Obesity-Related Policies and Programs

Public policy can improve the health of the nation. Policies can be a positive force in reducing obesity by creating conditions that promote optimal health and by deterring the unhealthy behaviors that lead to obesity—for example, taxing sugary drinks can reduce consumption. Programs that provide access to nutritious food, teach about healthy eating and regular physical activity, and incentivize people to make healthier choices all help prevent and reduce obesity.

In order to ensure effective policies and programs, policymakers should prioritize communities with high obesity rates and must proactively consider equity and community context when designing and implementing obesity-prevention policies—to ensure they reach the intended communities and do not unintentionally exacerbate inequities.



NUTRITION ASSISTANCE AND EDUCATION

Providing Americans with nutritious food is a straightforward way to encourage healthy eating. The programs below provide food, financial assistance, and education to low-income Americans.

Many programs focus on food insecurity—a lack of access to enough food for an active, healthy life—with access to quality, nutritious food as a secondary goal. Paradoxically, food insecurity is associated with obesity, particularly among women. 90 Racial and

ethnic minority households have higher rates of food insecurity: 22 percent of households headed by Blacks and 18 percent of households headed by Latinos are food insecure, compared with a 12 percent national average. ⁹¹ When designing and implementing nutrition programs, policymakers must ensure the policies are based on solid scientific findings, including the *Dietary Guidelines* for Americans, as well as ensure the policies are culturally sensitive to participants.

The State of Obesity

Federal Nutrition Assistance: WIC, School Nutrition Programs, SNAP, and Nutrition Incentive Programs

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

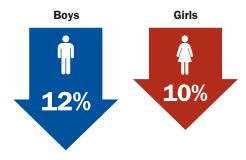
WIC provides nutrition-assistance and education programs to low-income pregnant, postpartum, and breastfeeding mothers and their children under the age of 5. WIC is one of the larger federal nutrition-assistance programs; it served 6.9 million people in 2018, including half the nation's infants. 92,93 WIC is funded by the federal government and administered by the USDA's Food and Nutrition Service (FNS) in conjunction with state agencies. WIC participants receive vouchers or payments cards that they can use to purchase a discrete set of foods, including milk, infant formula, cereal, eggs, whole grains, fruits, and vegetables.

WIC also provides nutrition education, healthcare, and social-service referrals, as well as breastfeeding education and support. Nutrition early in life is critical, and research shows breastfed children have a reduced risk of obesity later in life.94,95 Studies show breastfeeding initiation rates among WIC participants have increased substantially more recently (83 percent in 2013 versus 56 percent two decades earlier).96 In FY 2019, the Senate Appropriations Committee requested that USDA conduct an updated study on the economic benefits of breastfeeding in WIC.97 The study found that if breastfeeding rates in WIC met levels recommended by the

American Academy of Pediatrics (AAP), there would be \$9.1 billion saved in healthcare costs from less disease and fewer early deaths. 98

In 2009, the USDA updated WIC food packages to more closely adhere to the Dietary Guidelines for Americans and the AAP infant-feeding guidelines, 99 the first major change to the food packages since the program's creation in the 1970s.100 The changes added fruits, vegetables, and whole grains; reduced the fat levels in milk and infant formula; and reduced the monthly juice allocation. A 2019 study that examined the health impacts of these changes in Los Angeles County found that 4-year-olds who had received the revised WIC food packages since birth were at a reduced risk of obesity—a 12 percent reduction for boys and a 10 percent reduction for girls compared with those who received the old versions of the package.¹⁰¹ Another study of the package changes found that they may have helped reverse toddler obesity trends among WIC participants ages 2 to 4; toddler obesity had been increasing by 0.23 percentage points annually before the package changes and began decreasing by 0.34 percentage points annually after the changes went into effect.102 The most recent data from WIC on obesity rates among enrolled children ages 2 to 4 shows a further decline in 2016 to 13.9 percent of children with obesity, down from 15.9 percent in 2010.¹⁰³

A 2019 study in Los Angeles County found that 4-year-olds who had received the revised WIC food packages since birth were at a reduced risk of obesity



Participation in WIC has been declining since FY 2010, 104,105 likely for a number reasons, including an improving economy, a decline in the U.S. birth rate,106 and possibly due to burdensome administrative processes.¹⁰⁷ A federal rule—commonly referred as "public charge"-was finalized in August 2019. The rule will make it harder for immigrants who use certain public benefits to qualify for permanent resident cards (green cards).¹⁰⁸ While not yet in effect, the rule has already caused fear and confusion in immigrant communities, leading some families to unenroll or stop participating in public programs, including WIC in 18 states.¹⁰⁹ A recent Urban Institute survey found that 13.7 percent of adults in immigrant families failed to participate in a public program in 2018 for fear of jeopardizing future green card status.¹¹⁰ Another recent proposal that could reduce WIC participation—as well as many other essential nutrition, healthcare, and education programs—is the Office of Management and Budget consideration of a change to consumer-inflation measures, which are used to measure poverty levels.¹¹¹ If adopted, this change would, in effect, change the income threshold for eligibility and mean fewer Americans would be able to participate in these programs.

While the majority of WIC participants are White, racial and ethnic minorities make up a disproportionate share of WIC recipients relative to their share of the overall population. In 2016, 59 percent of WIC participants were White, 21 percent were Black, 10 percent were AI/AN, 4 percent were Asian, and approximately 5 percent of WIC participants reported two or more races. In addition, 42 reported Latino ethnicity (race and Latino origin



questions are asked separately). 112 These numbers are not surprising, as racial and ethnic minorities comprise an outsized share of Americans living in poverty, 113 but they do suggest the need for policymakers to consider matters of racial equity in the administration of WIC and other programs, like making WIC packages more culturally inclusive, providing targeted support based on health disparities, and providing more breastfeeding support for women of color who participate in WIC. 114

In FY 2019, the federal government appropriated \$6.1 billion for WIC, including \$60 million for its breastfeeding peer-counselor program and \$5 million for telehealth programs that support WIC's nutrition education or breastfeeding support programs and that decrease barriers that deter participation in the program. https://example.com/15.116/2009 Appropriators also encouraged FNS to increase the levels of fish allowed in WIC food packages due to their health benefits and cultural significance in certain communities, particularly in Alaska. 117,118,119

Since the 2012 standards were implemented, participants in the School Lunch and Breakfast Programs consumed more fruits, vegetables, whole grains, and milk while consuming fewer calories and saturated fat. In addition, plate waste—a way to measure student satisfaction with the meals—was generally comparable to waste observed in studies that took place prior to the new standards going into effect.

