm Cooperative: Selma, Alabama.” <https://www.thelocal.coop/the-farm>. Accessed August 9, 2023.
- 245 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 246 Representative Barbara Lee, H.R. 1509: Healthy Food Financing Initiative Reauthorization Act of 2023, Introduced March 9, 2023. <https://www.congress.gov/118/bills/hr1509/BILLS-118hr1509ih.pdf>. Accessed August 9, 2023.
- 247 Sequeira, Robbie. “In Hunts Point Visit, Gillibrand Touts \$50M Effort to End Food Deserts and Insecurity.” *Bronx Times*, April 11, 2023. <https://www.bxtimes.com/in-hunts-points-visit-gillibrand-touts-50m-effort-to-end-food-deserts-and-insecurity/>. Accessed August 9, 2023.
- 248 Internal Revenue Service. *New Markets Tax Credit*. Washington, DC: Internal Revenue Service. Large and Mid-Size Business, Report No. LMSB-04-0510-016, May 2010. <https://www.irs.gov/pub/irs-utl/atgnmtc.pdf>. Accessed August 9, 2023.
- 249 Editors. “Food Bank Moves into Grand Junction Facility.” *The Business Times*, December 7, 2022. <https://thebusinesstimes.com/food-bank-moves-into-grand-junction-facility/>. Accessed August 9, 2023.
- 250 Community Development Financial Institutions Fund. “Treasury Announces \$5 Billion in New Markets Tax Credit Awards to Revitalize Low-Income and Distressed Communities.” October 28, 2022. <https://www.cdfifund.gov/programs-training/programs/new-markets-tax-credit/award-announcement-step>. Accessed August 9, 2023.
- 251 Conway, Matt. “Food Bank of Western Mass. Continues to Progress with New Headquarters.” *The Reminder*, January 11, 2023. <https://www.there minder.com/localnews/chicopee/food-bank-of-western-mass-continues-to-progress-wi/>. Accessed August 9, 2023.
- 252 Community Development Financial Institutions Fund. “Treasury Announces \$5 Billion in New Markets Tax Credit Awards to Revitalize Low-Income and Distressed Communities.” October 28, 2022. <https://www.cdfifund.gov/programs-training/programs/new-markets-tax-credit/award-announcement-step>. Accessed August 9, 2023.
- 253 Community Development Financial Institutions Fund. “NMTC Program Award Book CY 2021.” https://www.cdfifund.gov/sites/cdfi/files/2022-10/CY_2021_NMTC_Program_Award_Book%20_FINAL.pdf. Accessed August 9, 2023.
- 254 New Markets Tax Credit Coalition. “New Markets Tax Credit Fact Sheet.” <https://nmtccoalition.org/advocacy-toolkit/fact-sheet/>. Accessed August 9, 2023.
- 255 U.S. Office of Management and Budget. *Budget of the U.S. Government: Fiscal Year 2024*. Washington, DC: U.S. Office of Management and Budget, March 2023. https://www.whitehouse.gov/wp-content/uploads/2023/03/budget_fy2024.pdf. Accessed August 9, 2023.
- 256 New Markets Tax Credit Extension Act of 2023, S. 234, 118th Congress. <https://www.congress.gov/118/bills/s234/BILLS-118s234is.pdf>. Accessed August 9, 2023.
- 257 U.S. Department of the Treasury. “General Explanations of the Administration’s Fiscal Year 2024 Revenue Proposals.” March 9, 2023. <https://home.treasury.gov/system/files/131/General-Explanations-FY2024.pdf>. Accessed August 9, 2023.
- 258 University of Connecticut, Rudd Center for Food Policy & Obesity. “Food Marketing.” <https://uconnruddcenter.org/research/food-marketing/>. Accessed August 9, 2023.
- 259 Boyland, Emma, D. Thivel, and Artur Mazur. “Digital Food Marketing to Young People: A Substantial Public Health Challenge.” *Annals of Nutrition and Metabolism*, 76(1): 6-9, May 2020. <https://doi.org/10.1159/000506413>. Accessed August 9, 2023.
- 260 Boyland, Emma, Lauren McGale, and Michelle Maden. “Association of Food and Nonalcoholic Beverage Marketing with Children and Adolescents’ Eating Behaviors and Health: A Systematic Review and Meta-Analysis.” *JAMA Pediatrics*, 176(7): e221037, 2022. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2791859>. Accessed August 9, 2023.
- 261 Amra & Elma. “Food Marketing Statistics: 2023 Report.” <https://www.amraandelma.com/food-marketing-statistics/>. Accessed August 9, 2023.
- 262 Boyland, Emma, D. Thivel, and Artur Mazur. “Digital Food Marketing to Young People: A Substantial Public Health Challenge.” *Annals of Nutrition and Metabolism*, 76(1): 6-9, May 2020. <https://doi.org/10.1159/000506413>. Accessed August 9, 2023.
- 263 Zhang, Qi, Priyanka Patel, and Caitlin M. Lowery. “Protecting Low-Income Consumers in the Era of Digital Grocery Shopping: Implications for WIC Online Ordering.” *Nutrients*, 15(2): 390, 2023. <https://doi.org/10.3390/nu15020390>. Accessed August 9, 2023.
- 264 Boyland, Emma, D. Thivel, and Artur Mazur. “Digital Food Marketing to Young People: A Substantial Public Health Challenge.” *Annals of Nutrition and Metabolism*, 76(1): 6-9, May 2020. <https://doi.org/10.1159/000506413>. Accessed August 9, 2023.
- 265 Fleming-Milici, Frances, Lindsay Phaneuf, and Jennifer Harris. “Prevalence of Food and Beverage Brands in ‘Made-For-Kids’ Child-Influencer YouTube Videos: 2019–2020.” *Pediatric Obesity*, 18(4): e13008, 2023. <https://onlinelibrary.wiley.com/doi/10.1111/ijpo.13008>. Accessed August 9, 2023.
- 266 Ibid.
- 267 Coates, Anna E., Charlotte A. Hardman, Jason C.G. Halford, et al. “Social Media Influencer Marketing and Children’s Food Intake: A Randomized Trial.” *Pediatrics*, 143(4): e20182554, 2019. <https://doi.org/10.1542/peds.2018-2554>. Accessed August 9, 2023.
- 268 Harris, Jennifer L., Frances Fleming-Milici, Sally Mancini, et al. *Rudd Report: Increasing Disparities in Unhealthy Food Advertising Targeted to Hispanic and Black Youth*. Hartford, CT: University of Connecticut, Rudd Center for Food Policy & Obesity, January 2019. <chrome-extension://efaidnbmninnibpcapjpcgclefindmkaj/https://media.ruddcenter.uconn.edu/PDFs/TargetedMarketingReport2019.pdf>. Accessed August 9, 2023.
- 269 Harris, Jennifer L., Frances Fleming-Milici, Lindsay Phaneuf, et al. *Fast Food Facts 2021: Fast Food Advertising: Billions in Spending, Continued High Exposure by Youth*. Hartford, CT: University of Connecticut, Rudd Center for Food Policy & Obesity, June 2021. <https://media.ruddcenter.uconn.edu/PDFs/FACTS2021.pdf>. Accessed August 9, 2023.

- 270 Ibid.
- 271 Rummo, Pasquale E., Josh H. Arshonsky, Andrea L. Sharkey, et al. "Social Media Accounts of Food and Beverage Brands Have Disproportionately More Black and Hispanic Followers than White Followers." *Health Equity*, 5(1): 414-423, 2021. <https://www.liebertpub.com/doi/10.1089/heq.2020.0068>. Accessed August 9, 2023.
- 272 Ibid.
- 273 Harris, Jennifer L., Frances Fleming-Milici, Willie Frazier, et al. *Baby Food FACTS: Nutrition and Marketing of Baby and Toddler Food and Drinks*. Hartford, CT: University of Connecticut, Rudd Center for Food Policy & Obesity, January 2017. https://media.ruddcenter.uconn.edu/PDFs/BabyFoodFACTS_FINAL.pdf. Accessed August 9, 2023.
- 274 U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans*, 2020-2025. Washington, DC: U.S. Department of Agriculture, 9th Edition, December 2020. <https://www.dietaryguidelines.gov/>. Accessed August 9, 2023.
- 275 Duffy, Emily W., Lindsey Smith Taillie, Ana Paula C. Richter, et al. "Toddler Milk Perceptions and Purchases: The Role of Latino Ethnicity." *Public Health Nutrition*, 24(10): 2911-2919, 2021. <https://www.cambridge.org/core/journals/public-health-nutrition/article/toddler-milk-perceptions-and-purchases-the-role-of-latino-ethnicity/78DA5A81C322A82EF844EB110C387AE6>. Accessed August 9, 2023.
- 276 World Health Organization. "WHO/UNICEF Information Note: Cross-Promotion of Infant Formula and Toddler Milks." May 22, 2019. <https://www.who.int/publications/i/item/WHO-NMH-NHD-19.27>. Accessed August 9, 2023.
- 277 Muth, Natalie D., William H. Dietz, Sheela N. Magge, et al. "Public Policies to Reduce Sugary Drink Consumption in Children and Adolescents." *Pediatrics*, 143(4): e20190282, 2019. <https://pubmed.ncbi.nlm.nih.gov/30910915/>. Accessed August 9, 2023.
- 278 Wilking, Cara, Summer Moukalled, and Michele Polacsek. "Reducing Student Exposure to Digital Food and Beverage Marketing: Policy and Practice Recommendations." *Healthy Eating Research*, 2022. <https://healthyeatingresearch.org/wp-content/uploads/2022/07/Reducing-Student-Exposure-to-Digital-Marketing-Full-Report-7.27.22-FINAL.pdf>. Accessed August 9, 2023.
- 279 Public Health Advocacy Institute. "Letter from Mark A. Gottlieb, Executive Director, Public Health Advocacy Institute to Claudine Kavanaugh, Director, Officer of Nutrition and Food Labeling, at the U.S. Food and Drug Administration." February 10, 2023. https://uconnruddcenter.org/wp-content/uploads/sites/2909/2023/02/Follow-up-letter-FDA-2020-P-1718-Transition-Formula_final-submitted-2-10-23.pdf. Accessed August 9, 2023.
- 280 U.S. Department of Agriculture, Food and Nutrition Service. "About WIC—WIC at a Glance." Updated October 10, 2013. <https://www.fns.usda.gov/wic/about-wic-glance>. Accessed August 9, 2023.
- 281 U.S. Department of Agriculture, Food and Nutrition Service. "WIC Program Participation and Costs." Data as of April 14, 2023. <https://wicworks.fns.usda.gov/resources/wic-program-participation>. Accessed August 9, 2023.
- 282 Chaparro, M. Pia, Catherine M. Crespi, Christopher E. Anderson, et al. "The 2009 Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Food Package Change and Children's Growth Trajectories and Obesity in Los Angeles County." *American Journal of Clinical Nutrition*, 109(5): 1414-1421, 2019. <https://pubmed.ncbi.nlm.nih.gov/31011750/>. Accessed August 9, 2023.
- 283 Daepf, Madeleine I.G., Steven L. Gortmaker, Y. Claire Wang, et al. "WIC Food Package Changes: Trends in Childhood Obesity Prevalence." *Pediatrics*, 143(5): e20182841, 2019. <https://pediatrics.aappublications.org/content/early/2019/03/28/peds.2018-2841?versioned=true>. Accessed August 9, 2023.
- 284 Dietz, William H. "Better Diet Quality in the Healthy Hunger-Free Kids Act and WIC Package Reduced Childhood Obesity." *Pediatrics*, 147(4): e2020032375, April 2021. <https://doi.org/10.1542/peds.2020-032375>. Accessed August 9, 2023.
- 285 Healthy, Hunger-Free Kids Act of 2010. Pub. L. 111-296. <https://www.congress.gov/111/plaws/publ296/PLAW-111publ296.pdf>. Accessed August 9, 2023.
- 286 Senate Report 111-178 - Healthy - Healthy, Hunger-Free Kids Act of 2010, May 5, 2010. <https://www.congress.gov/111/crpt/srpt178/CRPT-111srpt178.pdf>. Accessed August 9, 2023.
- 287 U.S. Department of Agriculture, Food and Nutrition Service. *Fiscal Year 2021: WIC Breastfeeding Data: Local Agency Report*. Washington, DC: U.S. Department of Agriculture, November 2022. <https://fns-prod.azureedge.us/sites/default/files/resource-files/FY2021-BFDLA-Report.pdf>. Accessed August 9, 2023.
- 288 Gross, Susan M., Jennifer L. Lerman, Kristen M. Hurley, et al., "Breastfeeding Outcomes Associated with the Special Supplemental Nutrition Program for Women, Infants, and Children: A Systematic Review." *Academic Pediatrics*, 23(2): 244-260, 2023. <https://doi.org/10.1016/j.acap.2022.10.008>. Accessed August 9, 2023.
- 289 Food Research and Action Center. *Making WIC Work Better: Strategies to Reach More Women and Children and Strengthen Benefits Use*. Washington, DC: U.S. Department of Agriculture, May 2019. <https://frac.org/wp-content/uploads/Making-WIC-Work-Better-Full-Report.pdf>. Accessed August 9, 2023.
- 290 Sequeira, Simone, Rachel Edelman, and Deirdre Hirschtritt. "In Their Own Words: Parents Help Us Understand Barriers to Accessing WIC." *Code for America*, April 2022. <https://codeforamerica.org/news/understand-barriers-to-accessing-wic/>. Accessed August 9, 2023.
- 291 Food Research and Action Center. *Making WIC Work Better: Strategies to Reach More Women and Children and Strengthen Benefits Use*. Washington, DC: U.S. Department of Agriculture, May 2019. <https://frac.org/wp-content/uploads/Making-WIC-Work-Better-Full-Report.pdf>. Accessed August 9, 2023.
- 292 U.S. Department of Agriculture, Task Force on Supplemental Foods Delivery in the WIC Program. "Recommendations Report." September 30, 2021. <https://fns-prod.azureedge.us/sites/default/files/resource-files/Task-Force-Supp-Foods-Delivery-WIC-Recommend-Report.pdf>. Accessed August 9, 2023.
- 293 U.S. Department of Agriculture, Food and Nutrition Service. "Proposed Rule: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): Online Ordering and Transactions and Food Delivery Revisions to Meet the Needs of a Modern, Data-Driven Program." *Federal Register*, 88 36, February 23, 2023. <https://www.govinfo.gov/content/pkg/FR-2023-02-23/pdf/2023-02484.pdf>. Accessed August 9, 2023.

- 294 U.S. Department of Agriculture, Food and Nutrition Service. “Additional WIC Flexibilities to Support Outreach, Innovation, and Modernization Efforts through ARPA Nationwide Waivers – Supporting Remote WIC Operations.” February 1, 2023. <https://www.fns.usda.gov/wic/flexibilities-support-outreach-innovation-and-modernization-efforts-through>. Accessed August 9, 2023.
- 295 U.S. Department of Health and Human Services. “White House Conference on Hunger, Nutrition, and Health: Implementing the National Strategy.” Updated March 24, 2023. <https://health.gov/our-work/nutrition-physical-activity/white-house-conference-hunger-nutrition-and-health/implementing-national-strategy>. Accessed August 9, 2023.
- 296 U.S. Department of Agriculture, Food and Nutrition Service. “FY 2022 WIC Shopping Experience Improvement Grant Project Summaries.” Updated December 14, 2022. <https://www.fns.usda.gov/wic/shopping-experience-grant-summaries>. Accessed August 9, 2023.
- 297 U.S. Department of Agriculture, WIC Works Resource System. “USDA/Tufts Telehealth Intervention Strategies for WIC (THIS-WIC).” <https://wicworks.fns.usda.gov/resources/usdatufts-telehealth-intervention-strategies>. Accessed August 9, 2023.
- 298 Grants.gov. “USDA-FY19-WIC-TIP USDA WIC Telehealth Innovations Project Department of Agriculture Food and Nutrition Service.” <https://www.grants.gov/web/grants/view-opportunity.html?popId=316569>. Accessed August 9, 2023.
- 299 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 300 National WIC Association. “Congress Takes Steps to Improve Maternal, Child Health in Year-End Spending Bill.” December 23, 2022. <https://www.nwica.org/press-releases/congress-takes-steps-to-improve-maternal-child-health-in-year-end-spending-bill#.ZDsPmezMKrc>. Accessed August 9, 2023.
- 301 Ritchie, Lorrene, Danielle Lee, Celeste Felix, et al. “Multi-State WIC Participant Survey: Cash Value Benefit Increase During COVID.” The National WIC Association and Nutrition Policy Institute, University of California Division of Agriculture and Natural Resources, March 2022. <https://s3.amazonaws.com/aws.upl/nwica.org/nwa-multi-state-cvb-report-march-2022.pdf>. Accessed August 9, 2023.
- 302 U.S. Department of Agriculture, Food and Nutrition Service. “Proposed Rule: Special Supplemental Nutrition Program for Women, Infants, and Children: Revisions in the Women, Infants, and Children Food Packages.” *Federal Register*, 87: 223, November 21, 2022. <https://www.govinfo.gov/content/pkg/FR-2022-11-21/pdf/2022-24705.pdf>. Accessed August 9, 2023.
- 303 Ralston, Katherine, Constance Newman, Annette Clauson, et al. *The National School Lunch Program: Background, Trends, and Issues*. Washington, DC: U.S. Department of Agriculture, Economic Research Service, Report No. 61, July 2008. https://www.ers.usda.gov/webdocs/publications/46043/12051_err61_1_.pdf?v=0. Accessed August 9, 2023.
- 304 U.S. Department of Agriculture, Food and Nutrition Service. “Child Nutrition Programs.” <https://www.fns.usda.gov/cn>. Accessed August 9, 2023.
- 305 U.S. Department of Agriculture, Food and Nutrition Service. “National School Lunch Program.” <https://www.fns.usda.gov/nslp>. Accessed August 9, 2023.
- 306 U.S. Department of Agriculture, Food and Nutrition Service. “School Breakfast Program.” <https://www.fns.usda.gov/sbp/school-breakfast-program>. Accessed August 9, 2023.
- 307 Ibid.
- 308 U.S. Department of Agriculture, Food and Nutrition Service. “National School Lunch Program (NSLP) Fact Sheet.” Updated: March 20, 2019. <https://www.fns.usda.gov/nslp/nslp-fact-sheet>. Accessed August 9, 2023.
- 309 U.S. Department of Agriculture, Food and Nutrition Service. “Special Milk Program.” <https://www.fns.usda.gov/smp/special-milk-program>. Accessed August 9, 2023.
- 310 U.S. Department of Agriculture, Food and Nutrition Service. “Child and Adult Care Food Program.” <https://www.fns.usda.gov/cacfp>. Accessed August 9, 2023.
- 311 U.S. Department of Agriculture, Food and Nutrition Service. “Fresh Fruit and Vegetable Program.” Updated December 2017. <https://fns-prod.azureedge.us/sites/default/files/resource-files/FFVPFactSheet.pdf>. Accessed August 9, 2023.
- 312 U.S. Department of Agriculture, Food and Nutrition Service. “The Patrick Leahy Farm to School Grant Program.” Updated February 2023. <https://fns-prod.azureedge.us/sites/default/files/resource-files/f2s-grant-program-508.pdf>. Accessed August 9, 2023.
- 313 U.S. Department of Agriculture, Food and Nutrition Service. “School Meal Changes are Coming in the 2022-23 School Year.” Updated June 29, 2022. <https://www.fns.usda.gov/cn/2022-23-parent-faqs>. Accessed August 9, 2023.
- 314 Ibid.
- 315 Food Research and Action Center. “Large School District Report, 2023.” June 2023. <https://frac.org/large-school-district-report-2023>. Accessed August 9, 2023.
- 316 School Nutrition Association. “2023 School Nutrition Trends Report.” <https://schoolnutrition.org/wp-content/uploads/2023/01/2023-School-Nutrition-Trends-Report.pdf>. Accessed August 9, 2023.
- 317 Food Research and Action Center. “Large School District Report, 2023.” June 2023. <https://frac.org/large-school-district-report-2023>. Accessed August 9, 2023.
- 318 U.S. Department of Agriculture, Food and Nutrition Service. “Child Nutrition Programs: Community Eligibility Provision – Increasing Options for Schools.” March 23, 2023. <https://www.fns.usda.gov/cn/fr-032323#:~:text=This%20rulemaking%20proposes%20to%20expand,no%2Dcost%20meals%20to%20all>. Accessed August 9, 2023.
- 319 Butz, Leah. “States that Have Passed Universal Free School Meals (So Far).” Hunter College New York City Food Policy Center, February 21, 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed August 9, 2023.
- 320 Shockman, Elizabeth. “Walz Signs Universal School Meals Bill Into Minnesota Law.” *Minnesota Public Radio*, March 17, 2023. <https://www.mprnews.org/story/2023/03/17/gov-signs-universal-school-meals-bill-into-law>. Accessed August 9, 2023.
- 321 U.S. Department of Agriculture, Food and Nutrition Service. “Summer Food Service Program.” <https://www.fns.usda.gov/sfsp/summer-food-service-program>. Accessed August 9, 2023.

- 322 Boone, Kelsey. “Six Things You Need to Know About Summer EBT Benefits.” FRAC Chat, February 2, 2023. <https://frac.org/blog/six-things-you-need-to-know-about-summer-ebt-benefits>. Accessed August 9, 2023.
- 323 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 324 Sheldon, Melissa. “2023 Omnibus Includes Provisions to Fight Child Hunger.” Food Policy Center, January 17, 2023. <https://www.nycfoodpolicy.org/food-policy-snapshot-2023-omnibus-permanent-summer-ebt-program-and-summer-meals/>. Accessed August 9, 2023.
- 325 U.S. Department of Agriculture, Food and Nutrition Service. “Summer Food Service Program.” <https://www.fns.usda.gov/sfsp/summer-food-service-program>. Accessed August 9, 2023.
- 326 Families First Coronavirus Response Act of 2020. Public Law 116-127. March 18, 2020. H.R. 6201 (116th Congress). <https://www.congress.gov/116/plaws/publ127/PLAW-116publ127.pdf>. Accessed August 9, 2023.
- 327 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 328 Sheldon, Melissa. “2023 Omnibus Includes Provisions to Fight Child Hunger.” Food Policy Center, January 17, 2023. <https://www.nycfoodpolicy.org/food-policy-snapshot-2023-omnibus-permanent-summer-ebt-program-and-summer-meals/>. Accessed August 9, 2023.
- 329 Reiley, Laura. “Spending Bill Funds Kids’ Summer Meals by Cutting Emergency Food Stamps.” *The Washington Post*, December 21, 2022. <https://www.washingtonpost.com/business/2022/12/21/school-meals-pandemic-snap/>. Accessed August 9, 2023.
- 330 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 331 U.S. Department of Agriculture, Food and Nutrition Service. “State Guidance on Coronavirus P-EBT.” Updated August 7, 2023. <https://www.fns.usda.gov/snap/state-guidance-coronavirus-pandemic-ebt-pebt>. Accessed August 9, 2023.
- 332 Reiley, Laura. “Spending Bill Funds Kids’ Summer Meals by Cutting Emergency Food Stamps.” *The Washington Post*, December 21, 2022. <https://www.washingtonpost.com/business/2022/12/21/school-meals-pandemic-snap/>. Accessed August 9, 2023.
- 333 Liu, Junxiu, Renata Micha, Yan Li, et al. “Trends in Food Sources and Diet Quality Among US Children and Adults, 2003-2018.” *JAMA Network Open*, 4(4): e215262, 2021. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2778453>. Accessed August 9, 2023.
- 334 Ralston, Katherine, Katie Treen, Alisha Coleman-Jensen, et al. “Children’s Food Security and USDA Child Nutrition Programs.” U.S. Department of Agriculture, *Economic Information Bulletin*, No. EIB-174, 2017. <https://www.ers.usda.gov/webdocs/publications/84003/eib-174.pdf?v=8111.1>. Accessed August 9, 2023.
- 335 Gleason, Phillip M., and Allison Hedley Dodd. “School Breakfast Program but not School Lunch Program Participation Is Associated with Lower Body Mass Index.” *Journal of the Academy of Nutrition and Dietics*, 109(2, Suppl. 2): S118-28, 2009. [https://www.jandonline.org/article/S0002-8223\(08\)02051-8/fulltext](https://www.jandonline.org/article/S0002-8223(08)02051-8/fulltext). Accessed August 9, 2023.
- 336 Kenney, Erica L., Jessica L. Barrett, Sara N. Bleich, et al. “Impact of the Healthy, Hunger-Free Kids Act on Obesity Trends.” *Health Affairs*, 39(7), July 2020. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00133>. Accessed August 9, 2023.
- 337 Chandran, Aruna, Mohamad Burjak, Joshua Petimar, et al. “Changes in Body Mass Index Among School-Aged Youths Following Implementation of the Healthy, Hunger-Free Kids Act of 2010.” *JAMA Pediatrics*, 177(4): 401-409, 2023. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2801450>. Accessed August 9, 2023.
- 338 U.S. Department of Agriculture, Food and Nutrition Service. “Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium.” *Federal Register*, 87, 6984, February 7, 2022. <https://www.federalregister.gov/documents/2022/02/07/2022-02327/child-nutrition-programs-transitional-standards-for-milk-whole-grains-and-sodium>. Accessed August 9, 2023.
- 339 U.S. Department of Agriculture, Food and Nutrition Service. “Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans.” *Federal Register*, 88, 8050, February 7, 2023. <https://www.federalregister.gov/documents/2023/02/07/2023-02102/child-nutrition-programs-revisions-to-meal-patterns-consistent-with-the-2020-dietary-guidelines-for-footnote-1-p8050>. Accessed August 9, 2023.
- 340 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 341 “Explanatory Statement Submitted by Mr. Leahy, Chair of the Senate Committee on Appropriations, Regarding H.R. 2617, Consolidated Appropriations Act, 2023.” *Congressional Record*: S7819, December 20, 2022. <https://www.congress.gov/117/crec/2022/12/20/168/198/CREC-2022-12-20-pt1-PgS7819-2.pdf>. Accessed August 9, 2023.
- 342 U.S. Department of Agriculture, Food and Nutrition Service. “Supplemental Nutrition Assistance Program.” <https://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program>. Accessed August 9, 2023.
- 343 U.S. Department of Agriculture, Food and Nutrition Service. “Yearly Trends SNAP Households by Demographic and Income Characteristics.” <https://www.fns.usda.gov/SNAP-household-trends/percentage-demographic>. Accessed August 2, 2023.
- 344 Jones Cox, Ty. “SNAP Is and Remains Our Most Effective Tool to Combat Hunger.” Center on Budget and Policy Priorities, February 14, 2023. <https://www.cbpp.org/blog/snap-is-and-remains-our-most-effective-tool-to-combat-hunger>. Accessed August 9, 2023.
- 345 U.S. Department of Agriculture, Food and Nutrition Service. “Supplemental Nutrition Assistance Program (SNAP): Frequently Asked Questions.” Updated September 4, 2013. <https://www.fns.usda.gov/snap/retailer/faq>. Accessed August 9, 2023.
- 346 U.S. Department of Agriculture, Food and Nutrition Service. “What Can SNAP Buy?” Updated April 4, 2021. <https://www.fns.usda.gov/snap/eligible-food-items>. Accessed August 9, 2023.
- 347 U.S. Department of Agriculture, Food and Nutrition Service. “Restaurant Meals Program.” Updated July 25, 2023. <https://www.fns.usda.gov/snap/retailer/restaurant-meals-program>. Accessed August 9, 2023.

- 348 U.S. Department of Agriculture, Food and Nutrition Service. “Supplemental Nutrition Assistance Program (SNAP): Stores Accepting SNAP Online.” Updated August 4, 2022. <https://www.fns.usda.gov/snap/online-purchasing-pilot>. Accessed August 9, 2023.
- 349 U.S. Department of Agriculture, Food and Nutrition Service. “SNAP Extension of COVID-19 Administrative Flexibilities: January 2022 and Beyond.” Updated December 8, 2021. <https://www.fns.usda.gov/snap/extension-covid-19-administrative-flexibilities-january-2022-and-beyond>. Accessed August 9, 2023.
- 350 Wheaton, Laura, and Danielle Kwon. “Effect of the Reevaluated Thrifty Food Plan and Emergency Allotments on Supplemental Nutrition Assistance Program Benefits and Poverty.” Urban Institute, August 1, 2022. <https://www.urban.org/research/publication/effect-reevaluated-thrifty-food-plan-and-emergency-allotments-supplemental>. Accessed August 9, 2023.
- 351 U.S. Department of Agriculture, Food and Nutrition Service. “SNAP COVID-19 Emergency Allotments Guidance.” Updated March 7, 2023. <https://www.fns.usda.gov/snap/covid-19-emergency-allotments-guidance>. Accessed August 9, 2023.
- 352 Center on Budget and Policy Priorities. “Policy Basics: The Supplemental Nutrition Assistance Program (SNAP).” Updated June 9, 2022. <https://www.cbpp.org/research/food-assistance/the-supplemental-nutrition-assistance-program-snap>. Accessed August 9, 2023.
- 353 Qiu, Linda. “Low-Income Families Brace for End of Extra Food Stamp Benefits.” *The New York Times*, February 28, 2023. <https://www.nytimes.com/2023/02/28/us/politics/food-stamps-benefits-decrease.html>. Accessed August 9, 2023.
- 354 Rosenbaum, Dottie, Katie Bergh, and Lauren Hall. “Temporary Pandemic SNAP Benefits Will End in Remaining 35 States in March 2023.” Center on Budget and Policy Priorities, February 6, 2023. <https://www.cbpp.org/research/food-assistance/temporary-pandemic-snap-benefits-will-end-in-remaining-35-states-in-march>. Accessed August 9, 2023.
- 355 Cox, Kris, Chuck Marr, Sarah Calame, et al. “Top Tax Priority: Expanding the Child Tax Credit in Upcoming Economic Legislation.” Center of Budget and Policy Priorities, June 12, 2023. <https://www.cbpp.org/research/federal-tax/top-tax-priority-expanding-the-child-tax-credit-in-upcoming-economic>. Accessed August 9, 2023.
- 356 Llobera, Joseph. “SNAP Benefit Adjustments Will Help Low-Income Households Cope with Food Inflation.” Center on Budget and Policy Priorities, August 12, 2022. <https://www.cbpp.org/blog/snap-benefit-adjustments-will-help-low-income-households-cope-with-food-inflation>. Accessed August 9, 2023.
- 357 U.S. Department of Agriculture, Food and Nutrition Service. “USDA Modernizes the Thrifty Food Plan, Updates SNAP Benefits: First Update in More Than 45 Years Reflects Current Cost Realities.” August 16, 2021. <https://www.fns.usda.gov/news-item/usda-0179.21>. Accessed August 9, 2023.
- 358 Ibid.
- 359 Llobera, Joseph. “SNAP Benefit Adjustments Will Help Low-Income Households Cope with Food Inflation.” Center on Budget and Policy Priorities, August 12, 2022. <https://www.cbpp.org/blog/snap-benefit-adjustments-will-help-low-income-households-cope-with-food-inflation>. Accessed August 9, 2023.
- 360 The White House. “Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health.” September 2022. <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>. Accessed August 9, 2023.
- 361 The White House. “Fact Sheet: The Biden-Harris Administration Announces More Than \$8 Billion in New Commitments as Part of Call to Action for White House Conference on Hunger, Nutrition, and Health.” September 28, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/24/fact-sheet-biden-harris-administration-launches-the-white-house-challenge-to-end-hunger-and-build-healthy-communities-announces-new-public-private-sector-actions-to-continue-momentum-from-hist/>. Accessed August 9, 2023.
- 362 U.S. Department of Agriculture, Food and Nutrition Service. “USDA Continues Expanding SNAP Online Shopping, Invests in Reaching New Retailers.” December 21, 2022. <https://www.fns.usda.gov/news-item/fns-0016.22>. Accessed August 9, 2023.
- 363 Hill, Meredith Lee, and Garrett Downs. “Republicans Launch Opening Salvo Against Food Aid.” *Politico*, March 13, 2023. <https://www.politico.com/news/2023/03/13/republicans-snap-benefits-cuts-00086638>. Accessed August 9, 2023.
- 364 Congress.gov. “H.R.1550 - 118th Congress (2023-2024): Jobs and Opportunities for SNAP Act.” April 5, 2023. <https://www.congress.gov/bill/118th-congress/house-bill/1550/text>. Accessed August 9, 2023.
- 365 Congress.gov. “S.39 - 118th Congress (2023-2024): Let’s Get to Work Act of 2023.” January 24, 2023. <https://www.congress.gov/bill/118th-congress/senate-bill/39>. Accessed August 9, 2023.
- 366 Bustillo, Ximena. “Congress Created Changes to Food Assistance. Here’s What They Mean.” *NPR*, June 2, 2023. <https://www.npr.org/2023/06/02/1179633624/snap-food-assistance-work-requirements-congress-debt-ceiling>. Accessed August 9, 2023.
- 367 H.R.3746 - Fiscal Responsibility Act of 2023. <https://www.congress.gov/bill/118th-congress/house-bill/3746>. Accessed August 9, 2023.
- 368 Hill, Meredith Lee, and Garrett Downs. “Republicans Launch Opening Salvo Against Food Aid.” *Politico*, March 13, 2023. <https://www.politico.com/news/2023/03/13/republicans-snap-benefits-cuts-00086638>. Accessed August 9, 2023.
- 369 Ferguson, Ellyn. “Lawmakers Steer Toward Food Stamp Clash on Work Requirements.” *Roll Call*, April 18, 2023. <https://rollcall.com/2023/04/18/lawmakers-steer-toward-food-stamp-clash-on-work-requirements/>. Accessed August 9, 2023.
- 370 Hill, Meredith Lee. “McCarthy’s Pitch to Shrink Food Aid Drawing Skepticism from Fellow Republicans.” *Politico*, April 16, 2023. <https://www.politico.com/news/2023/04/16/gop-mccarthy-snap-food-stamps-00092243>. Accessed August 9, 2023.