School Nutrition Programs

American children consume up to half their daily calories at school, 120 providing schools and the government a key opportunity to boost healthy eating and nutrition among students. The federal child nutrition programs—which include the School Lunch Program, the School Breakfast Program, and the Summer Meals Program (see sidebar on page 37)—together feed more than 34 million American children. 121 Funded by the federal government and administered by FNS and state agencies, these programs reimburse schools, daycare centers, and after-care programs for the cost of providing healthy meals and snacks to children in their care. In 2018, more than 40 percent of all American children participated in one of these programs, 122,123 with the School Lunch Program alone serving 4.8 billion meals.¹²⁴

Children from low-income households are eligible for free or reduced-price lunch. While these students are mostly White, a disproportionate number of students receiving the reduced price are racial or ethnic minorities. 125 Accordingly, policymakers should ensure these populations are being well served by the child nutrition programs by taking measures to reduce barriers to program participation, including stigma, lack of information, and language and literacy challenges. 126 One way to reduce the stigma of program participation is by making school breakfast and lunch free to all students. The Community Eligibility Provision of the Healthy, Hunger-Free Kids Act of 2010 (HHFKA) allows any school district with 40 percent or more children eligible for school lunch to provide free meals for all students. Administrative savings help offset the costs of offering meals to all.¹²⁷ Participating schools

report that the Community Eligibility Provision improves children's access to healthy meals, cuts paperwork for parents and schools, and makes schoolmeal programs more efficient. Yet currently, only about half of eligible districts and states participate in the Community Eligibility Provision, ranging from 15 percent adoption in Kansas to 100 percent adoption in North Dakota (see appendix for data on all states). 129

HHFKA required USDA to align school food nutrition standards with the 2010 *Dietary Guidelines for Americans*.¹³⁰ The new rules, completed in 2012, require increased availability of whole grains, fruits and vegetables, skim and low-fat milk, and lower levels of added sugars and saturated fats. They also required lower sodium levels, with changes phased in over several years.^{131,132} Nearly all schools have now successfully implemented these 2012 standards.¹³³

In April 2019, FNS published the first nationally representative study of the School Lunch and Breakfast Programs since the 2012 standards went into effect. The study found that both school lunches and breakfasts significantly improved in nutritional quality after the new standards went into effect; that participants in the programs consumed more fruits, vegetables, whole grains, and milk than nonparticipants, while consuming fewer calories and saturated fat than nonparticipants. In addition, plate waste—a way to measure student satisfaction with the meals—was generally comparable to waste observed in studies that took place prior to the new standards going into effect, suggesting that the new standards did not have a significant effect on student satisfaction with the meals.134

Because of the success of the child nutrition programs, nutrition advocates have focused on increasing participation, particularly in the School Breakfast Program, which serves only 57 percent of the students who participate in the School Lunch Program. A February 2019 report found that nearly 149,000 additional students participated in the breakfast program during the 2017–2018 school year, a 1.2 percent increase over the prior year. (See appendix for data on state-level progress on School Breakfast implementation.)

However, in the past several years, Congress and USDA have rolled back several aspects of the 2012 standards, permitting schools to again serve chocolate milk, refined grains, and foods with higher sodium levels.¹³⁶ In April 2019, a number of states and two publicinterest organizations sued over the rollback, arguing that USDA violated the Administrative Procedure Act by failing to offer a reasoned explanation for the rule changes or to provide sufficient notice to the public. The lawsuit also noted that nearly all schools had successfully implemented the 2012 standards and that the majority of public comments that USDA received in 2017 were supportive of the 2012 rules.137 These rollbacks risk reversing the recent progress made in the nutritional quality of meals eaten by American school children.

For FY 2019, Congress appropriated \$23.1 billion for the child nutrition programs, including \$30 million in grant funding for equipment to allow schools to serve healthier meals, improve food safety, or expand their school breakfast programs. This was a reduction of more than \$1 billion from the FY 2018 funding level, 139 reflecting lower participation rates in the programs.



MAJOR CHILD NUTRITION PROGRAMS IN THE UNITED STATES

- The National School Lunch Program provides low-cost or free meals and snacks to nearly 30 million low-income students in public and private schools and in residential child-care facilities. ¹⁴⁰ In FY 2018, the program served more than 4.8 billion lunches. ¹⁴¹
- The School Breakfast Program
 provides free or low-cost breakfast
 to nearly 12.5 million low-income
 students each school year.¹⁴² In FY
 2018, the program served 2.4 billion
 meals.¹⁴³
- The Summer Food Service Program
 provides nutritious daily meals to
 approximately 3.8 million low-income
 school children during summer
 vacation from school.¹⁴⁴
- The Child and Adult Care Food
 Program funds healthy meals and snacks for more than 4.2 million

- children in day-care, preschool, and after-care programs, as well as 130,000 adults in adult day-care centers.¹⁴⁵
- The Special Milk Program for Children provides free low-fat or skim milk to students who do not participate in the meal programs, such as half-day kindergarten students.¹⁴⁶
- Fresh Fruit and Vegetable Program
 provides fresh fruits and vegetables
 as a healthy snack option in select
 low-income schools and promotes
 nutrition education.¹⁴⁷
- The Farm to School Grant Program
 helps incorporate fresh, local food
 into the National School Lunch and
 School Breakfast Programs and
 facilitates hands-on learning activities,
 including school gardens, farm visits,
 and cooking classes.¹⁴⁸

Supplemental Nutrition Assistance Program

The Supplemental Nutrition Assistance Program (SNAP), also known as food stamps, is the nation's largest nutrition-assistance program. It had 40 million participants in 2018, down from a record high of 48 million in FY 2013. 149

As with WIC, the number of SNAP recipients has declined in the last several years. This is likely due to a number of causes, including an improved economy, reduced outreach, and possibly the "public charge" rule discussed earlier (page 35). An analysis of data from the ongoing Children's Health Watch study found that SNAP participation decreased among immigrant families in 2018, most markedly among recent immigrants, while employment rates remained stable. 150,151 Another proposed federal rule from the USDA is to stop offering SNAP's broad-based categorical eligibility option to states—which allows state to enroll residents in SNAP when they apply for other incomebased programs. 152 USDA estimates that 3.1 million Americans receive SNAP benefits through this option.¹⁵³

The federal government funds SNAP benefits and shares the cost of administering the program with the states. ¹⁵⁴ SNAP recipients receive monthly vouchers they can use to purchase food from participating retailers. The average monthly benefit in 2018 was \$126 per person. ¹⁵⁵

Current law imposes work requirements on SNAP recipients: adults ages 18 to 59 who are able to work must do so, with stricter requirements imposed on able-bodied adults ages 18 to 49 without dependents. The latter group is limited to three months of SNAP benefits in three years if they do not work 80 hours per month, although states are permitted

to seek waivers from the requirement. 156 In recent years, SNAP benefits have been cut, and there have been a number of proposals to further reduce benefits while increasing the program's work requirements. 157,158 In February 2019, USDA issued a proposed rule that would limit the ability of states to obtain waivers that allow them to extend eligibility to people who have not met the program's work requirements (no final rule has been issued as of July 2019). 159 By USDA's estimate, this rule could cut SNAP benefits to 755,000.160 This would disproportionately touch a number of populations, including: women, Blacks, Latinos, LGBTQ communities, rural communities, people with disabilities, and people with criminal records. 161,162

With a few exceptions—such as alcohol, vitamins, prepared food, hot food, or live animals—SNAP can be used to purchase any food or beverage, regardless of its nutritional value.163 A 2016 study by FNS found that SNAP households spend 20 cents of every SNAP dollar on sweetened drinks, salty snacks, candy, and other desserts, with more money spent on soft drinks than any other item. These spending patterns are largely consistent with those of non-SNAP households.164 Some public health advocates have suggested changes that would incentivize participants to make healthier food choices, for example, through voluntary pilot programs that test different strategies, such as excluding sugary drinks or other foods with limited nutritional value. Some have raised concerns, however, that such changes could increase stigma, reduce participation, and unfairly target low-income individuals.165 USDA has historically denied requests by states to pilot test strategies, and Congress had also resisted similar legislative proposals. 166,167