- 371 Swenson, Kyle. "Iowa to Spend Millions Kicking Families off Food Stamps. More States May Follow." *The Washington Post*, April 16, 2023. <https://www.washingtonpost.com/dc-md-va/2023/04/16/iowa-snap-restrictions-food-stamps/>. Accessed August 9, 2023.
- 372 Oswego County. "SNAP-Ed New York, OFA Offer Healthy Eating Community Workshops." March 24, 2023. https://www.oswegocounty.com/news_detail_T17_R2175.php. Accessed August 9, 2023.
- 373 Sloomaker, Estelle. "Detroit Public Schools Community District Farm-to-School Initiatives Grow Through SNAP-Ed." *Model D*, January 19, 2023. <https://www.modeldmedia.com/features/dpscdfarmtoschool01162023.aspx>. Accessed August 9, 2023.
- 374 Burgess, Kimberly, Teresa Jackson, and Stephany Parker. "Cultural Relevance in SNAP-Ed: Let's Get 'Real.'" U.S. Department of Agriculture, Food and Nutrition Service, November 1, 2022. <https://www.usda.gov/media/blog/2022/11/02/cultural-relevance-snap-ed-lets-get-real>. Accessed August 9, 2023.
- 375 Diabetes Is Not Our Destiny. "Stories of Health." Oklahoma Tribal Engagement Partners. <https://notourdestiny.com/>. Accessed August 9, 2023.
- 376 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 377 "Explanatory Statement Submitted by Mr. Leahy, Chair of the Senate Committee on Appropriations, Regarding H.R. 2617, Consolidated Appropriations Act, 2023." *Congressional Record*: S7819, December 20, 2022. <https://www.congress.gov/117/crec/2022/12/20/168/198/CREC-2022-12-20-pt1-PgS7819-2.pdf>. Accessed August 9, 2023.
- 378 U.S. Department of Agriculture, National Institute of Food and Agriculture. "Gus Schumacher Nutrition Incentive Program." <https://www.nifa.usda.gov/grants/programs/gus-schumacher-nutrition-incentive-program>. Accessed August 9, 2023.
- 379 The Agriculture Improvement Act of 2018. Public Law 115-334. <https://www.congress.gov/115/plaws/publ334/PLAW-115publ334.pdf>. Accessed August 9, 2023.
- 380 U.S. Department of Agriculture, National Institute of Food and Agriculture. "Gus Schumacher Nutrition Incentive Program." <https://www.nifa.usda.gov/grants/programs/gus-schumacher-nutrition-incentive-program>. Accessed August 9, 2023.
- 381 Gretchen Swanson Center for Nutrition, GusNIP NTAE Center Project Lead. *Gus Schumacher Nutrition Incentive: Program Training, Technical Assistance, Evaluation, and Information Center (GusNIP NTAE): Impact Findings: Year 2: September 1, 2020 to August 31, 2021*. Omaha, NE: Gretchen Swanson Center for Nutrition, 2022. <https://www.nutritionincentivehub.org/media/fjohmr2n/gusnip-ntae-impact-findings-year-2.pdf>. Accessed August 9, 2023.
- 382 U.S. Department of Agriculture. "USDA Invests More Than \$59M to Improve Dietary Health and Nutrition Security." November 22, 2022. <https://www.usda.gov/media/press-releases/2022/11/22/usda-invests-more-59m-improve-dietary-health-and-nutrition-security>. Accessed August 9, 2023.
- 383 U.S. Department of Agriculture, National Institute of Food and Agriculture. "Request for Applications: The Gus Schumacher Nutrition Incentive Program Competitive Grants Program." <https://www.nifa.usda.gov/sites/default/files/2023-02/FY23-GusNIP-RFA-508.pdf>. Accessed August 9, 2023.
- 384 Ibid.
- 385 Office of Head Start. "About the Office of Head Start." U.S. Department of Health and Human Services, Administration for Children and Families. Updated June 30, 2023. <https://www.acf.hhs.gov/ohs/about>. Accessed August 9, 2023.
- 386 Office of Head Start. "Head Start Categorical Eligibility for Families Eligible for the Supplemental Nutrition Assistance Program ACF-IM-HS-22-03." U.S. Department of Health and Human Services, Administration for Children and Families, April 21, 2022. <https://eclkc.ohs.acf.hhs.gov/policy/im/acf-im-hs-22-03>. Accessed August 9, 2023.
- 387 U.S. Department of Agriculture, Food and Nutrition Service. "Automatic Eligibility for Free Meal Benefits Extended to All Children Enrolled in Head Start." May 16, 2008. <https://www.fns.usda.gov/cn/automatic-eligibility-free-meal-benefits-extended-all-children-enrolled-head-start>. Accessed August 9, 2023.
- 388 National Head Start Association. "Connecting Families Facing Food Insecurity to Head Start." <https://nhsa.org/connecting-families-facing-food-insecurity-to-head-start/>. Accessed August 9, 2023.
- 389 Administration for Children and Families, U.S. Department of Health and Human Services. "Head Start Performance Standards." *Federal Register*, 81, 172, September 6, 2016. <https://www.govinfo.gov/content/pkg/FR-2016-09-06/pdf/2016-19748.pdf>. Accessed August 9, 2023.
- 390 National Head Start Association. "Facts and Impacts." <https://nhsa.org/resource/facts-and-impacts/>. Accessed August 9, 2023.
- 391 Lumeng, Julie C., Niko Kaciroti, Julie Sturza, et al. "Changes in Body Mass Index Associated with Head Start Participation." *Pediatrics*, 135(2): e449-e456, 2015. <https://pediatrics.aappublications.org/content/135/2/e449>. Accessed August 9, 2023.
- 392 Fernandez-Jimenez, Rodrigo, Risa Jaslow, Sameer Bansilal, et al. "Child Health Promotion in Underserved Communities." *Journal of the American College of Cardiology*, 73(16): 2011-2021, 2019. <https://www.jacc.org/doi/full/10.1016/j.jacc.2019.01.057>. Accessed August 9, 2023.
- 393 Fortner, Alyssa. "FY2023 Omnibus Spending Package Includes Important Investments for Child Care and Early Education." Center for Law and Social Policy, January 4, 2023. <https://www.clasp.org/blog/fy2023-omnibus-spending-package-includes-important-investments-for-child-care-and-early-education/>. Accessed August 9, 2023.
- 394 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 395 U.S. Department of Health and Human Services, Office of the Administration for Children and Families. "What Is the Child Care and Development Fund (CCDF)?" <https://www.acf.hhs.gov/archive/oc/faq/what-child-care-and-development-fund-ccdf>. Accessed August 9, 2023.
- 396 Child Care and Development Block Grant Act of 2014. Pub. L. 113-186. <https://www.congress.gov/113/plaws/publ186/PLAW-113publ186.pdf>. Accessed August 9, 2023.

- 397 Centers for Disease Control and Prevention. "Advancing Farm to Early Care and Education (ECE)." Updated January 5, 2023. <https://www.cdc.gov/obesity/strategies/farm-to-ece.html>. Accessed August 9, 2023.
- 398 National Farm to School Network. "Farm to Early Care and Education." <https://www.farmtoschool.org/our-work/early-care-and-education>. Accessed August 9, 2023.
- 399 Fortner, Alyssa. "FY2023 Omnibus Spending Package Includes Important Investments for Child Care and Early Education." Center for Law and Social Policy, January 4, 2023. <https://www.clasp.org/blog/fy2023-omnibus-spending-package-includes-important-investments-for-child-care-and-early-education/>. Accessed August 9, 2023.
- 400 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 401 U.S. Department of Agriculture, Food and Nutrition Service. "Local School Wellness Policies." Updated August 15, 2022. <https://www.fns.usda.gov/tn/local-school-wellness-policy>. Accessed August 9, 2023.
- 402 Ibid.
- 403 Piekarz-Porter, Elizabeth, Rebecca Schermbeck, and Julien Leider. *Working on Wellness: How Aligned Are District Wellness Policies with the Soon-To-Be Implemented Federal Wellness Policy Requirements?* Chicago, IL: National Wellness Policy Study, Institute for Health Research and Policy, University of Illinois at Chicago, 2017. https://ihrp.uic.edu/wp-content/uploads/sites/530/2021/05/NWPS_Wkg_on_wellness_508v3.pdf. Accessed August 9, 2023.
- 404 U.S. Department of Agriculture, Food and Nutrition Service. "Local School Wellness Policies." Updated August 15, 2022. <https://www.fns.usda.gov/tn/local-school-wellness-policy>. Accessed August 9, 2023.
- 405 U.S. Department of Agriculture, Food and Nutrition Service. "Summer 2022 and SY 2022-23 Child Nutrition Programs 12(l) Waiver Checklist." 2022. <https://fns-prod.azureedge.us/sites/default/files/resource-files/cn-summer-sy-2022-23-waiver-checklist-060822.pdf>. Accessed August 9, 2023.
- 406 U.S. Department of Agriculture, Food and Nutrition Service. "A Guide to Smart Snacks in School." Updated August 4, 2022. <https://www.fns.usda.gov/tn/guide-smart-snacks-school>. Accessed August 9, 2023.
- 407 *Dietary Guidelines for Americans*. "About." <https://www.dietaryguidelines.gov/about-dietary-guidelines>. Accessed August 9, 2023.
- 408 U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. Washington, DC: U.S. Department of Agriculture, 9th Edition, December 2020. <https://www.dietaryguidelines.gov/>. Accessed August 9, 2023.
- 409 *Dietary Guidelines for Americans*. "Work Under Way." <https://www.dietaryguidelines.gov/work-under-way>. Accessed August 9, 2023.
- 410 Ibid.
- 411 Wansink, Brian, and Audrey Wansink. "MyPlate, Half-Plate, and No Plate: How Visual Plate-Related Dietary Benchmarks Influence What Food People Serve." *Cureus*, 14(5): e25231, May 23, 2022. <https://pubmed.ncbi.nlm.nih.gov/35746983/>. Accessed August 9, 2023.
- 412 Westfall, Miranda, Sarah E. Roth, Monique Gill, et al. "Exploring the Relationship Between MyPlate Knowledge, Perceived Diet Quality, and Healthy Eating Behaviors Among Adolescents." *American Journal of Health Promotion*, 34(7): 713-721, 2020. <https://pubmed.ncbi.nlm.nih.gov/32000501/>. Accessed August 9, 2023.
- 413 U.S. Department of Agriculture. "My Plate." <https://www.myplate.gov/>. Accessed August 9, 2023.
- 414 Wartella, Ellen A., Alice H. Lichtenstein, and Caitlin S. Boon (eds.). "Front-of-Package Nutrition Rating Systems and Symbols: Phase I Report." In: *Institute of Medicine Committee on Examination of Front-of-Package Nutrition Rating Systems and Symbols*. Washington, DC: National Academies Press, 2010. <https://www.ncbi.nlm.nih.gov/books/NBK209859/>. Accessed August 9, 2023.
- 415 Food and Drug Administration. "Food Labeling: Revision of the Nutrition and Supplement Facts Labels." *Federal Register*, 81, 33741, May 27, 2016. <https://www.federalregister.gov/documents/2016/05/27/2016-11867/food-labeling-revision-of-the-nutrition-and-supplement-facts-labels>. Accessed August 9, 2023.
- 416 New York City Department of Health and Mental Hygiene. "Healthy Eating Workshop: Reading and Understanding Food Labels." <https://www.nyc.gov/assets/doh/downloads/pdf/cardio/healthy-eating-workshop-food-labels-notes.pdf>. Accessed August 9, 2023.
- 417 Harvard T.H. Chan School of Public Health. "Understanding Food Labels." Updated June 2021. <https://www.hsph.harvard.edu/nutritionsource/food-label-guide/>. Accessed August 9, 2023.
- 418 Food and Drug Administration. "Authorized Health Claims that Meet the Significant Scientific Agreement (SSA) Standard." Updated March 7, 2022. <https://www.fda.gov/food/food-labeling-nutrition/authorized-health-claims-meet-significant-scientific-agreement-ssa-standard>. Accessed August 9, 2023.
- 419 Food and Drug Administration. "Qualified Health Claims." Updated March 7, 2022. <https://www.fda.gov/food/food-labeling-nutrition/qualified-health-claims>. Accessed August 9, 2023.
- 420 Harvard T.H. Chan School of Public Health. "Understanding Food Labels." Updated June 2021. <https://www.hsph.harvard.edu/nutritionsource/food-label-guide/>. Accessed August 9, 2023.
- 421 Environmental Working Group. *Children's Cereals: Sugar by the Pound*. Washington, DC: EWG, May 2014. <https://www.ewg.org/research/childrens-cereals>. Accessed August 9, 2023.
- 422 Nestle, Marion. "FDA's Plan to Define 'Healthy' for Food Packaging: Better Than the Existing Labeling Anarchy, But Do We Really Need It?" *Stat*, October 7, 2022. <https://www.statnews.com/2022/10/07/fda-plan-define-healthy-label-food-packaging/>. Accessed August 9, 2023.
- 423 Harvard T.H. Chan School of Public Health. "Understanding Food Labels." Updated June 2021. <https://www.hsph.harvard.edu/nutritionsource/food-label-guide/>. Accessed August 9, 2023.
- 424 Ibid.
- 425 Temple, Norman J. "Front-of-Package Food Labels: A Narrative Review." *Appetite*, 144: 104485, 2020. <https://doi.org/10.1016/j.appet.2019.104485>. Accessed August 9, 2023.

- 426 Lim, Joon Ho, Rishika Rishika, Ramkumar Janakiraman, et al. “Competitive Effects of Front-of-Package Nutrition Labeling Adoption on Nutritional Quality: Evidence from Facts Up Front–Style Labels.” *Journal of Marketing*, 84(6), 2020. https://www.newswise.com/pdf_docs/16006919759257_Rishika%20nutrition%20labels%202020%20FINAL.pdf. Accessed August 9, 2023.
- 427 The White House. “Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health.” September 2022. <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>. Accessed August 9, 2023.
- 428 Food and Drug Administration. “Agency Information Collection Activities; Proposed Collection; Comment Request; Quantitative Research on Front of Package Labeling on Packaged Foods.” *Federal Register*, 88, 5005, January 26, 2023. <https://www.federalregister.gov/documents/2023/01/26/2023-01551/agency-information-collection-activities-proposed-collection-comment-request-quantitative-research>. Accessed August 9, 2023.
- 429 Food and Drug Administration. “Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Quantitative Research on Front of Package Labeling on Packaged Foods Agency Information Collection Activities; Submission for Office of Management and Budget Review; Comment Request; Quantitative Research on Front of Package Labeling on Packaged Foods.” *Federal Register*, 88, 39257, June 15, 2023. <https://www.federalregister.gov/documents/2023/06/15/2023-12820/agency-information-collection-activities-submission-for-office-of-management-and-budget-review>. Accessed August 9, 2023.
- 430 Food and Drug Administration. “Food Labeling: Nutrient Content Claims; Definition of Term ‘Healthy.’” *Federal Register*, 87, 59168, September 29, 2022. <https://www.federalregister.gov/documents/2022/09/29/2022-20975/food-labeling-nutrient-content-claims-definition-of-term-healthy>. Accessed August 9, 2023.
- 431 Fang, Lee. “Fruity Pebbles and Lucky Charms Threaten to Block ‘Healthy’ Food Labeling Guidelines in Court.” *The Intercept*, March 1, 2023. <https://theintercept.com/2023/03/01/fda-healthy-food-label-cereal-brands/>. Accessed August 9, 2023.
- 432 Food and Drug Administration. “Food Labeling: Nutrient Content Claims; Definition of Term ‘Healthy.’” *Federal Register*, 87, 59168, September 29, 2022. <https://www.federalregister.gov/documents/2022/09/29/2022-20975/food-labeling-nutrient-content-claims-definition-of-term-healthy>. Accessed August 9, 2023.
- 433 The White House. “Fact Sheet: Biden-Harris Administration Launches the White House Challenge to End Hunger and Build Healthy Communities, Announces New Public & Private Sector Actions to Continue Momentum from Historic Hunger, Nutrition, and Health Conference.” March 24, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/24/fact-sheet-biden-harris-administration-launches-the-white-house-challenge-to-end-hunger-and-build-healthy-communities-announces-new-public-private-sector-actions-to-continue-momentum-from-hist/>. Accessed August 9, 2023.
- 434 Food and Drug Administration. “Guidance for Industry: Voluntary Sodium Reduction Goals.” October 2021. <https://www.fda.gov/media/98264/download>. Accessed August 9, 2023.
- 435 The White House. “Fact Sheet: Biden-Harris Administration Launches the White House Challenge to End Hunger and Build Healthy Communities, Announces New Public & Private Sector Actions to Continue Momentum from Historic Hunger, Nutrition, and Health Conference.” March 24, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/24/fact-sheet-biden-harris-administration-launches-the-white-house-challenge-to-end-hunger-and-build-healthy-communities-announces-new-public-private-sector-actions-to-continue-momentum-from-hist/>. Accessed August 9, 2023.
- 436 Food and Drug Administration. “FDA Works to Further Improve Nutrition, Reduce Diet-Related Chronic Disease with Dietary Guidance Statements on Food Labels.” March 24, 2023. <https://www.fda.gov/news-events/press-announcements/fda-works-further-improve-nutrition-reduce-diet-related-chronic-disease-dietary-guidance-statements>. Accessed August 9, 2023.
- 437 Food and Drug Administration. “Questions and Answers About Dietary Guidance Statements in Food Labeling: Guidance for Industry: Draft Guidance.” March 2023. <https://www.fda.gov/media/166342/download>. Accessed August 9, 2023.
- 438 Food and Drug Administration. “FDA Works to Further Improve Nutrition, Reduce Diet-Related Chronic Disease with Dietary Guidance Statements on Food Labels.” March 24, 2023. <https://www.fda.gov/news-events/press-announcements/fda-works-further-improve-nutrition-reduce-diet-related-chronic-disease-dietary-guidance-statements>. Accessed August 9, 2023.
- 439 Food and Drug Administration. “Questions and Answers About Dietary Guidance Statements in Food Labeling: Guidance for Industry: Draft Guidance.” March 2023. <https://www.fda.gov/media/166342/download>. Accessed August 9, 2023.
- 440 Food and Drug Administration. “Questions and Answers About Dietary Guidance Statements in Food Labeling: Draft Guidance for Industry; Availability; Agency Information Collection Activities; Proposed Collection; Comment Request.” *Federal Register*, 88, 18149, March 27, 2023. <https://www.federalregister.gov/documents/2023/03/27/2023-06304/questions-and-answers-about-dietary-guidance-statements-in-food-labeling-draft-guidance-for-industry>. Accessed August 9, 2023.
- 441 The White House. “Fact Sheet: Biden-Harris Administration Launches the White House Challenge to End Hunger and Build Healthy Communities, Announces New Public & Private Sector Actions to Continue Momentum from Historic Hunger, Nutrition, and Health Conference.” March 24, 2023. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/24/fact-sheet-biden-harris-administration-launches-the-white-house-challenge-to-end-hunger-and-build-healthy-communities-announces-new-public-private-sector-actions-to-continue-momentum-from-hist/>. Accessed August 9, 2023.
- 442 Food and Drug Administration. “Use of Salt Substitutes to Reduce the Sodium Content in Standardized Foods.” *Federal Register*, 88, 21148, April 10, 2023. <https://www.federalregister.gov/documents/2023/04/10/2023-06456/use-of-salt-substitutes-to-reduce-the-sodium-content-in-standardized-foods>. Accessed August 9, 2023.

- 443 Food and Drug Administration. “Food Labeling; Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments; Extension of Compliance Date; Request for Comments.” *Federal Register*, 82, 20825, May 4, 2017. <https://www.federalregister.gov/documents/2017/05/04/2017-09029/food-labeling-nutrition-labeling-of-standard-menu-items-in-restaurants-and-similar-retail-food>. Accessed August 9, 2023.
- 444 Food and Drug Administration. “Food Labeling; Calorie Labeling of Articles of Food in Vending Machines; Extension of Compliance Date.” *Federal Register*, 81, 50303, August 1, 2016. <https://www.federalregister.gov/documents/2016/08/01/2016-18140/food-labeling-calorie-labeling-of-articles-of-food-in-vending-machines-extension-of-compliance-date>. Accessed August 9, 2023.
- 445 Shangguan, Siyi, Ashkan Afshin, Masha Shulkin, et al. “A Meta-Analysis of Food Labeling Effects on Consumer Diet Behaviors and Industry Practices.” *American Journal of Preventive Medicine*, 56(2): 300-314, 2019. <https://pubmed.ncbi.nlm.nih.gov/30573335/>. Accessed August 9, 2023.
- 446 Block, Jason P., Suzanne K. Condon, Ken Kleinman, et al. “Consumers’ Estimation of Calorie Content at Fast Food Restaurants.” *The BMJ*, 346: f2907, 2013. <https://www.bmj.com/content/346/bmj.f2907>. Accessed August 9, 2023.
- 447 Moran, Alyssa J., Maricelle Ramirez, and Jason P. Block. “Consumer Underestimation of Sodium in Fast Food Restaurant Meals: Results from a Cross-Sectional Observational Study.” *Appetite*, 113: 155-161, 2017. <https://pubmed.ncbi.nlm.nih.gov/28235618/>. Accessed August 9, 2023.
- 448 Bleich, Sarah N., Christina D. Economos, Marie L. Spiker, et al. “A Systematic Review of Calorie Labeling and Modified Calorie Labeling Interventions: Impact on Consumer and Restaurant Behavior.” *Obesity*, 25(2): 2018-2044, 2017. <https://onlinelibrary.wiley.com/doi/10.1002/oby.21940>. Accessed August 9, 2023.
- 449 Auchincloss, Amy H., Giridhar G. Mallya, Beth L. Leonberg, et al. “Customer Responses to Mandatory Menu Labeling at Full-Service Restaurants.” *American Journal of Preventive Medicine*, 45(6): 710-719, 2013. <https://pubmed.ncbi.nlm.nih.gov/24237912/>. Accessed August 9, 2023.
- 450 Center for Science in the Public Interest. “Consumer Groups to FDA: Bring Calorie Labeling to Doordash, Grubhub, and Other Third-Party Ordering Platforms.” April 1, 2021. <https://www.cspinet.org/news/consumer-groups-fda-bring-calorie-labeling-door-dash-grubhub-and-other-third-party-ordering>. Accessed August 9, 2023.
- 451 Reiley, Laura. “Food Delivery Apps are Exempt from Posting Nutrition Information. This Loophole Has Added to our Pandemic Pounds, Advocates Say.” *The Washington Post*, April 1, 2021. <https://www.washingtonpost.com/business/2021/04/01/food-delivery-apps-calorie-labeling/>. Accessed August 9, 2023.
- 452 Restrepo, Brandon J. “Calorie Labeling in Chain Restaurants and Body Weight: Evidence from New York.” *Health Economics*, 26(10): 1191-1209, 2016. <https://pubmed.ncbi.nlm.nih.gov/27451966/>. Accessed August 9, 2023.
- 453 Auchincloss, Amy H., Giridhar G. Mallya, Beth L. Leonberg, et al. “Customer Responses to Mandatory Menu Labeling at Full-Service Restaurants.” *American Journal of Preventive Medicine*, 45(6): 710-719, 2013. <https://pubmed.ncbi.nlm.nih.gov/24237912/>. Accessed August 9, 2023.
- 454 Stenson, Jacqueline. “Calorie Counts on Menus: Have They Helped?” *NBC News*, June 11, 2022. <https://www.nbcnews.com/health/health-news/calorie-counts-menus-helped-rcna29276>. Accessed August 9, 2023.
- 455 Petimar, Joshua, Fang Zhang, Eric B. Rimm, et al. “Changes in the Calorie and Nutrient Content of Purchased Fast Food Meals After Calorie Menu Labeling: A Natural Experiment.” *PLoS Medicine*, 18(7): e1003714, 2021. <https://doi.org/10.1371/journal.pmed.1003714>. Accessed August 9, 2023.
- 456 U.S. House Committee on Agriculture. “Listening Sessions.” <https://agriculture.house.gov/calendar/eventlisting.aspx?EventTypeID=215&Timeframe=All>. Accessed August 9, 2023.
- 457 U.S. Senate Committee on Agriculture, Nutrition and Forestry. “The Farm Bill.” <https://www.agriculture.senate.gov/farm-bill>. Accessed August 9, 2023.
- 458 Jones Cox, Ty. “SNAP Is and Remains Our Most Effective Tool to Combat Hunger.” Center on Budget and Policy Priorities, February 14, 2023. <https://www.cbpp.org/blog/snap-is-and-remains-our-most-effective-tool-to-combat-hunger>. Accessed August 9, 2023.
- 459 Food Research and Action Center. “The Positive Effect of SNAP Benefits on Participants and Communities.” <https://frac.org/programs/supplemental-nutrition-assistance-program-snap/positive-effect-snap-benefits-participants-communities>. Accessed August 9, 2023.
- 460 White, Martha C. “How the Food Stamp Increase Boosts the Economic Recovery.” *NBC News*, August 17, 2021. <https://www.nbcnews.com/business/consumer/how-food-stamp-increase-boosts-economic-recovery-n1277018>. Accessed August 9, 2023.
- 461 U.S. Department of Agriculture, Economic Research Service. “Farm Bill Spending.” Updated February 7, 2023. <https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/farm-bill-spending/>. Accessed August 9, 2023.
- 462 Hill, Meredith Lee, and Garrett Downs. “Republicans Launch Opening Salvo Against Food Aid.” *Politico*, March 13, 2023. <https://www.politico.com/news/2023/03/13/republicans-snap-benefits-cuts-00086638>. Accessed August 9, 2023.
- 463 Perkowski, Mateusz, “2023 Farm Bill: Will Bipartisan Tradition Prevail in Congress?” *Capital Press*, January 9, 2023. https://www.capitalpress.com/nation_world/2023-farm-bill-will-bipartisan-tradition-prevail-in-congress/article_8b76d95a-8fd2-11ed-a536-0b01cbc34c38.html. Accessed August 9, 2023.
- 464 Hill, Meredith Lee, and Garrett Downs. “Republicans Launch Opening Salvo Against Food Aid.” *Politico*, March 13, 2023. <https://www.politico.com/news/2023/03/13/republicans-snap-benefits-cuts-00086638>. Accessed August 9, 2023.
- 465 Hampl, Sarah E., Sandra G. Hassink, Asheley C. Skinner, et al. “Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents with Obesity.” *Pediatrics*, 151(2): e2022060640, 2023. <https://doi.org/10.1542/peds.2022-060640>. Accessed August 9, 2023.

- 466 Centers for Disease Control and Prevention. "Designing Activity-Friendly Communities." Updated October 12, 2020. <https://www.cdc.gov/nccdphp/dnpao/features/walk-friendly-communities/index.html>. Accessed August 9, 2023.
- 467 Prados, María J., Nancy Nicosia, and Ashlesha Datar. "Impact of Built, Social, and Economic Environments on Adolescent Obesity and Related Health Behaviors." *Obesity*, 31(4): 1085-1094, 2023. <https://onlinelibrary.wiley.com/doi/10.1002/oby.23682>. Accessed August 9, 2023.
- 468 Howell, Nicholas A., and Gillian L. Booth. "The Weight of Place: Built Environment Correlates of Obesity and Diabetes." *Endocrine Reviews*, 43(6): 966-983, December 2022. <https://doi.org/10.1210/endrev/bnac005>. Accessed August 9, 2023.
- 469 The Community Guide. "Physical Activity: Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design." Updated June 2018. <https://www.thecommunityguide.org/findings/physical-activity-built-environment-approaches>. Accessed August 9, 2023.
- 470 Malacarne, Diego, Evangelos Handakas, Oliver Robinson, et al. "The Built Environment as Determinant of Childhood Obesity: A Systematic Literature Review." *Obesity Reviews*, 23(S1): e13385, 2022. <https://doi.org/10.1111/obr.13385>. Accessed August 9, 2023.
- 471 Howell, Nicholas A., and Gillian L. Booth. "The Weight of Place: Built Environment Correlates of Obesity and Diabetes." *Endocrine Reviews*, 43(6): 966-983, December 2022. <https://doi.org/10.1210/endrev/bnac005>. Accessed August 9, 2023.
- 472 Singh, Gopal K., Mohammad Siahpush, and Michael D. Kogan. "Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity." *Health Affairs*, 29(3): 503-512, 2010. <https://pubmed.ncbi.nlm.nih.gov/20194993/>. Accessed August 9, 2023.
- 473 Malacarne, Diego, Evangelos Handakas, Oliver Robinson, et al. "The Built Environment as Determinant of Childhood Obesity: A Systematic Literature Review." *Obesity Reviews*, 23(S1): e13385, 2022. <https://doi.org/10.1111/obr.13385>. Accessed August 9, 2023.
- 474 Ibid.
- 475 University of Wisconsin, Population Health Institute. "What Works for Health Wisconsin: Housing & Transit." <http://improvingwihealth.org/wfh/factor.php?id=126>. Accessed August 9, 2023.
- 476 Centers for Disease Control and Prevention. "Designing Activity-Friendly Communities." Updated October 12, 2020. <https://www.cdc.gov/nccdphp/dnpao/features/walk-friendly-communities/index.html>. Accessed August 9, 2023.
- 477 U.S. Department of Transportation. "Active Transportation." Updated August 24, 2015. <https://www.transportation.gov/mission/health/active-transportation>. Accessed August 9, 2023.
- 478 Krahnstoever, Kirsten D., and Catherine T. Lawson. "Do Attributes in the Physical Environment Influence Children's Physical Activity? A Review of the Literature." *International Journal of Behavioral Nutrition and Physical Activity*, 3(19), 2006. <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-3-19>. Accessed May 2, 2023.
- 479 Heinen, Eva, Jenna Panter, Roger Mackett, et al. "Changes in Mode of Travel to Work: A Natural Experimental Study of New Transport Infrastructure." *International Journal of Behavioral Nutrition and Physical Activity*, 12(81): 1-10, 2015. <https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-015-0239-8>. Accessed August 9, 2023.
- 480 Frank, Lawrence D., Nicole Iroz-Elardo, Kara E. MacLeod, et al. "Pathways From Built Environment to Health: A Conceptual Framework Linking Behavior and Exposure-Based Impacts." *Journal of Transport & Health*, 12: 319-335, 2019. <https://doi.org/10.1016/j.jth.2018.11.008>. Accessed August 9, 2023.
- 481 Malacarne, Diego, Evangelos Handakas, Oliver Robinson, et al. "The Built Environment as Determinant of Childhood Obesity: A Systematic Literature Review." *Obesity Reviews*, 23(S1): e13385, 2022. <https://doi.org/10.1111/obr.13385>. Accessed August 9, 2023.
- 482 The Community Guide. "Economic Review Highlights Costs and Benefits of Park, Trail, and Greenway Infrastructure Interventions." <https://www.thecommunityguide.org/news/economic-review-highlights-costs-and-benefits-of-park-trail-greenway-infrastructure-interventions.html>. Accessed August 9, 2023.
- 483 Krahnstoever, Kirsten D., and Catherine T. Lawson. "Do Attributes in the Physical Environment Influence Children's Physical Activity? A Review of the Literature." *International Journal of Behavioral Nutrition and Physical Activity*, 3(19), 2006. <https://ijbnpa.biomedcentral.com/articles/10.1186/1479-5868-3-19>. Accessed August 9, 2023.
- 484 Rissel, Chris, Nada Curac, Mark Greenaway, et al. "Physical Activity Associated with Public Transport Use—A Review and Modelling of Potential Benefits." *International Journal of Environmental Research and Public Health*, 9(7): 2454-2478, 2012. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3407915/>. Accessed August 9, 2023.
- 485 U.S. Department of Transportation. "Active Transportation." Updated August 24, 2015. <https://www.transportation.gov/mission/health/active-transportation>. Accessed August 9, 2023.
- 486 Nesbitt, Lorien, Michael J. Meitner, Cynthia Girling, et al. "Who Has Access to Urban Vegetation? A Spatial Analysis of Distributional Green Equity in 10 US Cities." *Landscape and Urban Planning*, 181: 51-79, 2019. <https://doi.org/10.1016/j.landurbplan.2018.08.007>. Accessed August 9, 2023.
- 487 Raifman, Matthew A., and Ernani F. Choma. "Disparities in Activity and Traffic Fatalities by Race/Ethnicity." *American Journal of Preventive Medicine*, 63(2): P160-167, 2022. [https://www.ajpmonline.org/article/S0749-3797\(22\)00155-6/fulltext](https://www.ajpmonline.org/article/S0749-3797(22)00155-6/fulltext). Accessed August 9, 2023.
- 488 Ibid.
- 489 Frank, Lawrence D., Nicole Iroz-Elardo, Kara E. MacLeod, et al. "Pathways From Built Environment to Health: A Conceptual Framework Linking Behavior and Exposure-Based Impacts." *Journal of Transport & Health*, 12: 319-335, 2019. <https://doi.org/10.1016/j.jth.2018.11.008>. Accessed August 9, 2023.
- 490 Ibid.
- 491 Malacarne, Diego, Evangelos Handakas, Oliver Robinson, et al. "The Built Environment as Determinant of Childhood Obesity: A Systematic Literature Review." *Obesity Reviews*, 23(S1): e13385, 2022. <https://doi.org/10.1111/obr.13385>. Accessed August 9, 2023.