FNS has licensed more than 3.000 farmers' markets nationwide to accept SNAP benefits,168 increasing opportunities for participants to purchase fresh fruits and vegetables. In 2017, Americans spent \$22 million in SNAP benefits at farmers' markets, a 35 percent increase over 2012.¹⁶⁹ And USDA recently rolled out a pilot program allowing SNAP participants to use their benefits for eligible food via online sales for the first time. (SNAP does cover not delivery fees.) Amazon, Walmart, and ShopRite stores began accepting SNAP for online purchases in New York in April 2019, and the program is slated to expand to other states. 170,171,172

The SNAP Education (SNAP-Ed) grant program, the educational component of SNAP, teaches healthy shopping and cooking skills, and it encourages physical activity. States can apply for SNAP-Ed funding and often contract with landgrant universities to implement the program.¹⁷³ Below are examples of programs funded by SNAP-Ed:

- The Power of Produce club has been adopted by farmers' markets across the nation and provides children ages 4 to 12 with a token for \$2 of fresh fruit or vegetables. In surveys of parents whose children participated in the program, 67 percent reported that their children were eating, or at least trying, more fruits and vegetables.¹⁷⁴
- Auburn University and the Alabama Department of Public Health have helped 11 retailers in rural counties promote the purchase of healthy foods through the Good Choice Healthier Retail Initiative. Health officials help retailers assess their stores and recommend purchasing and promotional improvements, such as displaying

Good Choice signage near healthy foods, increasing their stock of healthy items, and revising product placement to promote the purchase of healthy foods and drinks.¹⁷⁵

The SNAP program also helps stimulate the economy. USDA's Economic Research Service estimates that SNAP has a multiplier effect, with each dollar in federally funded SNAP benefits generating \$1.79 in economic activity. 176 In addition, a May 2019 Economic Research Service study of the impact of SNAP on county-level employment from 2001 to 2014 found that the program created jobs in rural areas and, in particular, helped lift the economy during the 2008–2010 recession. 177

Congress appropriated \$73.5 billion for the SNAP program in FY 2019, including \$433 million for SNAP-Ed. 178,179 This was a \$537 million reduction from the program's FY 2018 level. 180



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Gus Schumacher Nutrition Incentive Program

Based on the success of the Fresh Fruit and Vegetable Program (see sidebar on page 37), the Agriculture Act of 2014 (2014 Farm Bill) established the Food Insecurity Nutrition Incentive grant program, which incentivizes SNAP recipients to purchase more produce.181,182 The 2018 Farm Bill expanded the program and renamed it the Gus Schumacher Nutrition Incentive Program (GusNIP), after the late August Schumacher, a former undersecretary of agriculture. Congress funded the program at \$250 million per year for five years. 183,184 GusNIP, which is administrated collaboratively by FNS and the National Institute of Food and Agriculture (NIFA), funds projects that provide incentives to SNAP recipients to purchase more fruits and vegetables and to programs that provide produce prescriptions to encourage fruit and vegetable consumption. 185,186

Research has demonstrated the success of these types of incentive programs. A rigorous evaluation of the USDA's Healthy Incentives Pilot (HIP) program, which provided SNAP participants in Hampden County, Massachusetts, with 30 cents for every dollar in benefits spent on fruits and vegetables, found that HIP significantly increased participants' produce consumption. Other studies have shown that produce prescriptions can increase fruit and vegetable consumption and reduce participants' BMI. 189

NIFA has issued a request for applications for FY 2019 projects and announced that it has approximately \$41 million in funding available for five types of GusNIP grants:

- One-year GusNIP pilot projects (awards up to \$100,00) to implement innovative strategies to increase fruit and vegetable consumption;
- GusNIP projects (awards up to \$400,000) for programs that provide incentives at the point-of-purchase to increase produce consumption;
- GusNIP large-scale projects (awards up to \$500,00) for statewide or regional programs;
- Produce Prescriptions (awards up to \$500,000), competitive grants for organizations partnering with healthcare providers to offer prescriptions that increase food and vegetable consumption; and
- Nutrition Incentive Program
 Training, Technical Assistance,
 Evaluation, and Information Centers
 (awards of \$8.5 million) to support
 and evaluate programs. 190

Nutrition Services Program

The Nutrition Services Program, authorized by the Older Americans Act, provides funding to states and territories that provide nutrition assistance for individuals ages 60 and older in order to reduce food insecurity among seniors, to delay the onset of adverse health conditions, and to provide socialization. The U.S. Department of Health and Human Services' (HHS) Administration on Aging administers the program, which has three components: (1) the Congregate Nutrition Services Program, which provides meals to seniors in group settings, such as senior centers and churches; (2) the Home-Delivered Nutrition Services Program, which delivers meals to frail and homebound seniors, commonly referred to as "Meals on Wheels"; and (3) the Nutrition Services Incentive Program, which provides grants to organizations to support the first two nutrition programs. Participants are encouraged to contribute to the cost of their meals, though no one may be denied participation for failure to contribute.191 Meals served through the program must adhere to the *Dietary* Guidelines for Americans. 192

Funding formulas for these programs are largely population-based, depending on the number of people ages 60 or over in a state, and states are required to match 15 percent of the cost of the congregate and Meals on Wheels programs. ¹⁹³ The Nutrition Services Program received \$911 million in funding for FY 2019, including \$486 million for congregate nutrition, \$247 million for home-delivered meals, and \$178 million for the Nutrition Services Incentive Program. ¹⁹⁴

Nutrition Education and Information: Dietary Guidelines, and Nutrition and Menu Labels

Dietary Guidelines for Americans

The Dietary Guidelines for Americans, issued jointly by USDA and HHS, helps educate the public about healthy eating, serve as a resource for policymakers and health professionals, and provide the foundation for the federal government's nutrition programs. The current 2015–2020 guidelines are the eighth edition and focus on how Americans age two and older can achieve an overall healthy eating pattern. 196

USDA and HHS publish new guidelines every five years reflecting the latest in nutrition science, and the process of developing the ninth edition of the guidelines is already underway. As mandated by the 2014 Farm Bill, the next guidelines will include advice for babies, toddlers, and pregnant women. ¹⁹⁷ In the past decade, there has been increasing evidence of the lifelong health impact of the period from conception to age 2. Poor nutrition during this period can result in permanent health problems, including obesity. ¹⁹⁸

One way the *Dietary Guidelines for*Americans communicate with the public is through a food-guidance symbol known as MyPlate, an educational icon that serves as a reminder for Americans to eat healthfully, and its companion *ChooseMyPlate.gov* website, which provides practical information to help them do so. A 2018 study revealed that Americans who reported they had tried MyPlate were more likely to have engaged in healthy behaviors, such as

United States Department of Agriculture

Start Sumple
with MyPlate
Start simple and take healthy eating one step at a time.



Focus on whole fruits

Include fruit at breakfast! Top whole-grain cereal with your favorite fruit, add berries to pancakes, or mix dried fruit into hot oatmeal.



Make half your grains whole grains

Add brown rice to your stir-fry dishes. Combine your favorite veggies and protein foods for a nutritious meal.



Vary your veggies

Cook a variety of colorful veggies. Make extra vegetables and save some for later. Use them for a stew, soup, or a pasta dish.



Move to low-fat or fat-free milk or yogurt

Enjoy a low-fat yogurt parfait for breakfast. Top with fruit and nuts to get in two more food groups.



Vary your protein routine

Next taco night, try adding a new protein, like shrimp, beans, chicken, or beef.



Drink and eat less sodium, saturated fat, and added sugars

Cook at home and read the ingredients to compare foods.