- 492 Omura, John D., Eric T. Hyde, Kathleen B. Watson, et al. "Prevalence of Children Walking to School and Related Barriers—United States, 2017." *Preventive Medicine*, 118: 191-195, January 2019. <https://www.sciencedirect.com/science/article/abs/pii/S0091743518303359>. Accessed August 9, 2023.
- 493 Ibid.
- 494 Jacob, Verughese, Sajal K. Chattopadhyay, Jeffrey A. Reynolds, et al. "Economics of Interventions to Increase Active Travel to School: A Community Guide Systematic Review." *American Journal of Preventive Medicine*, 60(1): e27-e40, 2021. <https://pubmed.ncbi.nlm.nih.gov/33341185/>. Accessed August 9, 2023.
- 495 DeWeese, Robin S., Francesco Acciai, David Tulloch, et al. "Active Commuting to School: A Longitudinal Analysis Examining Persistence of Behavior Over Time in Four New Jersey Cities." *Preventive Medicine Reports*, 26: 101718, 2022. <https://doi.org/10.1016/j.pmedr.2022.101718>. Accessed August 9, 2023.
- 496 The White House. "Fact Sheet: The Biden-Harris Action Plan for Building Better School Infrastructure." April 4, 2022. <https://www.whitehouse.gov/briefing-room/statements-releases/2022/04/04/fact-sheet-the-biden-harris-action-plan-for-building-better-school-infrastructure/>. Accessed August 9, 2023.
- 497 Ibid.
- 498 Jones, Marisa. "Bipartisan Infrastructure Bill Makes Meaningful Strides Toward Increasing Funding and Improving Safety for People Walking, Biking, and Safe Routes to School." Safe Routes Partnership, August 4, 2021. <https://saferoutespartnership.org/blog/bipartisan-infrastructure-bill-makes-meaningful-strides-toward-increasing-funding-and-improving>. Accessed August 9, 2023.
- 499 Infrastructure Investment and Jobs Act, Public Law 117-58. <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>. Accessed August 9, 2023.
- 500 Ibid.
- 501 The White House. "A Guidebook to the Bipartisan Infrastructure Law." Updated July 2023. <https://www.whitehouse.gov/build/guidebook/>. Accessed August 9, 2023.
- 502 U.S. Department of Transportation. "Active Transportation." Updated August 24, 2015. <https://www.transportation.gov/mission/health/active-transportation>. Accessed August 9, 2023.
- 503 Mills, Kevin. "Analysis: Bipartisan Infrastructure Bill Passes with New Opportunities for Trails, Walking and Biking." Rails-to-Trails Conservancy, *Trailblog*, November 6, 2021. <https://www.railstotrails.org/trailblog/2021/november/06/analysis-bipartisan-infrastructure-bill-passes-with-new-opportunities-for-trails-walking-and-biking/>. Accessed August 9, 2023.
- 504 Jones, Marisa. "Bipartisan Infrastructure Bill Makes Meaningful Strides Toward Increasing Funding and Improving Safety for People Walking, Biking, and Safe Routes to School." Safe Routes Partnership, August 4, 2021. <https://saferoutespartnership.org/blog/bipartisan-infrastructure-bill-makes-meaningful-strides-toward-increasing-funding-and-improving>. Accessed August 9, 2023.
- 505 U.S. Department of Transportation. "Reconnecting Communities Pilot Program—Planning Grants and Capital Construction Grants." Updated July 14, 2023. <https://www.transportation.gov/grants/reconnecting-communities>. Accessed August 9, 2023.
- 506 Singh, Gopal K., Mohammad Siahpush, and Michael D. Kogan. "Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity." *Health Affairs*, 29(3): 503-512, 2010. <https://pubmed.ncbi.nlm.nih.gov/20194993/>. Accessed August 9, 2023.
- 507 Yu, Edward, and Adam M. Lippert. "Neighborhood Crime Rate, Weight-Related Behaviors, and Obesity: A Systematic Review of the Literature." *Sociology Compass*, 10(3): 187-207, 2016. <https://doi.org/10.1111/soc4.12356>. Accessed August 9, 2023.
- 508 U.S. Department of Housing and Urban Development. "FY2023 Notice of Funding Opportunity (NOFO) Information." https://www.hud.gov/program_offices/public_indian_housing/programs/ph/cn/fy23funding. Accessed August 9, 2023.
- 509 Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. "Our Budget." Updated March 2, 2023. <https://www.cdc.gov/chronicdisease/programs-impact/budget/index.htm>. Accessed August 9, 2023.
- 510 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.
- 511 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. "State Physical Activity and Nutrition (SPAN) Program." Updated January 20, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/span-1807/index.html>. Accessed August 9, 2023.
- 512 Grants.gov. "CDC-RFA-DP18-1807: State Physical Activity and Nutrition Program: Department of Health and Human Services: Centers for Disease Control—NCCDPHP." <https://www.grants.gov/web/grants/view-opportunity.html?oppId=299540>. Accessed August 9, 2023.
- 513 Grants.gov. "CDC-RFA-DP-23-0012: The State Physical Activity and Nutrition Program (SPAN): Department of Health and Human Services: Centers for Disease Control—NCCDPHP." <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342954>. Accessed August 9, 2023.
- 514 U.S. Office of Management and Budget. *Budget of the U.S. Government: Fiscal Year 2024*. Washington, DC: U.S. Office of Management and Budget, March 2023. https://www.whitehouse.gov/wp-content/uploads/2023/03/budget_fy2024.pdf. Accessed August 9, 2023.
- 515 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. "High Obesity Program (HOP)." Updated April 25, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/hop-1809/high-obesity-program-1809.html>. Accessed August 9, 2023.
- 516 Ibid.
- 517 Louisiana State University. "Removing Red Tape for Complete Streets Projects in Small Rural Communities." *YouTube*. LSU AgCenter Healthy Communities, May 30, 2023. <https://www.youtube.com/watch?v=GFj2OHBO6pY>. Accessed August 9, 2023.
- 518 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Nutrition. "CDC-RFA-DP-23-0013: The High Obesity Program (HOP 2023)." Updated February 23, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/fundingopp/2023/hop.html>. Accessed August 9, 2023.
- 519 Consolidated Appropriations Act, 2023, Public Law 117-328. <https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf>. Accessed August 9, 2023.

- 520 Grants.gov. “CDC-RFA-DP-23-0013: The High Obesity Program (HOP): Department of Health and Human Services: Centers for Disease Control - NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342939>. Accessed August 9, 2023.
- 521 Centers for Disease Control and Prevention. “Public Health Professionals Gateway: Preventive Health and Health Services (PHHS) Block Grant.” Updated February 28, 2023. <https://www.cdc.gov/phhsblockgrant/index.htm>. Accessed August 9, 2023.
- 522 Centers for Disease Control and Prevention. “Preventive Health and Health Services (PHHS) Block Grant: Funding by Topic Area.” Updated June 17, 2021. <https://www.cdc.gov/phhsblockgrant/funding/index.htm>. Accessed August 9, 2023.
- 523 City of Philadelphia. “Philadelphia Food Justice Initiative Announces New Grant Awards to Increase Health Food Access in Philadelphia.” January 27, 2022. <https://www.phila.gov/2022-01-27-philadelphia-food-justice-initiative-announces-new-grant-awards-to-increase-health-food-access-in-philadelphia/>. Accessed August 9, 2023.
- 524 North Carolina Department of Health and Human Services, Division of Public Health. “Healthy Communities Strategy #5: Healthy Food Retail Designation.” <https://www.dph.ncdhhs.gov/chronicdiseaseandinjury/healthycommunities/docs/HealthyCommunitiesStrategy-5-HealthyFoodRetailDesignationSFY22-23FINAL.pdf>. Accessed August 9, 2023.
- 525 State of Oklahoma. “PHHS Block Grant Information System – Oklahoma 2022 Work Plan.” July 1, 2021. https://oklahoma.gov/content/dam/ok/en/health/health2/aem-documents/organization/prevent-block-grant/meeting-files/2022/FFY%202022%20PHHSBG%20Work%20Plan%20FINAL_2022_07_25.pdf. Accessed August 9, 2023.
- 526 Oklahoma State Department of Health. “Coordinated Approach to Child Health (CATCH).” <https://oklahoma.gov/health/health-education/community-outreach/community-development-services/school-health/catch.html>. Accessed August 9, 2023.
- 527 Centers for Disease Control and Prevention. “Centers for Disease Control and Prevention: FY 2023 Operating Plan.” <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Operating-Plan.pdf>. Accessed August 9, 2023.
- 528 Grants.gov. “CDC-RFA-DP-23-0012: The State Physical Activity and Nutrition Program (SPAN): Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342954>. Accessed August 9, 2023.
- 529 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. “SPAN 2023.” Updated February 23, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/fundingopp/2023/span.html>. Accessed August 9, 2023.
- 530 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. “HOP 2023.” <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/fundingopp/2023/hop.html>. Accessed May 3, 2023.
- 531 Grants.gov. “CDC-RFA-DP-23-0013: The High Obesity Program (HOP): Department of Health and Human Services: Centers for Disease Control - NCCDPHP.” Updated February 23, 2023. <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342939>. Accessed August 9, 2023.
- 532 Centers for Disease Control and Prevention. “About the PHHS Block Grant Program.” Updated December 9, 2019. <https://www.cdc.gov/phhsblockgrant/about.htm>. Accessed August 9, 2023.
- 533 Centers for Disease Control and Prevention. “Preventive Health and Health Services (PHHS) Block Grant: Funding by Topic Area.” Updated June 17, 2021. <https://www.cdc.gov/phhsblockgrant/funding/index.htm>. Accessed August 9, 2023.
- 534 Centers for Disease Control and Prevention. “Centers for Disease Control and Prevention: FY 2023 Operating Plan.” <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Operating-Plan.pdf>. Accessed August 9, 2023.
- 535 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. “REACH 2023.” Updated February 27, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/fundingopp/2023/reach.html>. Accessed August 9, 2023.
- 536 Grants.gov. “CDC-RFA-DP-23-0014: Racial and Ethnic Approaches to Community Health (REACH): Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342940>. Accessed August 9, 2023.
- 537 Grants.gov. “CDC-RFA-DP-23-0002: School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students: Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” https://www.cdc.gov/healthyschools/nofo/pdf/dp23-0002_nof-final.pdf. Accessed August 9, 2023.
- 538 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. “Racial and Ethnic Approaches to Community Health.” Updated July 25, 2022. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/reach/index.htm>. Accessed August 9, 2023.
- 539 Society for Public Health Education. “REACH Urban Communities.” <https://www.sophe.org/focus-areas/health-equity/reach/reach-urban-communities/>. Accessed August 9, 2023.
- 540 Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity. “REACH Lark Galloway-Gilliam Awards for Advancing Health Equity Challenge.” Updated February 13, 2023. <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/reach/reach-lark-award/index.html>. Accessed August 9, 2023.
- 541 Society for Public Health Education. “REACH Rural Areas.” <https://www.sophe.org/focus-areas/health-equity/reach/reach-rural-areas/>. Accessed August 9, 2023.
- 542 Grants.gov. “CDC-RFA-DP-23-0014: Racial and Ethnic Approaches to Community Health (REACH): Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342940>. Accessed August 9, 2023.
- 543 Centers for Disease Control and Prevention. “Healthy Tribes: Good Health and Wellness Indian Country.” Updated June 23, 2020. <https://www.cdc.gov/healthytribes/ghwic.htm>. Accessed August 9, 2023.

- 544 Centers for Disease Control and Prevention. “Centers for Disease Control and Prevention: FY 2023 Operating Plan.” <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Operating-Plan.pdf>. Accessed August 9, 2023.
- 545 Grants.gov. “CDC-RFA-DP-23-0002: School-Based Interventions to Promote Equity and Improve Health, Academic Achievement, and Well-Being of Students: Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” https://www.cdc.gov/healthyschools/nofo/pdf/dp23-0002_nof-final.pdf. Accessed August 9, 2023.
- 546 Ibid.
- 547 Barnes, Ann Smith. “The Epidemic of Obesity and Diabetes: Trends and Treatments.” *Texas Heart Institute Journal*, 38(2): 142-4, 2011. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3066828/>. Accessed August 9, 2023.
- 548 Centers for Disease Control and Prevention, National Diabetes Prevention Program. “National Diabetes Prevention Program: Working Together to Prevent Type 2 Diabetes.” https://www.cdc.gov/diabetes/images/library/socialmedia/NDPP_WorkingTogetherDiabetes_Print.pdf. Accessed August 9, 2023.
- 549 Centers for Disease Control and Prevention. “Lifestyle Change Program Details.” Updated August 1, 2023. <https://www.cdc.gov/diabetes/prevention/lcp-details.html>. Accessed August 9, 2023.
- 550 Centers for Disease Control and Prevention. “National Diabetes Prevention Program: About the National DPP.” Updated August 1, 2023. <https://www.cdc.gov/diabetes/prevention/about.htm>. Accessed August 9, 2023.
- 551 National Institute of Diabetes and Digestive and Kidney Diseases. “Diabetes Prevention Program (DPP).” Updated May 2022. <https://www.niddk.nih.gov/about-niddk/research-areas/diabetes/diabetes-prevention-program-dpp>. Accessed August 9, 2023.
- 552 Centers for Disease Control and Prevention. “Centers for Disease Control and Prevention: FY 2023 Operating Plan.” <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Operating-Plan.pdf>. Accessed August 9, 2023.
- 553 Centers for Disease Control and Prevention. “Benefits of Physical Activity.” Updated June 28, 2023. <https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>. Accessed August 9, 2023.
- 554 Webber, Bryant J., Heather C. Yun, and Geoffrey P. Whitfield. “Leisure-Time Physical Activity and Mortality from Influenza and Pneumonia: A Cohort Study of 577 909 US Adults.” *British Journal of Sports Medicine*, May 16, 2023. <https://bjsm.bmj.com/content/early/2023/04/18/bjsports-2022-106644>. Accessed August 9, 2023.
- 555 Centers for Disease Control and Prevention. “Physical Activity and COVID-19.” Updated May 20, 2022. <https://www.cdc.gov/physicalactivity/physical-activity-and-COVID-19.html>. Accessed July 27, 2023.
- 556 Pearce, Matthew, Leandro Garcia, Ali Abbas, et al. “Association Between Physical Activity and Risk of Depression: A Systematic Review and Meta-Analysis.” *JAMA Psychiatry*, 79(6): 550-559, April 13, 2022. <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2790780>. Accessed August 9, 2023.
- 557 U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans. Washington, DC: U.S. Department of Health and Human Services, 2nd edition. 2018. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf. Accessed August 9, 2013.
- 558 Elgaddal, Nazik, Ellen A. Kramarow, and Cynthia Reuben. “Physical Activity Among Adults Aged 18 and Over: United States, 2020.” National Center for Health Statistics, *NCHS Data Brief*, No. 443, August 2022. <https://www.cdc.gov/nchs/data/databriefs/db443.pdf>. Accessed August 9, 2023.
- 559 Centers for Disease Control and Prevention. “Active People, Healthy Nation: About Active People, Healthy NationSM.” Updated July 6, 2023. <https://www.cdc.gov/physicalactivity/activepeoplehealthynation/about-active-people-healthy-nation.html>. Accessed August 9, 2023.
- 560 Ibid.
- 561 Grants.gov. “CDC-RFA-DP-23-0020: A Strategic Approach to Advancing Health Equity for Priority Populations with or at Risk for Diabetes: Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=342950>. Accessed August 9, 2023.
- 562 Centers for Disease Control and Prevention, Division of Diabetes Translation. “Advancing Health Equity.” Updated May 4, 2023. <https://www.cdc.gov/diabetes/health-equity/index.html>. Accessed August 9, 2023.
- 563 U.S. Breastfeeding Committee. “Federal Appropriations for Breastfeeding.” <https://www.usbreastfeeding.org/federal-appropriations-for-breastfeeding.html>. Accessed August 9, 2023.
- 564 Grants.gov. “CDC-RFA-DP-23-0058: Addressing Conditions to Improve Population Health (ACTion): Department of Health and Human Services: Centers for Disease Control – NCCDPHP.” <https://www.grants.gov/web/grants/view-opportunity.html?oppId=346415>. Accessed August 9, 2023.
- 565 Centers for Disease Control and Prevention, Division of Population Health. “Funding Opportunity: Addressing Conditions to Improve Population Health (ACTion).” Updated April 28, 2023. <https://www.cdc.gov/populationhealth/sdoh/funding/action/ACTion-NOFO.htm>. Accessed August 9, 2023.
- 566 Centers for Disease Control and Prevention. “Centers for Disease Control and Prevention: FY 2023 Operating Plan.” <https://www.cdc.gov/budget/documents/fy2023/FY-2023-CDC-Operating-Plan.pdf>. Accessed August 9, 2023.
- 567 Ibid.
- 568 DC Hunger Solutions. “Universal School Meals.” <https://www.dchunger.org/universal-school-meals/>. Accessed August 9, 2023.
- 569 Butz, Leah. “States that Have Passed Universal Free School Meals (So Far).” Hunter College New York City Food Policy Center, February 21, 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed August 9, 2023.
- 570 Garcia, Karen, and Jon Healey. “Free for All California Public School Students: At Least Two Meals a Day.” *Los Angeles Times*, August 15, 2022. <https://www.latimes.com/california/story/2022-08-15/free-for-all-california-public-school-students-at-least-two-meals-a-day>. Accessed August 9, 2023.
- 571 California Department of Education. “California Universal Meals.” Updated June 16, 2023. <https://www.cde.ca.gov/ls/nu/sn/cauniversalmeals.asp>. Accessed August 9, 2023.