MPMW Tipsheet No. 14
December 2018
Center for Nutrition Policy and Promotion
USDA is an equal opportunity provider, employer, and lender.

Based on the Dietary Guidelines for Americans.

Go to ChooseMyPlate.gov for more information.

reducing fat or increasing exercise. The same study, however, revealed socioeconomic and racial and ethnic disparities in Americans' awareness of MyPlate; Latinos, Blacks, and lowincome individuals were less likely to have heard about MyPlate. ¹⁹⁹

As noted earlier, federal nutrition programs, such as WIC and the School Lunch Program, have seen improved health and nutrition outcomes among participants since more closely aligning program nutritional requirements with the *Dietary Guidelines for Americans*.

Nutrition Labels and Menu Labeling

Congress has required nutrition labels on most packaged foods and beverages since 1993.200 In 2014, the Food and Drug Administration (FDA) proposed updating the label requirements to better reflect the latest scientific knowledge about healthy eating. FDA finalized a federal rule implementing this change in 2016; it requires that nutrition information panels: (1) print "calories" and "number of servings" in larger and bolder type; (2) report "added sugars"; and (3) include serving sizes that more accurately reflect Americans' eating habits.²⁰¹ The compliance date of the new rule is January 2020, for large manufacturers and January 2021, for small manufacturers, though many foods already feature the new labels.202

Research demonstrates that mandatory food labels can alter consumer and industry behavior. A recent meta-analysis of 60 studies of the effect of food labels across 11 countries found that consumers ate fewer calories and total fat, and consumed more vegetables. On the industry side, the analysis found that companies decreased sodium levels and artificial trans fats.²⁰³

Like nutrition labels, labels on restaurant menus allow American consumers, who are eating more food away from home than in years past,²⁰⁴ to make informed decisions about what they eat. Food outside the home tends to have more calories and be of lower nutritional quality than food prepared at home,²⁰⁵ vet consumers tend to underestimate the number of calories and levels of sodium in out-of-home meals.^{206,207} The Affordable Care Act required chain restaurants and vending-machine companies to provide nutritional information about their products beginning in May 2018.208 Chain restaurants with 20 or more locations

must now prominently display calorie counts on menus and menu boards, and vending-machine operators with 20 or more machines must also post calorie counts.²⁰⁹ For some products sold in glassfront vending machines, the FDA will "exercise enforcement discretion" until it finalizes a new rule regarding calorie count type size for these machines.²¹⁰

Several studies have demonstrated that posting nutritional information at the point of purchase can result in healthier menu choices, 211, 212, 213 and a 2016 study found that the average BMI fell in jurisdictions in New York that implemented calorie-count laws.214 There is also evidence that menu labeling may lead restaurants to improve the nutritional content of their food.²¹⁵ Other studies have found that menu labeling leads to significant results only at specific establishments or in certain populations, 216,217 while other studies have found no changes in consumer behavior.218

Some have raised concerns that menu labeling could reinforce racial and ethnic health disparities. Recent studies show mixed results. One study published in 2018 reported that Blacks and Latinos use labels more than Whites in sit-down restaurants, though Whites increased their use of labels over time more than the other groups,²¹⁹ while another study found that Blacks have lower rates of using menu labels.220 Advocates have suggested educational campaigns and label improvements to ensure they are understood and used universally.²²¹ For example, some countries use symbols on their labelssuch as a voluntary color-coded trafficlight system on some packaged foods in the United Kingdom and a stopsign-shaped warning label in Chile-to simplify the messages in order to reach more consumers.222

ECONOMICS OF WHAT WE EAT

How foods and beverages are priced and marketed has an enormous impact on what Americans eat and drink. A 2017 review of 30 studies measuring the effect of food pricing found that every 10 percent price increase on unhealthy food reduced sales by 6 percent, while a 10 percent reduction in the cost of healthy foods increased their purchase by 16 percent.223 An analysis of television data found that exposure to an increase of 100 ads for soda between 2002 and 2004 was associated with an 9.4 percent increase in consumption in 2004 among fifth-graders.²²⁴ One study determined that subsidies of healthy foods, such as fruits and vegetables, and taxes on sugary drinks and other unhealthy foods could together prevent more than 20,000 deaths per year and potentially reduce disparities between those with differing levels of education.225

In addition to taxes and subsidies, there are also federal programs that financially incentivize retail development that increases access to healthy food or physical activity opportunities. A few fiscal policies to this effect are highlighted below.

Food and Beverage Marketing

Marketers deluge children, particularly teenagers, with food and beverage advertising. Despite some improvement in recent years, ads for primarily unhealthy categories of food constituted more than 75 percent of food-related ads viewed by American youth in 2016. In particular, the marketing of sugary drinks—such as sports drinks and sodas—has increased substantially. Between 2015 and 2016, the exposure of children ages 2 to 11 to ads for carbonated beverages increased by 19 percent and their exposure to ads for juice, fruit drinks, and sports drinks increased by 38 percent. ²²⁶



Advertisers market unhealthy food even more heavily to Black and Latino youth than to their White counterparts. A 2019 report by the Rudd Center for Food Policy and Obesity found that, even when accounting for differences in TV viewing time, Black children saw 40 percent more candy ads than White children. On the other hand, brands in the healthiest categories—such as juice, fruit, water, and nuts-were less likely to advertise on Black-targeted TV and did not advertise at all on Spanish-language stations.²²⁷ Another survey of American adolescents ages 12 to 17 found that Black adolescents and those with less educated parents reported the highest exposure levels to sugary drink ads.228

Public health advocates have also raised concerns about the misleading marketing of toddler drinks, a category that includes "transition formula" marketed for children ages 9 months to 36 months, and "toddler milk," for children ages 12 months to 36 months.²²⁹ The labels for toddler drinks frequently make nutritional and health claims, even though the World Health Organization (WHO) has labeled these drinks, which are often made from powdered milk and added sweeteners, "unnecessary" and "unsuitable." Both the WHO and the AAP recommend that children ages 1 and older

drink cow's milk in combination with a nutritious diet.²³⁰ The Latino community has been a particular target for formula companies, which spent \$16 million advertising toddler drinks on Spanish-language channels in 2015, more than 20 percent of their total marketing dollars, compared with about 8 percent for most highly marketed food and beverage brands.²³¹

Public health organizations have called for policy changes to reduce the marketing of unhealthy foods and beverages to children. The AAP and the American Heart Association (AHA) recently issued a policy paper on sugary drinks (see sidebar on page 45). Among its recommendations are suggestions on how to limit sugary-drink marketing within constitutional constraints. One suggestion is to change federal tax law to prohibit food and beverage companies from deducting all or part of the cost of marketing unhealthy products.²³² The Rudd Center has also proposed that the Children's Food and Beverage Advertising Initiative, a food and beverage industry self-regulation program, limit targeted marketing of unhealthy products to Black and Latino children.²³³ Public health researchers have recommended that the FDA regulate the marketing of toddler formula to prevent misleading labeling.234

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

Beverage Taxes

Sugary drinks, including soda and sports drinks, are the largest source of added sugar in the U.S. diet,235 and the WHO has found the consumption of sugary drinks to be associated with childhood obesity.²³⁶ Research has demonstrated that beverage taxes can effectively reduce consumption of these drinks. In fact, the Childhood Obesity Intervention Cost-Effectiveness Study (CHOICES)—a collaboration among researchers at the Harvard T.H. Chan School of Public Health and the Milken Institute School of Public Health at The George Washington University calculated that a tax on sugary drinks would be the most cost-effective strategy in reducing childhood obesity. A 1-cent per-ounce tax, over a decade, could prevent more than half a million cases of childhood obesity and save the nation more than \$14 billion, mainly from reduced healthcare costs.²³⁷ (CHOICES has also developed a tool kit that can help policymakers and others model different obesity-reduction strategies to help inform decision-making.)²³⁸

A number of U.S. cities, as well as the Navajo Nation, have passed local taxes on sugary drinks, and these taxes have shown early promise. Studies of a 1-cent per-ounce tax enacted in Berkeley, California, and a 1.5-cent per-ounce tax enacted in Philadelphia, Pennsylvania, found that purchase and consumption of such drinks decreased significantly after the tax. 239,240,241 Another study found that Philadelphia retailers stocked more bottled water and less soda after the tax went into effect.242 Researchers need longerterm studies to understand whether sugary-drink taxes affect overall



morrbyte

calorie consumption and weight status and how the impacts differ by race, socioeconomic status, and gender.