- 572 Feinberg, Robbie. "Maine Makes Free School Lunches Permanent After Federal Funding Ends." *NPR*, August 31, 2022. <https://www.npr.org/2022/08/31/1120223479/maine-makes-free-school-lunches-permanent-after-federal-funding-ends>. Accessed August 9, 2023.
- 573 Butz, Leah. "States that Have Passed Universal Free School Meals (So Far)." Hunter College New York City Food Policy Center, February 21, 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed August 9, 2023.
- 574 Daley, John. "Universal Free Lunch Ballot Measure Passes Easily in Colorado." *NPR*, November 9, 2022. <https://www.npr.org/2022/11/09/1134832752/colorado-free-school-lunch-results-measure-mid-terms>. Accessed August 9, 2023.
- 575 Butz, Leah. "States that Have Passed Universal Free School Meals (So Far)." Hunter College New York City Food Policy Center, February 21, 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed August 9, 2023.
- 576 Ibid.
- 577 Shockman, Elizabeth. "Walz Signs Universal School Meals Bill into Minnesota Law." *Minnesota Public Radio*, March 17, 2023. <https://www.mprnews.org/story/2023/03/17/gov-signs-universal-school-meals-bill-into-law>. Accessed August 9, 2023.
- 578 Office of the Governor, State of New Mexico. "Governor signs Senate Bill 4, making universal free and healthy school meals the law of the land." Press release, March 28, 2023. <https://www.governor.state.nm.us/2023/03/28/governor-signs-senate-bill-4-making-universal-free-and-healthy-school-meals-the-law-of-the-land/>. Accessed August 15, 2023.
- 579 Bewlay, Sid. "Universal School Meals bill allowed to become law in Vermont." *NBC5*, June 14, 2023. <https://www.mynbc5.com/article/universal-school-meals-bill-allowed-to-become-law-in-vermont/44202345>. Accessed August 15, 2023.
- 580 State of Vermont Agency of Education. "Free and Reduced Meals." <https://education.vermont.gov/student-support/nutrition/school-meals/free-and-reduced-meals>. Accessed August 15, 2023.
- 581 Michigan Department of Education. "Michigan School Meal Program." July 2023. <https://www.michigan.gov/mde/services/food/michigan-school-meals>. Accessed August 15, 2023.
- 582 LeBlanc, Steve. "Massachusetts joins a small but growing number of states adopting universal free school meals." *Associated Press*, August 2023. <https://www.boston.com/news/schools/2023/08/09/massachusetts-joins-a-small-but-growing-number-of-states-adopting-universal-free-school-meals/>. Accessed August 15, 2023.
- 583 Butz, Leah. "States that Have Passed Universal Free School Meals (So Far)." Hunter College New York City Food Policy Center, February 21, 2023. <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>. Accessed August 9, 2023.
- 584 DC Hunger Solutions. "Universal School Meals." <https://www.dchunger.org/universal-school-meals/>. Accessed August 9, 2023.
- 585 Cohen, Juliana F.W., Amelie A. Hecht, Gabriella M. McLoughlin, et al. "Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review." *Nutrients*, 13(3): 911, 2021. <https://doi.org/10.3390/nu13030911>. Accessed August 9, 2023.
- 586 National Farm to School Network. "The Benefits of Farm to School." Updated May 2020. https://assets.website-files.com/5c469df2395cd53c3d913b2d/611027419232d4281ad2f51ff_BenefitsFact-Sheet.pdf. Accessed August 9, 2023.
- 587 New York State Department of Agriculture and Markets. "Farm-to-School." <https://agriculture.ny.gov/farming/farm-school>. Accessed August 9, 2023.
- 588 Economou, Robbie. "States Step in as End of Free School Meal Waivers Looms." National Conference on State Legislatures, July 29, 2022. <https://www.ncsl.org/state-legislatures-news/details/states-step-in-as-end-of-free-school-meal-waivers-looms>. Accessed August 9, 2023.
- 589 University of Maryland Extension. "Farm to School." <https://mdteachertoolkit.org/gardening-for-nutrition/farm-to-school-2/>. Accessed August 9, 2023.
- 590 New York State Department of Agriculture and Markets. "Farm-to-School." <https://agriculture.ny.gov/farming/farm-school>. Accessed August 9, 2023.
- 591 Rock On Café. "Farm to School." <https://www.rockoncafe.org/FarmtoSchool.aspx>. Accessed August 9, 2023.
- 592 Florida Department of Agriculture and Consumer Services. "Harvest of the Month." <https://www.fdacs.gov/Food-Nutrition/Nutrition-Programs/Farm-to-School/Harvest-of-the-Month>. Accessed August 9, 2023.
- 593 Pflugh Prescott, Melissa, Rebecca Cleary, Alessandro Bonanno, et al., "Farm to School Activities and Student Outcomes: A Systematic Review." *Advances in Nutrition*, 11(2): 357-374, 2020. <https://doi.org/10.1093/advances/nmz094>. Accessed August 9, 2023.
- 594 Centers for Medicare and Medicaid Services. "Access to Health Coverage." Updated July 31, 2023. <https://www.cms.gov/pillar/expand-access>. Accessed August 9, 2023.
- 595 Finkelstein, Eric A., Justin G. Trogdon, Joel W. Cohen, et al. "Annual Medical Spending Attributable to Obesity: Payer and Service-Specific Estimates." *Health Affairs* (Millwood), 28(5): w822-31, 2009. <https://pubmed.ncbi.nlm.nih.gov/19635784/>. Accessed August 9, 2023.
- 596 Ward, Zachary J., Sara N. Bleich, Michael W. Long, et al. "Association of Body Mass Index with Health Care Expenditures in the United States: By Age and Sex." *PLoS One*, 16(3): e0247307, 2021. <https://doi.org/10.1371/journal.pone.0247307>. Accessed August 9, 2023.
- 597 Cawley, John, Adam Biener, Chad Meyerhoefer, et al. "Direct Medical Costs of Obesity in the United States and the Most Populous States." *Journal of Managed Care & Specialty Pharmacy*, 27(3): 354-366, 2021. <https://pubmed.ncbi.nlm.nih.gov/33470881/>. Accessed August 9, 2023.
- 598 Food and Drug Administration. "FDA Approves New Drug Treatment for Chronic Weight Management, First Since 2014." June 4, 2021. <https://www.fda.gov/news-events/press-announcements/fda-approves-new-drug-treatment-chronic-weight-management-first-2014>. Accessed August 9, 2023.
- 599 Centers for Medicare and Medicaid Services. "National Coverage Determination: Intensive Behavioral Therapy for Obesity." November 29, 2011. <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=353>. Accessed August 9, 2023.
- 600 Ibid.

- 601 The National Association of Chronic Disease Directors and Centers for Disease Control and Prevention. "Participating Payers and Employers." *The National Diabetes Prevention Program Coverage Toolkit*. Updated August 1, 2023. <https://coveragetoolkit.org/participating-payers/>. Accessed August 9, 2023.
- 602 Centers for Medicare and Medicaid Services. "National Coverage Determination: Bariatric Surgery for Treatment of Co-Morbid Conditions Related to Morbid Obesity." Updated September 24, 2013. <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=57&ncdver=5&bc=0>. Accessed August 9, 2023.
- 603 AARP. "Does Medicare Cover Weight-Loss Programs or Surgery?" November 3, 2022. <https://www.aarp.org/health/medicare-qa-tool/does-medicare-cover-weight-loss-programs-surgery/>. Accessed August 9, 2023.
- 604 Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Public Law 108-173. <https://www.congress.gov/108/plaws/publ173/PLAW-108publ173.pdf>. Accessed August 9, 2023.
- 605 Hamlet, Gasoyan, Jennifer K. Ibrahim, and William E. Aaronson. "The Role of Health Insurance Characteristics in Utilization of Bariatric Surgery." *Surgery for Obesity and Related Diseases*, 17(5): P860-868, 2021. [https://www.soard.org/article/S1550-7289\(21\)00050-2/fulltext](https://www.soard.org/article/S1550-7289(21)00050-2/fulltext). Accessed August 9, 2023.
- 606 Wirth, Keith, Scott Kizy, Hisham Abdelwahab, et al. "Bariatric Surgery Outcomes in Medicare Beneficiaries." *Obesity Science & Practice*, 7(2): 176-191, December 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8019272/>. Accessed August 9, 2023.
- 607 Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Public Law 108-173. <https://www.congress.gov/108/plaws/publ173/PLAW-108publ173.pdf>. Accessed August 9, 2023.
- 608 Medicare.org. "Does Medicare Cover Weight Loss Medication?" <https://www.medicare.org/articles/does-medicare-cover-weight-loss-medication/>. Accessed August 9, 2023.
- 609 Baum, Charles, Katherine Andino, Eric Wittbrodt, et al. "The Challenges and Opportunities Associated with Reimbursement for Obesity Pharmacotherapy in the USA." *PharmacoEconomics*, 33(7): 643-53, 2015. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4486408/>. Accessed August 9, 2023.
- 610 Ibid.
- 611 Ibid.
- 612 Aubrey, Allison. "Wegovy Works. But Here's What Happens If You Can't Afford to Keep Taking the Drug." *NPR*, January 30, 2023. <https://www.npr.org/sections/health-shots/2023/01/30/1152039799/ozempic-wegovy-weight-loss-drugs>. Accessed August 9, 2023.
- 613 Cha, Ariana Eunjung. "Their Child's Obesity Drug Was Working. Then Their Plan Refused to Pay." *The Washington Post*, March 26, 2023. <https://www.washingtonpost.com/health/2023/03/26/ozempic-insurance-coverage-children/>. Accessed August 9, 2023.
- 614 Congress.gov. "S.596 – 117th Congress (2021-22): Treat and Reduce Obesity Act of 2021." <https://www.congress.gov/117/bills/s596/BILLS-117s596is.pdf>. Accessed May 5, 2023.
- 615 Congress.gov. "H.R.1577 – 117th Congress (2021-22): Treat and Reduce Obesity Act of 2021." <https://www.congress.gov/117/bills/hr1577/BILLS-117hr1577ih.pdf>. Accessed August 9, 2023.
- 616 Aubrey, Allison. "Wegovy Works. But Here's What Happens If You Can't Afford to Keep Taking the Drug." *NPR*, January 30, 2023. <https://www.npr.org/sections/health-shots/2023/01/30/1152039799/ozempic-wegovy-weight-loss-drugs>. Accessed August 9, 2023.
- 617 Reitman, Elizabeth. "Anti-Obesity Medication's Steep Price Tag Adds to Public Health Disparities." *Yale School of Medicine*, October 31, 2022. <https://medicine.yale.edu/news-article/anti-obesity-medications-steep-price-tag-adds-to-public-health-disparities/>. Accessed August 9, 2023.
- 618 Centers for Medicare and Medicaid Services. "Reducing Obesity." <https://www.medicare.gov/medicaid/quality-of-care/quality-improvement-initiatives/reducing-obesity/index.html>. Accessed August 9, 2023.
- 619 Strategies to Overcome & Prevent (STOP) Obesity Alliance. *Coverage for Obesity Treatment Services State Medicaid Programs 2016-2017*. Washington, DC: Sumner M. Redstone Global Center for Prevention & Wellness, Milken Institute School of Public Health, The George Washington University, 2018. <https://stop.publichealth.gwu.edu/coverage/medicaid>. Accessed August 9, 2023.
- 620 Jannah, Nichole, Jeff Hild, Christine Gallagher, et al. "Coverage for Obesity Prevention and Treatment Services: Analysis of Medicaid and State Employee Health Insurance Programs." *Obesity*, 26(12): 1834-1840, December 2018. <https://onlinelibrary.wiley.com/doi/10.1002/oby.22307>. Accessed August 9, 2023.
- 621 Court, Emma, and Robert Langreth. "Good Luck Paying for Those \$10,000 Obesity Drugs Everyone's Talking About." *Bloomberg Businessweek*, April 27, 2023. <https://www.bloomberg.com/news/features/2023-04-27/ozempic-s-high-cost-limits-access-to-weight-loss-drug?leadSource=verify%20wall>. Accessed August 9, 2023.
- 622 Ibid.
- 623 The National Association of Chronic Disease Directors and Centers for Disease Control and Prevention. "Participating Payers and Employers." *The National Diabetes Prevention Program Coverage Toolkit*. Updated August 1, 2023. <https://coveragetoolkit.org/participating-payers/>. Accessed August 9, 2023.
- 624 Ibid.
- 625 Waidmann, Timothy A., Elaine Waxman, Vincent Pancini, et al. "Obesity Across America: Geographic Variation in Disease Prevalence and Treatment Options." *The Urban Institute*, February 2022. <https://www.urban.org/sites/default/files/2022-02/obesity-across-america.pdf>. Accessed August 9, 2023.
- 626 Centers for Disease Control and Prevention. "National and State Diabetes Trends." Updated May 17, 2022. <https://www.cdc.gov/diabetes/library/reports/reportcard/national-state-diabetes-trends.html>. Accessed August 9, 2023.
- 627 The National Association of Chronic Disease Directors and Centers for Disease Control and Prevention. "Participating Payers and Employers." *The National Diabetes Prevention Program Coverage Toolkit*. Updated August 1, 2023. <https://coveragetoolkit.org/participating-payers/>. Accessed August 9, 2023.