Some have raised equity concerns about these taxes, since they have a disproportionate impact on lower-income consumers. Public health advocates point out that the benefits will ultimately return to these populations, as they will also realize a disproportionate share of the improved health benefits. Some cities have directed the sugary-drink tax revenue toward programs that promote healthy eating and active living and/or help disadvantaged communities to ensure the policies boost health and reduce inequities. For example:

Albany, California—a city of 20,000
residents on the east shore of San
Francisco Bay—implemented a
1-cent per-ounce tax in 2017. The
city council allocated the revenue
toward public health purposes,

- including school programs for cooking, gardening, and nutritional education, as well as grants to community health organizations and for management of the city's public health division. ^{243,244,245}
- Seattle, Washington, earmarked revenue from its 1.75-cents perounce tax passed in 2017 for improving access to healthy foods, supporting early childhood programs, and addressing equity in K–12 education. ²⁴⁶
- Philadelphia has used the tax revenue from its 1-cent per-ounce tax passed in 2017 to fund the attendance of 4,000 children in pre-kindergarten classes, which directly benefit underserved communities. 247

Despite their success in reducing sales and consumption, no state governments have passed sugary-drink taxes, and some states have even passed legislation preempting their cities from taxing such drinks. California passed a law in 2018 barring any more local sugarydrink taxes until 2031 in response to a threatened ballot initiative sponsored by the American Beverage Association that would have required a two-thirds majority of voters to pass any tax increase.248 When state and federal law conflict, the supremacy clause of the U.S. Constitution dictates that federal law governs, preempting state law, and the same concept exists with respect to states and municipalities. Many industries have successfully avoided regulation by lobbying for federal or state laws that preempt the more progressive laws passed on the local level, and the beverage industry is following suit.

DOCTORS AND HEALTH OFFICIALS CALL FOR POLICIES TO REDUCE CHILDREN'S CONSUMPTION OF SUGARY DRINKS

Citing the "grave health threat" that excess sugar poses to children and adolescents, in April 2019, the American Academy of Pediatrics and American Heart Association issued a policy statement calling for stronger public policies to decrease the consumption of sugary drinks.²⁴⁹ The organizations noted that socioeconomically vulnerable children are particularly at risk.

The statement recommends that policymakers on all levels should:

- Consider increasing the cost of sugary drinks, such as through an excise tax, with revenue allocated to reducing health disparities;
- Support efforts to restrict the marketing of sugary drinks to children, such as by eliminating the ability of companies to deduct the cost of advertising unhealthy foods and beverages;

- Ensure federal nutrition programs discourage consumption of sugary drinks, including by restricting
 Child and Adult Care Food Program providers from serving sugary drinks and disallowing users from spending SNAP benefits on sugary drinks;
- Promote access to accurate nutrition information on nutrition labels, menus, and advertisements; and
- Create policies that make healthy beverages the default, such as through vending-machine rules or food-service guidelines.

The statement notes that many of these proposals—including raising taxes and imposing marketing restrictions—worked successfully on cigarettes. The result has been a drastic reduction in youth smoking rates, one of the nation's greatest public health success stories.

Healthy Food Financing Initiative

More than 23 million Americans—including 6.5 million children—live in a low-income area more than a mile from a supermarket, also known as a food desert.²⁵⁰ The Healthy Food Financing Initiative (HFFI), a public-private partnership established by the 2014 Farm Bill, helps improve access to healthy foods in communities by providing funding and technical

assistance to healthy food retail projects.²⁵¹ The initiative has supported nearly 1,000 retail projects in more than 35 states and leveraged an estimated \$1 billion in private investment and tax credits.^{252,253} HFFI is now an USDA Rural Development initiative and administered by the Reinvestment Fund.²⁵⁴ In FY 2019, Congress appropriated \$22 million for the program.²⁵⁵

FOOD DESERTS AND FOOD SWAMPS

Recognizing that many Americans lack access to a nearby supermarket, the federal government in the past decade has focused considerable efforts on eliminating food deserts—lowincome areas that lack a full-service grocery store. Policymakers used a number of tools to increase access to supermarkets, such as HFFI and former First Lady Michelle Obama's Let's Move! Campaign, which helped extract pledges from retailers to build more stores selling fruits and vegetables in underserved neighborhoods.²⁵⁶ Recent research, however, suggests that more important than supermarket access alone is the more holistic measure of the kind of food available in an area. 257,258 Researchers have found a correlation between fast-food availability and fastfood consumption among low-income respondents.²⁵⁹ A 2017 study found that food swamps—communities where

there is a high density of outlets selling high-calorie food, such as fast-food restaurants and convenience stores, compared with ones that sell healthy food—have a stronger association with obesity than communities with just a lack of supermarkets.^{260,261}

Both food deserts and food swamps disproportionately affect communities of color. ^{262,263,264} When comparing neighborhoods with similar poverty rates, Black and Latino neighborhoods have fewer large supermarkets than White neighborhoods. ²⁶⁵ Fast-food outlets are also more prevalent in neighborhoods that are predominantly Black and Latino. ²⁶⁶ This uneven distribution of food resources poses an additional challenge to members of these communities attempting to consume a nutritious diet and maintain a healthy weight. ²⁶⁷

Researchers suggest one way to tackle the challenge of food swamps and promote health equity is through zoning laws that incentivize healthy food outlets to open stores in underserved neighborhoods and that restrict fastfood and other outlets that sell primarily unhealthy food.²⁶⁸ Others have suggested incentivizing or requiring retailers that accept SNAP benefits to stock a certain amount of healthy food, including fresh produce, although this could have the unintended consequence of reducing the number of retailers in neighborhoods that are already underserved.²⁶⁹ Clearly, additional efforts are necessary to ensure that all Americans live in neighborhoods that offer plenty of opportunities to purchase fresh, nutritious food and fewer opportunities to buy products that may be convenient and affordable but are largely unhealthy.

New Markets Tax Credit

The New Markets Tax Credit (NMTC) encourages investment in low-income areas by providing a modest tax incentive to private investors that fund business- or economic-development projects in some of the nation's poorest communities. By incentivizing companies to build healthcare centers, supermarkets, fitness centers, and other facilities, in communities that lack access to affordable, healthy food and safe places to exercise, this program removes some of the barriers to a healthy lifestyle that exist in low-income communities.

NMTC investments of \$42 billion have generated \$80 billion in project financing.²⁷⁰ Examples of projects funded with NMTC assistance include:

- Town & Country Foods, a warehousestyle grocery store that provides the Southside neighborhood of Bozeman, Montana, access to local and organic groceries;²⁷¹
- The SL Green Street Squash Center in Harlem, New York, which hosts a youth-enrichment program that includes squash instruction and serves 750 public-school children each year;²⁷² and

 The Shops at Park Village in Washington, DC includes the first fullservice grocery store in the area in more than a decade.²⁷³

In 2018, NMTC incentivized nearly \$4 billion in investments in low-income communities. ²⁷⁴ In FY 2019, Congress appropriated \$22 million for the administration of Community Development Financial Institutions programs and NMTC. ²⁷⁵

ROLE OF CHILD CARE AND EDUCATION SETTINGS

Early Child Care and Education: Head Start, State Requirements, and CDC Initiatives

Head Start

Head Start and Early Head Start are federally funded programs that promote the school readiness of young children from low-income families by providing education, health, and social services.²⁷⁶ The federal government provides funding and oversight to local agencies that administer the programs, which benefit more than one million children and their families every year.²⁷⁷ Head Start and Early Head Start programs provide healthy food to their participants via either the Child and Adult Care Food Program or the National School Lunch Program. Children who participate in Head Start are healthier on a number of scores, 278 and one study found that children who entered Head Start with an unhealthy weight status were significantly more likely to have a healthier BMI when they started kindergarten than a comparison group.²⁷⁹

Head Start directors have identified obesity as one of the major health challenges facing the children and families in the program, and many Head Start programs focus on nutrition, physical activity, and weight-management services. ²⁸⁰ Since 2016, federal nutrition and physical-activity standards have required programs to actively engage in obesity prevention both in the classroom and through its family partnership process. ²⁸¹

Research shows that early health education in Head Start can make a big difference. A 2019 study of predominantly Black and Latino Head Start students in Harlem found that the 4-year-olds significantly improved their knowledge and attitude of a healthy lifestyle after

being taught about a healthy diet and physical activity.²⁸² A group of 15 schools were randomly assigned either an educational intervention that comprised 50 hours of age-appropriate instruction about healthy eating, physical activity, understanding the human body, and managing emotions or the standard curriculum. Researchers assessed the children's knowledge, attitudes, and habits about a healthy lifestyle at the baseline and after five months. For example, researchers asked the children to remember what they did at home (e.g., Do you run, jump, and play? Do you watch TV?). Both groups of children increased their knowledge, attitudes, and habits about a healthy lifestyle, but the results were 2.2-fold higher in the intervention group.²⁸³

For FY 2019, Congress appropriated \$10.1 billion for Head Start for FY 2019, including \$805 million for Early Head Start.²⁸⁴

State Early Child-Care and Education Requirements

All states have health and safety requirements that schools and early child-care providers must meet. The Child Care and Development Fund is a block grant program funded by the federal government and administered by the states to assist low-income families with the cost of child care, as well as improve the quality of child care. To receive funding, the Child Care and Development Block Grant Act of 2014 requires child-care providers to meet state-mandated health and safety requirements, which often include nutrition and physicalactivity benchmarks.²⁸⁵ In FY 2019, Congress appropriated \$5.3 billion for the program.²⁸⁶

CDC Early Care and Education Initiatives

Several CDC grant programs provide funding, training, and/or technical assistance to states to help them target early obesity risks by focusing on early care and education (ECE) settings.

- The State Physical Activity and Nutrition program funds statewide initiatives in 16 states and requires all grantees to integrate nutrition and physical-activity standards into ECE systems and/or supports.²⁸⁷
- The Obesity Mini Collaborative Improvement & Innovation Network (CoIIN) is a program run by the Association of State Public Health Nutritionists in cooperation with CDC that promotes the "farm-to-ECE" strategy as a way to develop healthy habits in young children. Five states are participating in CoIIN in 2018–2019: Alabama, Arizona, Colorado, Minnesota, and Ohio.²⁸⁸
- CDC partners with Nemours Health System on the Healthy Kids, Healthy Future Technical Assistance Program, which funds 10 states to improve nutrition and physical activity in their ECE systems, and on the Physical Activity Learning Session project to train ECE providers in three states about integrating physical activity in ECE settings.²⁸⁹
- The CDC's High Obesity Program (described in more detail on page 53) funds programs in counties with high rates of obesity; grantees can fund activities in the ECE sector. For example, as part of its High Obesity Program, West Virginia University is helping ECE providers in the state incorporate more movement, nutrition, and healthy habits into their classrooms.²⁹⁰

Elementary and Secondary Education: Local Wellness Policies, Smart Snacks, and CDC Initiatives

Given that children spend more than 900 hours each year at school,²⁹¹ nutrition, physical activity, and other obesity-prevention programs implemented in school settings can have an enormous impact.

Local School Wellness Policies

All school districts that participate in federal child nutrition programs must develop a wellness policy that promotes the health of students and addresses childhood obesity.²⁹² These policies must:

- Establish nutrition promotion and physical-activity goals;
- Include nutrition guidelines for foods available on campus; and
- Limit food marketing to those products that meet the Smart Snacks in Schools nutrition standards (discussed in more detail below).

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.²⁹³

Smart Snacks in Schools

All food sold at schools—including food sold in vending machines, at school stores, and at school fundraisers—must meet federal nutrition standards.²⁹⁴ States can exempt infrequent school fundraisers from the standards, although 21 states have policies in place allowing zero exemptions.²⁹⁵ The nutritional requirements for snacks are

similar to requirements covering the National School Lunch and Breakfast Programs. The Smart Snacks in School rule exempts snacks sold after school hours, food intended for consumption off school property, or food provided for free—for example, cupcakes brought in for a student's birthday.

CDC School Initiatives

CDC assists elementary and secondary schools with obesity-prevention efforts through its Healthy Schools program, which uses the Whole School, Whole Community, Whole Child model as its framework. The model emphasizes the importance of leveraging the entire community to help support students and schools, and using evidence-based practices to effect change.²⁹⁶

CDC Healthy Schools promotes:

- Improved school nutrition practices;
- Physical education and activity before, during, and after school;
- Health education and literacy;
- Stronger school health services to target chronic conditions, including obesity; and
- Assessment with the School Health Index.

The program also collects data, trains school staff, and encourages parental involvement. Congress funded the program at \$15.4 million for FY 2019.²⁹⁷

School-Based Physical Activity and Physical Education

Physical activity helps promote lifelong health and prevents adverse health conditions. Physically active children tend to have better school attendance, higher grades, and exhibit better classroom behavior. While experts recommend that children ages 6 to 17 get at least one hour of physical activity per day, fewer than a quarter of children (21.6 percent) between the ages of 6 and 19 get an hour or more of moderate-to-vigorous physical activity even five days per week. ^{298,299}

Schools can help ensure children are getting sufficient physical activity by providing time for both recess (free play) and physical education for all grade levels. Research demonstrates that children benefit in numerous ways from having time for physically active free play during the school day.300 The AAP describes recess as "a crucial and necessary component of a child's development" and explains that "recess is unique from, and a complement to, physical educationnot a substitute for it."301 The AAP specifically credits recess with helping students meet their recommended 60 minutes of daily physical activity. The CDC advises that schools provide students from kindergarten through 12th grade with 20 minutes of recess per day, in addition to—and not as a substitute for—physical education.302