- 628 Strategies to Overcome & Prevent (STOP) Obesity Alliance. *Coverage for Obesity Treatment Services State Medicaid Programs 2016-2017*. Washington, DC: Sumner M. Redstone Global Center for Prevention & Wellness, Milken Institute School of Public Health, The George Washington University, 2018. <https://stop.publichealth.gwu.edu/coverage/medicaid>. Accessed August 9, 2023.
- 629 Centers for Medicare and Medicaid Services. "Reducing Obesity." <https://www.medicare.gov/medicaid/quality-of-care/quality-improvement-initiatives/reducing-obesity/index.html>. Accessed August 9, 2023.
- 630 U.S. Preventive Service Task Force. "Final Recommendation: Statement Obesity in Children and Adolescents: Screening." June 20, 2017. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-children-and-adolescents-screening>. Accessed August 9, 2023.
- 631 U.S. Preventive Service Task Force. "Final Recommendation Statement: Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions." Updated September 18, 2018. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-adults-interventions>. Accessed August 9, 2023.
- 632 U.S. Preventive Service Task Force. "Final Recommendation Statement: Healthy Weight and Weight Gain in Pregnancy: Behavioral Counseling Interventions." Updated May 25, 2021. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/healthy-weight-and-weight-gain-during-pregnancy-behavioral-counseling-interventions>. Accessed August 9, 2023.
- 633 U.S. Preventive Service Task Force. "Final Recommendation Statement: Prediabetes and Type 2 Diabetes: Screening." Updated August 24, 2021. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-for-prediabetes-and-type-2-diabetes>. Accessed August 9, 2023.
- 634 U.S. Preventive Service Task Force. "Interventions for Weight Management in Children and Adolescents." Updated June 23, 2022. <https://www.uspreventiveservicestaskforce.org/uspstf/draft-update-summary/weight-management-children-adolescents-interventions>. Accessed August 9, 2023.
- 635 U.S. Preventive Service Task Force. "Preventive Services for Food Insecurity." Updated July 24, 2022. <https://www.uspreventiveservicestaskforce.org/uspstf/draft-update-summary/food-insecurity-preventive-services>. Accessed August 9, 2023.
- 636 Centers for Medicare and Medicaid Services. "National Health Expenditures 2021 Highlights." <https://www.cms.gov/files/document/highlights.pdf>. Accessed August 9, 2023.
- 637 Centers for Disease Control and Prevention, The National Institute for Occupational Safety and Health. "Healthcare Workers." Updated July 6, 2023. <https://www.cdc.gov/niosh/topics/healthcare/>. Accessed August 9, 2023.
- 638 U.S. Centers for Disease Control and Prevention, National Center for Health Statistics. "Ambulatory Care Use and Physician Office Visits." Updated June 30, 2023. <https://www.cdc.gov/nchs/fastats/physician-visits.htm>. Accessed August 9, 2023.
- 639 Adams, Kelly M., W. Scott Butsch, and Martin Kohlmeier. "The State of Nutrition Education at US Medical Schools." *Journal of Biomedical Education*, 2015. <https://doi.org/10.1155/2015/357627>. Accessed August 9, 2023.
- 640 Butsch, W. Scott, Robert F. Kushner, Susan Alford, et al. "Low Priority of Obesity Education Leads to Lack of Medical Students' Preparedness to Effectively Treat Patients with Obesity: Results from the U.S. Medical School Obesity Education Curriculum Benchmark Study." *BMC Medical Education*, 20(23), 2020. <https://doi.org/10.1186/s12909-020-1925-z>. Accessed August 9, 2023.
- 641 Morris, George L., Kayla Chapman, David Nelson, et al. "Physician Use of Electronic Health Records in Obesity Management." *Wisconsin Medical Journal*, 115(3): 140-142, 2016. <https://wmjonline.org/wp-content/uploads/2016/115/3/140.pdf>. Accessed August 9, 2023.
- 642 Hoppenfeld, Mita Shah, Nadeem E. Abou-Arraj, and Michelle E. Hauser. "MON-LB105 Resident Obesity Management: Comfort Correlates with Action." *Journal of the Endocrine Society*, 4(Suppl. 1), April-May 2020. <https://doi.org/10.1210/jendso/bvaa046.2106>. Accessed August 9, 2023.
- 643 Kris-Etherton, Penny M., Sharon R. Akabas, Pauline Douglas, et al. "Nutrition Competencies in Health Professionals' Education and Training: A New Paradigm." *Advances in Nutrition*, 6(1): 83-7, January 2015. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4288283/>. Accessed August 9, 2023.
- 644 Hoppenfeld, Mita Shah, Nadeem E. Abou-Arraj, and Michelle E. Hauser. "MON-LB105 Resident Obesity Management: Comfort Correlates with Action." *Journal of the Endocrine Society*, 4(Suppl. 1), April-May 2020. <https://doi.org/10.1210/jendso/bvaa046.2106>. Accessed August 9, 2023.
- 645 Nanda, Sanjeev, Jayanth Adusumalli, Ryan T. Hurt, et al. "Obesity Management Education Needs Among General Internists: A Survey." *Journal of Primary Care and Community Health*, January-December 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8114257/>. Accessed August 9, 2023.
- 646 Aubrey, Allison. "Eli Lilly Releases More Data for New Obesity Drug, Moving Toward Fast-Track Approval." *NPR*, April 27, 2023. <https://www.npr.org/sections/health-shots/2023/04/27/1172365791/eli-lilly-releases-more-data-for-new-obesity-drug-moving-toward-fast-track-appro>. Accessed August 9, 2023.
- 647 Puhl, Rebecca M., Sean M. Phelan, Joseph Nadglowski, et al. "Overcoming Weight Bias in the Management of Patients with Diabetes and Obesity." *Clinical Diabetes*, 34(1): 44-50, 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4714720/>. Accessed August 9, 2023.
- 648 Pan, Liping, Bettylou Sherry, Rashid Njai, et al. "Food Insecurity Is Associated with Obesity Among US Adults in 12 States." *Journal of the Academy of Nutrition and Dietetics*, 112(9): 1403-1409, 2012. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4584410/>. Accessed August 9, 2023.
- 649 Nobari, Tabashir Z., Shannon E. Whaley, Evelyn Blumenberg, et al. "Severe Housing-Cost Burden and Obesity Among Preschool-Aged Low-Income Children in Los Angeles County." *Preventive Medicine Reports*, 13: 139-145, March 2019. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6305808/>. Accessed August 9, 2023.

- 650 Boynton-Jarrett, Renée, Jessica Fargnoli, Shakira Franco Suglia, et al. "Association Between Maternal Intimate Partner Violence and Incident Obesity in Preschool-Aged Children: Results from the Fragile Families and Child Well-Being Study." *Archives of Pediatrics & Adolescent Medicine*, 164(6): 540-546, 2010. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4586060/>. Accessed August 9, 2023.
- 651 Hampl, Sarah E., Sandra G. Hassink, Asheley C. Skinner, et al. "Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents with Obesity." *Pediatrics*, 151(2): e2022060640, 2023. <https://doi.org/10.1542/peds.2022-060640>. Accessed August 9, 2023.
- 652 Ibid.
- 653 Hampl, Sarah E., Sandra G. Hassink, Asheley C. Skinner, et al. "Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents with Obesity." *Pediatrics*, 151(2): e2022060640, 2023. <https://doi.org/10.1542/peds.2022-060640>. Accessed August 9, 2023.
- 654 Jensen, Michael D., Donna H. Ryan, Caroline M. Apovian, et al. "2013 AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults." *Circulation*, 129(25, Suppl. 2): S102-38, 2014. <https://www.ahajournals.org/doi/full/10.1161/01.cir.0000437739.71477.ee>. Accessed August 9, 2023.
- 655 U.S. Preventive Service Task Force. "Final Recommendation: Statement Obesity in Children and Adolescents: Screening." Updated June 20, 2017. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-children-and-adolescents-screening>. Accessed August 9, 2023.
- 656 U.S. Preventive Service Task Force. "Final Recommendation Statement: Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions." Updated September 18, 2018. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-adults-interventions>. Accessed August 9, 2023.
- 657 U.S. Preventive Service Task Force. "Final Recommendation Statement: Healthy Weight and Weight Gain in Pregnancy: Behavioral Counseling Interventions." Updated May 25, 2021. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/healthy-weight-and-weight-gain-during-pregnancy-behavioral-counseling-interventions>. Accessed August 9, 2023.
- 658 U.S. Preventive Service Task Force. "Final Recommendation Statement: Prediabetes and Type 2 Diabetes: Screening." Updated August 24, 2021. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-for-prediabetes-and-type-2-diabetes>. Accessed August 9, 2023.
- 659 Centers for Disease Control and Prevention. "Support for Breastfeeding in the Workplace." https://www.cdc.gov/breastfeeding/pdf/bf_guide_2.pdf. Accessed August 9, 2023.
- 660 Harvard T.H. Chan School of Public Health. "Worksite Obesity Prevention Recommendations: Complete List Obesity Prevention on the Job." *Obesity Prevention Source*. <https://www.hsph.harvard.edu/obesity-prevention-source/obesity-prevention/worksites/worksites-obesity-prevention-recommendations-complete-list/>. Accessed August 9, 2023.
- 661 Heinen, LuAnn, and Helen Darling. "Addressing Obesity in The Workplace: The Role of Employers." *The Milbank Quarterly*, 87(1): 101-22, 2009. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2879173/>. Accessed August 9, 2023.
- 662 American Hospital Association. "Fast Facts on U.S. Hospitals, 2023." 2023. <https://www.aha.org/system/files/media/file/2023/04/Fast-Facts-on-US-Hospitals-2023-Infographics.pdf>. Accessed August 9, 2023.
- 663 Internal Revenue Service. "Requirements for 501(c)(3) Hospitals Under the Affordable Care Act—Section 501(r)." <https://www.irs.gov/charities-non-profits/charitable-organizations/requirements-for-501c3-hospitals-under-the-affordable-care-act-section-501r>. Accessed August 9, 2023.
- 664 Franz, Berkeley, Cory E. Cronin, Valerie A. Yeager, et al. "Overview of the Most Commonly Identified Public Health Needs and Strategies in a Nationally Representative Sample of Nonprofit Hospitals." *Medical Care Research and Review*, 80(3): 342-351, 2023. <https://journals.sagepub.com/doi/10.1177/10775587221135365>. Accessed August 9, 2023.
- 665 Excela Health. "2021-2023 Community Health Needs Assessment." Center for Applied Research, University of Pittsburg at Greenberg. https://www.excelahealth.org/documents/content/CHNA-2021-2023-032822_GLW.pdf. Accessed August 9, 2023.
- 666 North Mississippi Health Services. "Community Health Needs Assessment." September 2022. <https://www.nmhs.net/app/files/public/b431d6a4-554b-4213-a752-ffc78fc1467a/CHNA%202022%20Amory.pdf>. Accessed August 9, 2023.
- 667 Jackson County Memorial Hospital. "Community Health Needs Assessment Implementation Strategy." 2020. https://www.jcmh.com/wp-content/uploads/2022/09/2019_2020_CHNA_Implementation_Plan.pdf. Accessed August 9, 2023.
- 668 Yan, Jing, Lin Liu, Yun Zhu, et al. "The Association Between Breastfeeding and Childhood Obesity: A Meta-Analysis." *BMC Public Health*, 14(1): 1267, 2014. <https://pubmed.ncbi.nlm.nih.gov/25495402/>. Accessed August 9, 2023.
- 669 American Academy of Pediatrics. "American Academy of Pediatrics Calls for More Support for Breastfeeding Mothers Within Updated Policy Recommendations." June 27, 2022. <https://www.aap.org/en/news-room/news-releases/aap/2022/american-academy-of-pediatrics-calls-for-more-support-for-breastfeeding-mothers-within-updated-policy-recommendations/>. Accessed August 9, 2023.
- 670 Centers for Disease Control and Prevention, National Immunization Survey. "Breastfeeding Among U.S. Children Born 2013-2020, CDC National Immunization Survey-Child Percentage of U.S. Children Who Were Breastfed, by Birth Year." Updated August 1, 2023. https://www.cdc.gov/breastfeeding/data/nis_data/results.html. Accessed August 9, 2023.
- 671 Baby-Friendly USA. "The Baby Friendly Hospital Initiative." <https://www.babyfriendlyusa.org/about/>. Accessed August 9, 2023.
- 672 Centers for Disease Control and Prevention. "CDC-Recognized Family Healthy Weight Programs." Updated April 14, 2023. <https://www.cdc.gov/obesity/strategies/family-healthy-weight-programs.html>. Accessed August 9, 2023.

- 673 Hampl, Sarah E., Sandra G. Hassink, Asheley C. Skinner, et al. "Clinical Practice Guideline for the Evaluation and Treatment of Children and Adolescents with Obesity." *Pediatrics*, 151(2): e2022060640, 2023. <https://doi.org/10.1542/peds.2022-060640>. Accessed August 9, 2023.
- 674 U.S. Preventive Service Task Force. "Final Recommendation: Statement Obesity in Children and Adolescents: Screening." Updated June 20, 2017. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/obesity-in-children-and-adolescents-screening>. Accessed August 9, 2023.
- 675 Centers for Disease Control and Prevention. "CDC-Recognized Family Healthy Weight Programs." Updated April 14, 2023. <https://www.cdc.gov/obesity/strategies/family-healthy-weight-programs.html>. Accessed August 9, 2023.
- 676 Ibid.
- 677 Association of State Public Health Nutritionists. "DNPAO NOFO Helpful Information: For ASPHN Members Interested in Applying for DNPAO's Expected SNAP, HOP or REACH 2023 Funding Opportunities." <https://asphn.org/dnpao-nofo-helpful-info/>. Accessed August 9, 2023.
- 678 O'Toole, Terrence P., Heidi M. Blanck, Rafael Flores-Ayala, et al. "Five Priority Public Health Actions to Reduce Chronic Disease Through Improved Nutrition and Physical Activity." *Health Promotion Practice*, 23(1, Suppl. 1): 5S-11S, 2022. <https://journals.sagepub.com/doi/full/10.1177/15248399221120507#ibrid10-15248399221120507>. Accessed August 9, 2023.
- 679 Centers for Medicare and Medicaid Services. "Missouri State Plan Amendment (SPA) 21-0016." September 3, 2021. <https://www.medicaid.gov/medicaid/spa/downloads/MO-21-0016.pdf>. Accessed August 9, 2023.
- 680 Graber, Eric. "Food as Medicine." American Society for Nutrition, February 22, 2022. <https://nutrition.org/food-as-medicine/>. Accessed August 9, 2023.
- 681 American Heart Association and The Rockefeller Foundation. "Food is Medicine Initiative." <https://www.heart.org/en/professional/food-is-medicine-initiative>. Accessed August 14, 2023.
- 682 National Institutes of Health. "Request for Information (RFI): Food Is Medicine Research Opportunities: NOT-OD-23-107." April 11, 2023. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-107.html>. Accessed August 9, 2023.
- 683 Graber, Eric. "Food as Medicine." American Society for Nutrition, February 22, 2022. <https://nutrition.org/food-as-medicine/>. Accessed August 9, 2023.
- 684 National Institutes of Health. "Request for Information (RFI): Food is Medicine Research Opportunities: NOT-OD-23-107." April 11, 2023. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-23-107.html>. Accessed August 9, 2023.
- 685 Centers for Medicare and Medicaid Services. "All-State Medicaid and CHIP Call: December 6, 2022." 2022. <https://www.medicaid.gov/resources-for-states/downloads/covid19allstatecall12062022.pdf>. Accessed August 9, 2023.
- 686 Medicaid.gov. "About Section 1115 Demonstrations." <https://www.medicaid.gov/medicaid/section-1115-demonstrations/about-section-1115-demonstrations/index.html>. Accessed August 9, 2023.
- 687 Horn-Muller, Ayurella. "Medicaid for Food's Next Destination." *Axios*, March 16, 2023. <https://www.axios.com/2023/03/16/medicaid-for-food-next-states>. Accessed August 9, 2023.
- 688 KFF. "Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State." July 17, 2023. <https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/>. Accessed August 9, 2023.
- 689 Oregon Health Authority. "What's Changing in the 2022 – 2027 1115 Demonstration Waiver." <https://www.oregon.gov/oha/HSD/Medicaid-Policy/Pages/Changes.aspx>. Accessed August 9, 2023.
- 690 Centers for Medicare and Medicaid Services. "MassHealth Technical Correction Approval Letter." November 7, 2022. <https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ma-masshealth-ca-11072022.pdf>. Accessed August 9, 2023.
- 691 Centers for Medicare and Medicaid Services. "All-State Medicaid and CHIP Call: December 6, 2022." <https://www.medicaid.gov/resources-for-states/downloads/covid19allstatecall12062022.pdf>. Accessed August 9, 2023.
- 692 American Medical Association. "Recognition of Obesity as a Disease H-440.842." 2013. <https://policysearch.ama-assn.org/policyfinder/detail/obesity?uri=%2FAMADoc%2FHOD.xml-0-3858.xml>. Accessed August 9, 2023.
- 693 Adler, Kenneth G. "Screening for Social Determinants of Health: An Opportunity or Unreasonable Burden?" *Family Practice Management*, 25(3): 3, May/June 2018. <https://www.aafp.org/pubs/fpm/issues/2018/0500/p3.html#:~:text=Consider%20that%2080%20percent%20to,major%20contributor%20to%20health%20outcomes>. Accessed August 9, 2023.
- 694 Yusuf, Zenab I., Deepa Dongarwar, Rafeek A. Yusuf, et al. "Social Determinants of Overweight and Obesity Among Children in the United States." *International Journal of MCH and AIDS*, 9(1): 22-33, 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7031877/>. Accessed August 9, 2023.
- 695 Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. "Social Determinants of Health." <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>. Accessed August 9, 2023.
- 696 Meltzer, David O., and Chen Zhuo. "The Impact of Minimum Wage Rates on Body Weight in the United States." National Bureau of Economic Research, Working Paper No. 15485, November 2009. <https://www.nber.org/papers/w15485>. Accessed August 9, 2023.
- 697 Leigh, J. Paul, and Juan Du. "Effects of Minimum Wages on Population Health." *Health Affairs, Health Policy Brief*, October 4, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180622.107025/full/>. Accessed August 9, 2023.
- 698 Khullar, Dhruv, and David A. Chokshi. "Health, Income, & Poverty: Where We Are & What Could Help." *Health Affairs, Health Policy Brief*, October 4, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180817.901935/full/>. Accessed August 9, 2023.
- 699 Lustig, Adam, and Marilyn Cabrera. *Promoting Health and Cost Control in States*. Washington, DC: Trust for America's Health, February 2019. <https://www.tfah.org/report-details/promoting-health-and-cost-control-in-states/>. Accessed August 9, 2023.

- 700 U.S. Department of Health and Human Services. “Advancing Equity at HHS.” Updated April 14, 2022. <https://www.hhs.gov/equity/index.html#:~:text=HHS%20is%20committed%20to%20addressing,focus%20on%20equity%20over%20time>. Accessed August 9, 2023.
- 701 The White House. “Advancing Equity and Racial Justice Through the Federal Government.” Executive Order 13985. <https://www.whitehouse.gov/equity/#health-equity>. Accessed August 9, 2023.
- 702 U.S. Department of Agriculture, Food and Nutrition Service. “SNAP Data Tables.” Updated July 14, 2023. <https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>. Accessed August 9, 2023.
- 703 Food Research and Action Center. “One Year of WIC During COVID-19: Waivers are Vital to Participation and Benefit Redemption.” June 2021. <https://frac.org/wp-content/uploads/One-Year-of-WIC-During-COVID-19.pdf>. Accessed August 9, 2023.
- 704 U.S. Census Bureau. “Women, Infants, and Children (WIC) Program Eligibility and Participation.” August 17, 2021. <https://www.census.gov/library/visualizations/interactive/wic-eligibility-participation.html>. Accessed August 9, 2023.
- 705 Logan, Christopher, Vinh Tran, Maria Boyle, et al. *School Nutrition and Meal Cost Study, Final Report, Volume 3: School Meal Costs and Revenues*. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, April 23, 2019. <https://www.mathematica.org/publications/school-nutrition-and-meal-cost-study-final-report-volume-3-school-meal-costs-and-revenues>. Accessed August 9, 2023.
- 706 Food Resource and Action Center. “Community Eligibility: The Key to Hunger-Free Schools School Year 2021–2022.” June 2022. <https://frac.org/wp-content/uploads/cep-report-2022.pdf>. Accessed August 9, 2023.
- 707 Segal, Becca. “Why Schools Are Adopting Community Eligibility.” *Off the Charts*, Center on Budget and Policy Priorities, May 16, 2014. <https://www.cbpp.org/blog/why-schools-are-adopting-community-eligibility>. Accessed August 9, 2023.
- 708 U.S. Department of Agriculture, Food and Nutrition Service. “Child Nutrition Programs: Community Eligibility Provision-Increasing Options for Schools.” *Federal Register*, 88: 17406, March 23, 2023. <https://www.federalregister.gov/documents/2023/03/23/2023-05624/child-nutrition-programs-community-eligibility-provision-increasing-options-for-schools>. Accessed August 9, 2023.
- 709 U.S. Department of Agriculture, Food and Nutrition Service. “SNAP and the Thrifty Food Plan.” Updated November 21, 2022. <https://www.fns.usda.gov/snap/thriftyfoodplan>. Accessed August 9, 2023.
- 710 Project Bread. “Barriers to SNAP.” August 2021. <https://www.projectbread.org/research/barriers-to-snap>. Accessed August 9, 2023.
- 711 The White House. “Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health.” September 2022. <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>. Accessed August 9, 2023.
- 712 Croker, H., J. Packer, Simon J. Russell, et al. “Front of Pack Nutritional Labelling Schemes: A Systematic Review and Meta-Analysis of Recent Evidence Relating to Objectively Measured Consumption and Purchasing.” *Journal of Human Nutrition and Dietetics*, 33(4): 518-537, May 4, 2020. <https://pubmed.ncbi.nlm.nih.gov/32364292/>. Accessed August 9, 2023.
- 713 Roberto, Christina A., Shu Wen Ng, Montserrat Ganderats-Fuentes, et al. “The Influence of Front-of-Package Nutrition Labeling on Consumer Behavior and Product Reformulation.” *Annual Review of Nutrition*, 41: 529-550, October 11, 2021. <https://pubmed.ncbi.nlm.nih.gov/34339293/>. Accessed August 9, 2023.
- 714 Pan, Liping, David S. Freedman, Andrea J. Sharma, et al. “Trends in Obesity Among Participants Aged 2–4 Years in the Special Supplemental Nutrition Program for Women, Infants, and Children—United States, 2000–2014.” *Morbidity and Mortality Weekly Report*, 65: 1256-1260, 2016. <https://www.cdc.gov/mmwr/volumes/65/wr/mm6545a2.htm>. Accessed August 9, 2023.
- 715 Pan, Liping, Sohyun Park, Renata Slayton, et al. “Trends in Severe Obesity Among Children Aged 2 to 4 Years Enrolled in Special Supplemental Nutrition Program for Women, Infants, and Children From 2000 to 2014.” *JAMA Pediatrics*, 172(3): 232-238, 2018. <https://www.ncbi.nlm.nih.gov/pubmed/29309485>. Accessed August 9, 2023.
- 716 Pan, Liping, David S. Freedman, Andrea J. Sharma, et al. “Trends in Obesity Among Participants Aged 2–4 Years in the Special Supplemental Nutrition Program for Women, Infants, and Children—United States, 2000–2014.” *Morbidity and Mortality Weekly Report*, 65: 1256-1260, 2016. <https://www.cdc.gov/mmwr/volumes/65/wr/mm6545a2.htm>. Accessed August 9, 2023.
- 717 Pan, Liping, Sohyun Park, Renata Slayton, et al. “Trends in Severe Obesity Among Children Aged 2 to 4 Years Enrolled in Special Supplemental Nutrition Program for Women, Infants, and Children From 2000 to 2014.” *JAMA Pediatrics*, 172(3): 232-238, 2018. <https://www.ncbi.nlm.nih.gov/pubmed/29309485>. Accessed August 9, 2023.
- 718 Korenman, Sanders, Kristin S. Abner, Robert Kaestner, and Rachel A. Gordon. “The Child and Adult Care Food Program and the Nutrition of Preschoolers.” *Early Childhood Research Quarterly*, 28(2): 325-336, 2013. <https://www.ncbi.nlm.nih.gov/pubmed/23687405>. Accessed August 9, 2023.
- 719 U.S. Department of Agriculture, Food and Nutrition Service. “WIC Breastfeeding Policy Inventory.” Updated January 12, 2015. <https://www.fns.usda.gov/wic/wic-breastfeeding-policy-inventory>. Accessed August 9, 2023.
- 720 Moreno, Megan A. “Breastfeeding as Obesity Prevention.” *Pediatrics & Adolescent Medicine*, 165(8): 772, August 2011. <https://jamanetwork.com/journals/jamapediatrics/fullarticle/1107563>. Accessed August 9, 2023.
- 721 Maternal and Child Health Bureau, Health Resources and Services Administration. “Children’s Healthy Weight Collaborative Improvement and Innovation Network Fact Sheet.” Updated June 2019. <https://mchb.hrsa.gov/training/documents/fs/factsheet-coiin.pdf>. Accessed August 9, 2023.

- 722 Maternal and Child Health Bureau, Health Resources and Services Administration. "Nutrition." Updated May 2023. <https://mchb.hrsa.gov/maternal-child-health-initiatives/nutrition>. Accessed August 9, 2023.
- 723 National Policy and Legal Analysis Network to Prevent Childhood Obesity and ChangeLab Solutions. "Understanding Healthy Procurement: Using Government's Purchasing Power to Increase Access to Healthy Food." 2011. https://changelabsolutions.org/sites/default/files/Understanding%20Healthy%20Procurement%202011_20120717.pdf. Accessed August 9, 2023.
- 724 Centers for Disease Control and Prevention. "Food Service Guidelines for Federal Facilities: A Model for Your State or Community." Updated October 20, 2021. <https://www.cdc.gov/nutrition/food-service-guidelines/federal-facilities.html>. Accessed August 9, 2023.
- 725 U.S. Department of Agriculture, Food and Nutrition Service. "Child Nutrition Programs: Community Eligibility Provision-Increasing Options for Schools." *Federal Register*, 88, 17406, March 23, 2023. <https://www.federalregister.gov/documents/2023/03/23/2023-05624/child-nutrition-programs-community-eligibility-provision-increasing-options-for-schools>. Accessed August 9, 2023.
- 726 Fleming-Milici, F., and J.L. Harris. "Television Food Advertising Viewed by Preschoolers, Children and Adolescents: Contributors to Differences in Exposure for Black and White Youth in the United States." *Pediatric Obesity*, 13(2): 103-110, 2018. <https://onlinelibrary.wiley.com/doi/abs/10.1111/ijpo.12203>. Accessed August 9, 2023.
- 727 Adeigbe, Rebecca T., Shannon Baldwin, Kip Gallion, et al. "Food and Beverage Marketing to Latinos: A Systematic Literature Review." *Health Education & Behavior*, 42(5): 569-582, 2015. <https://journals.sagepub.com/doi/abs/10.1177/1090198114557122?journalCode=hebc>. Accessed August 9, 2023.
- 728 American Heart Association, Voices for Healthy Kids. "Philadelphia Uses Sweetened Beverage Revenue to Invest \$2 Million in Pre-K Programs." August 2020. <https://voicesforhealthykids.org/news/philadelphia-uses-sweetened-beverage-revenue-to-invest-usd2-million-in-pre-k-programs>. Accessed August 9, 2023.
- 729 American Heart Association, Voices for Healthy Kids. "Seattle's Sugary Drink Tax Helps Feed Local Families Hit Hardest by COVID-19." July 2020. <https://voicesforhealthykids.org/impact/success-stories/seattle-sugary-drink-tax-helps-feed-local-families-hit-hardest-by-covid-19>. Accessed August 9, 2023.
- 730 Lee, Matthew, Jennifer Falbe, Dean Schillinger, et al. "Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax." *American Journal of Public Health*, 109: 637-639, April 2019. <https://ajph.aphapublications.org/doi/10.2105/AJPH.2019.304971>. Accessed August 9, 2023.
- 731 Roberto, Christina A., Hannah G. Lawman, Michael T. LeVasseur, et al. "Association of a Beverage Tax on Sugar-Sweetened and Artificially Sweetened Beverages with Changes in Beverage Prices and Sales at Chain Retailers in a Large Urban Setting." *JAMA*, 321(18): 1799-1810, 2019. <https://jamanetwork.com/journals/jama/article-abstract/2733208>. Accessed August 9, 2023.
- 732 CHOICES Project, Harvard University, T.H. Chan School of Public Health. "Choices Childhood Obesity National Action Kit." <https://choicesproject.org/work-with-us/childhood-obesity-national-action-kit/>. Accessed August 9, 2023.
- 733 Muth, Natalie D., William H. Dietz, Sheela N. Magge, et al. "Public Policies to Reduce Sugary Drink Consumption in Children and Adolescents." *Pediatrics*, 143(4): e20190282, 2019. <https://pediatrics.aappublications.org/content/pediatrics/143/4/e20190282.full.pdf>. Accessed August 9, 2023.
- 734 Hornbuckle, Lyndsey M. "Running While Black: A Distinctive Safety Concern and Barrier to Exercise in White Neighborhoods." *Preventative Medicine Reports*, 22: 101378, June, 2021. <https://www.sciencedirect.com/science/article/pii/S2211335521000681>. Accessed August 9, 2023.
- 735 PTA.org. "Letter to Chairwoman Baldwin, Ranking Member Collins, Chairman Aderholt, and Ranking Member DeLauro." May 9, 2023. <https://www.pta.org/docs/default-source/files/advocacy/may-9-2023---national-pta-joins-letter-urging-congress-to-increase-funding-for-title-iv-a-the-student-support-and-academic-enrichment-grant-program.pdf>. Accessed August 9, 2023.
- 736 U.S. Department of Health and Human Services. "Physical Activity Guidelines for Americans, 2nd edition." 2018. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf. Accessed August 16, 2023.
- 737 Abamu, Jenny. "ESSA's Flexible Accountability Measures Give PE Teachers (and Entrepreneurs) Hope." *EdSurge*, April 11, 2017. <https://www.edsurge.com/news/2017-04-11-essa-s-flexible-accountability-measures-give-pe-teachers-and-entrepreneurs-hope>. Accessed August 9, 2023.
- 738 Yañez, Elva, Manal J. Aboelata, and Jasneet Bains. "Park Equity, Life Expectancy, and Power Building." *Prevention Institute*, September 2020. https://preventioninstitute.org/sites/default/files/uploads/PI_Park_Equity_Policy_Brief.pdf. Accessed August 9, 2023.
- 739 U.S. Department of Health and Human Services. "New HHS Data Show More Americans than Ever Have Health Coverage through the Affordable Care Act." June 5, 2021. <https://www.hhs.gov/about/news/2021/06/05/new-hhs-data-show-more-americans-than-ever-have-health-coverage-through-affordable-care-act.html>. Accessed August 9, 2023.
- 740 Cha, Amy E, and Robin A. Cohen. "Demographic Variation in Health Insurance Coverage: United States, 2020." National Center for Health Statistics, *National Health Statistics Reports*, 169, February 2022. <https://www.cdc.gov/nchs/data/nhsr/nhsr169.pdf>. Accessed August 9, 2023.
- 741 Agency for Healthcare Research and Quality. "Six Domains of Health Care Quality." Updated December 2022. https://www.ahrq.gov/talkingquality/measures/six-domains.html#_ftn1. Accessed August 9, 2023.
- 742 Cox, Cynthia, Karen Pollitz, Krutika Amin, and Jared Ortaliza. "Nine Changes to Watch in ACA Open Enrollment 2023." *KFF*, October 27, 2022. <https://www.kff.org/policy-watch/nine-changes-to-watch-in-open-enrollment-2023/>. Accessed August 9, 2023.

- 743 Tolbert, Jennifer, and Meghana Ammula. "10 Things to Know About the Unwinding of the Medicaid Continuous Enrollment Provision." ^{KFF}, June 9, 2023. <https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-the-unwinding-of-the-medicaid-continuous-enrollment-provision/>. Accessed August 9, 2023.
- 744 U.S. Preventive Services Task Force. *Final Recommendation Statement: Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions*. Rockville, MD: U.S. Preventive Services Task Force, September 2018. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/obesity-in-adults-interventions1>. Accessed August 9, 2023.
- 745 For a summary of HEAA, see: "The Health Equity and Accountability Act of 2020 Section-by-Section." <https://drive.google.com/file/d/1Fh6ypyQsnTAgUX5dMJCq2a39xISW5ZNY/view>. Accessed August 9, 2023.
- 746 Morgan-Bathke, Maria, Suzanne Domel Baxter, Tanya M. Halliday, et al. "Weight Management Interventions Provided by a Dietitian for Adults with Overweight or Obesity: An Evidence Analysis Center Systematic Review and Meta-Analysis." *Journal of the Academy of Nutrition and Dietetics*, June 2022. <https://doi.org/10.1016/j.jand.2022.03.014>. Accessed August 9, 2023.
- 747 Wilfley, Denise E., Amanda E. Staiano, Myra Altman, et al. "Improving Access and Systems of Care for Evidence-Based Childhood Obesity Treatment: Conference Key Findings and Next Steps." *Obesity*, 25(1): 16-29, January 2017. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5373656/>. Accessed August 9, 2023.



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