Despite these recommendations, fewer than a quarter of U.S. states require recess. Five states (Arizona, Florida, Missouri, New Jersey, and Rhode Island) have laws requiring recess daily, while seven states (Iowa, North Carolina, South Carolina, Louisiana, Texas, Connecticut, and Virginia) require daily physical activity but do not specify how the time must be



spent.³⁰³ A bill to require 20 minutes of recess in Massachusetts failed in 2018, but parent groups are hoping it will pass in the future.³⁰⁴

Physical education provides important benefits for children, and research demonstrates that it prevents childhood obesity and is costeffective. 305 The AHA recommends daily physical education in schools, including 150 minutes weekly for elementary school students and 225 minutes for middle and high school students. 306 Yet, only seven states meet the AHA recommendation for elementary school while just three states meet the AHA recommendations for middle school.³⁰⁷ Even where state requirements are in place, schools are not necessarily compliant. A 2016 Washington Post investigation found that only 10 of the more than 200 public and charter schools in Washington, DC, met the law's physical education requirements.308

After-School Settings

More than 10 million American children enroll in an after-school program,309 and children often attend these programs 15 or more hours per week during the school year and all day during the summer. A national coalition of leaders in out-of-school programs-including the YMCA of the USA, the National Institute on Out-of-School Time, the University of Massachusetts Boston, the Harvard School of Public Health, and the Healthy Out-of-School Time Coalition—helped develop a set of voluntary evidence-based nutrition and physical activity standards called the National AfterSchool Association Healthy Eating Physical Activity standards.³¹⁰ Organizations that provide care to children outside of school can pledge to abide by the standards.

Ensuring that after-school programs are providing nutritious food and plenty of physical activity is important in addressing health inequities, as Black and Latino children are much more likely to enroll in after-school programs than the general population.³¹¹

COMMUNITY POLICIES AND PROGRAMS

Recent evidence demonstrates the importance of community-based obesity-prevention and obesityreduction strategies. The Healthy Communities Study, a five-year study that included more than 5,000 children from more than 100 communities, found that areas with policies and programs that targeted more kinds of healthy behaviors related to physical activity and nutrition were associated with lower BMI and smaller waist circumference in children. 312,313 A study of Kaiser Permanente's Community Health Initiative, which has reached more than 715,000 people in nearly 60 communities, found that 69 percent of the strategies implemented affected behavioral change. Kaiser's most successful community strategies were physical-activity programs and park improvements.314

Built Environment: Community Design and Land Use, and Safe Routes to Schools

Research shows a link between built environments—all the human-made physical aspects of a community— physical activity, and obesity. The odds of a child having obesity or being overweight increase by 20 to 60 percent if he or she lives in a neighborhood with unfavorable environmental aspects, such as poor housing, unsafe conditions, and no access to sidewalks, parks, or recreation centers. 315

Community Design and Land Use

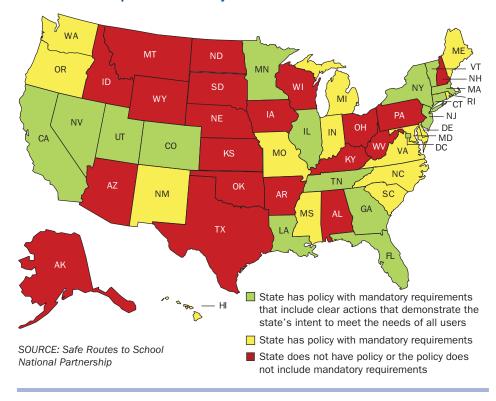
Thoughtful community design and land use can encourage physical activity. *The Community Guide*—a collection of evidence-based policies from the Community Preventive Services Task Force—recommends several transportation-infrastructure

- and land-use approaches, including street connectivity; sidewalk, bicycle, and trail infrastructure; and publictransit access; mixed residential and commercial land use; and parks and recreational areas. These strategies are all shown to encourage physical activity:
- Changing zoning laws to encourage mixed-use neighborhoods, which are associated with more physical activity;^{316,317}
- Improving conditions for walking by building sidewalks, installing crosswalks, and taking other pedestrian-safety measures—as children engage in more physical activity when their neighborhoods have sidewalks, 318 and people in neighborhoods with sidewalks are 50 percent more likely to meet the recommended daily amount of physical activity; 319

- Adding physically protected bike lanes, which encourage both walking and cycling³²⁰—as well as improved safety for all road users³²¹—and other bike-friendly measures; and
- Expanding public transportation, as taking public transportation can result in between eight and 33 minutes of additional walking per day.³²²

The National Complete Streets
Coalition has also developed a set
of recommendations for community
design and transportation policies and
implementation practices that ensure
streets are safe for people of all ages
and abilities, balance the needs of
different modes of transportation, and
support local land uses, economies,
cultures, and natural environments.
Currently 31 states have implemented
policies that meet Complete Streets'
requirements.³²³

States With A Complete Streets Policy



A number of federal programs provide funding for active transportation projects, such as building biking, rolling or walking trails, including:

- Fixing America's Surface
 Transportation (FAST) Act funding,
 which has a specific funding
 stream for projects that expand
 travel choices, the Transportation
 Alternative Set-Aside (TASA), and
 provides most of the federal funding
 for walking, biking, and trails;³²⁴
- Formula grant funding, such as the Congestion Mitigation and Air Quality Improvement program, which funds transportation projects that contribute to clean air, and the Surface Transportation Block Grant program, which provides flexible funds for different transportation projects, including walking and biking infrastructure;³²⁵ and
- Discretionary grant funding, including the U.S. Treasury
 Department's Better Utilizing
 Investments to Leverage Development
 (BUILD) grants (formerly called the Transportation Investment
 Generating Economic Recovery, or
 TIGER, program), which supports
 road, rail, port, and transit projects. 326
 Since 2009, this program has funded
 30 projects focused on improving
 pedestrian or biking infrastructure. 327

Community design is very much a health-equity issue. As discussed earlier, food deserts and food swamps disproportionately affect racial and ethnic minorities. 328,329,330 Research demonstrates that predominantly minority neighborhoods are less likely to have recreational facilities, 331 and predominantly Black neighborhoods are more likely to have sidewalks in need of repair. 332 People of color often face more precarious conditions

PROMOTING HEALTH AND COST CONTROL IN STATES

TFAH's Promoting Health and Cost Control initiativeⁱ identified 13 policies outside the healthcare sector that have a long-term impact on health and evidence showing their effectiveness. Many have the potential to help reduce the obesity crisis including universal Pre-K programs, school nutrition programs, earned income tax credits and complete streets policies.

i Lustig A, Cabrera M, et al. *Promoting Health and Cost Control in States: How States Can Improve Community Health and Well-being Through Policy Change.* Trust for America's Health, February 2019. https://www.tfah.org/report-details/promoting-health-and-cost-control-instates/ (accessed August 20, 2019).

for walking, rolling, and biking. For example, Black and Latino pedestrians' traffic-related death rates are twice as high as Whites, and AI/AN are four times as high;333 and the fatality rate for Black cyclists is 30 percent higher than for White cyclists, and, for Latino cyclists, it is 23 percent higher than for White cyclists.³³⁴ Altogether, these barriers and risks may dissuade healthy physical activity. Thoughtful community design must consider ways to reduce the barriers and risks, including by engaging community members in planning. For example, experts at the Harvard School of Public Health asked residents of high-crime neighborhoods in Boston about their perceptions of the safety of various bicycle-route options. Residents preferred wide, two-way cycle tracks with clear markings that were on streets with high-end stores and good sight lines to reduce crime risk. By considering residents' views when designing new bike routes, urban planners can create environments that are welcoming to bikers in diverse communities and hopefully can increase physical activity and health equity.335

See appendix for information on state-level indicators and policies related to the built environment, including Complete Streets policies and the prevalence of sidewalks and parks.

Safe Routes to School

Walking, rolling, or biking to school is an easy way for children to get more exercise: walking one mile to and from school each day provides a child with two-thirds of the recommended 60 minutes of daily physical activity. 336 Safe Routes to School (SRTS) initiatives educate students and families about the benefits of walking, rolling, and biking to school and ensure that the school environment allows children to do so safely. Yet according to the 2018 SRTS National Partnership report card only two states—California and Washington—received the top grade for supportive state policies on walking, bicycling, and physical activity.337

SRTS programs have resulted in statistically significant improvements in active transportation to school. One study of 800 schools in four states with SRTS programs found that rates of walking and biking to school increased after the program started and could lead to a 25 percent increase over five years in walking and bicycling. 338

To implement an SRTS initiative, states, localities, and school districts can compete for TASA funding, which is available to all states under the FAST Act. The amount of total national funding available for TASA projects in FY 2019 is \$850 million.³³⁹

CDC Community Initiatives

In addition to its support of obesity prevention in schools and ECE facilities, CDC also provides funding for a number of community-based obesity programs. For FY 2019, Congress funded CDC's Division of Nutrition, Physical Activity, and Obesity at \$56.9 million, of which CDC allocated \$15 million for the High Obesity Program and \$2 million for the Farm to School program. 340,341

State Physical Activity and Nutrition Program

The CDC's State Physical Activity and Nutrition (SPAN) Program supports community efforts to improve nutrition and provide safe and accessible places for physical activity. The SPAN program replaced the State Public Health Actions program in 2018, changing the program from one that operated in all 50 states to one that supports larger five-year projects in as many states as funding allows. In FY 2018, SPAN approved 50 applications, but CDC could fund only 16 states for state- and local-level efforts to support nutrition, physical activity, and breastfeeding. 342

SELECT OBESITY-RELATED FUNDING OPPORTUNITIES FROM CDC						
Grant/Program Name	Grant Number	Grant Goal	Length of Grant	Number of Available Grants	Annual Grant Size	Total Program Funding
State Physical Activity Nutrition (SPAN) Program (1807)	1807	Improve nutrition and physical activity at state and local level	5 years starting in September 2018	16 states	\$880,000 average annual award	\$70 million over 5 years
High Obesity Program (HOP)	1809	Increase access to healthy foods and safe places for physical activity in high- obesity areas	5 years starting in September 2018	15 land-grant universities	\$725,000 average annual award	\$56 million over 5 years
Preventive Health and Health Services (PHHS) Block Grant		Provide each state with flexible support to address its most important health needs	Annual	61 grants: 50 states, DC, two American Indian tribes, and eight U.S. territories	In FY 2018, CDC spent \$10.1 million on nutrition and \$3.8 million on physical activity	\$160 million in FY 2019
Racial and Ethnic Approaches to Community Health (REACH)	813	Reduce racial and ethnic health disparities	5 years starting in September 2018	31 grants in 21 states: AL, AZ, AR, CA, CT, FL, GA, IN, MA, MI, MS, NE, NV, NM, NY, NC, OH, OR, PA, TX, and WA	\$780,000 average	\$56 million in FY 2019 (\$35 million for REACH, \$21 million for Good Health and Wellness in Indian Country)
Improving Student Health and Academic Achievement through Nutrition, Physical Activity and the Management of Chronic Conditions in Schools (Healthy Schools)	1801	Increase number of students who consume nutritious food and beverages, participate in daily physical activity, and can effectively manage their chronic health conditions	5 years starting in June 2018	State education agencies in 17 states: AK, AZ, AR, CO, IL, KY, LA, MA, MN, MO, NE, NM, NC, OK, OR, TN, and WA	\$350,000 average for Priority 1 awards \$450,000 average for Priority 2 awards	\$35 million over 5 years

High Obesity Program

The High Obesity Program (HOP) funds land-grant universities in 15 states to conduct community programs that improve nutrition and provide safe and accessible places for physical activity in counties where the obesity rate exceeds 40 percent. 343 HOP grantees generally work in rural areas and target their efforts to those communities. 344 Current grantees include:

- The University of Kentucky in Lexington, which is working with local partners to expand its programs, including Plate it Up Kentucky Proud, which provides healthy recipes using local ingredients grown in Kentucky;
- North Dakota State University in Fargo, which is increasing access to healthier and culturally appropriate foods in the communities of the Standing Rock Sioux Tribe in Sioux County and the Turtle Mountain Band of Chippewa Indians in Rolette County;
- Mississippi State University in Starkville, which is connecting sidewalks, bike routes, and public transit with homes, schools, and workplaces in seven Mississippi counties.³⁴⁵

CDC requires grantees to conduct activities with populations that are at increased susceptibility to obesity. American Indian adults are 50 percent more likely than White adults to have obesity, 346 and four of the current projects include a focus on Native tribes. 347

Congress appropriated \$15 million for HOP in FY 2019. 348

Preventive Health and Health Services Block Grant

The Preventive Health and Health Services (PHHS) block grant provides states with flexible funding to address important public health needs.³⁴⁹ In FY 2018, states spent \$10.1 million in PHHS funding in obesity and nutrition, and \$3.8 million on physical activity.³⁵⁰

Examples of past PHHS-funded obesityprevention activities include:

- Hiring a physical-activity coordinator and purchasing game equipment by the Kickapoo Tribe for the Kickapoo Boys and Girls Club in Kansas;³⁵¹
- Introducing salad bars, active classrooms, and farm-to-school programs in seven Alaskan school districts;³⁵² and
- Strengthening school wellness policies in five school districts in Maryland.³⁵³

Funding for the PHHS program remained level in FY 2019 at \$160 million. 354

Racial and Ethnic Approaches to Community Health

A national program to reduce health disparities, Racial and Ethnic Approaches to Community Health (REACH) initiative has provided funds to community organizations, tribes, universities, and state and local health departments to implement culturally appropriate programs—including obesity-prevention efforts-among Blacks, American Indians, Latinos, Asian Americans, Alaskan Natives, and Pacific Islanders. Between 2014 and 2018, the REACH program improved access to healthy food and beverages for 2.7 million people and increased opportunities for 1.3 million people to be physically active. 355

Given the high obesity rates, many REACH grantees focus on reducing obesity in the Black community. Between 2008 and 2012, this was the target population of 14 REACH grantees, using strategies such as creating local farmers' markets, improving the walkability of neighborhood streets, and expanding healthy food choices in community grocery stores.³⁵⁶

In FY 2018, REACH funded 31 recipients. Just a few of the obesity-reduction activities REACH grantees undertook during the current five-year funding period include:

- The Montgomery Area Wellness
 Coalition is developing a Fresh Truck
 to travel to neighborhoods in food
 deserts in Montgomery, Alabama;
- Coastal Georgia's YMCA is supporting a national movement called Active People, Healthy Nation by creating a community-wide multi-use trail connecting homes to jobs; and
- Live Healthy Miami Gardens is implementing a breastfeeding program and establishing five new public-transportation routes in Miami Gardens, Florida.³⁵⁷

Congress funded the REACH program at \$56 million for FY 2019, a \$5 million increase over FY 2018. While the overall REACH funding line received a \$5 million increase in FY19, the increase went entirely to the Good Health and Wellness in Indian Country grant program, which works with American Indian tribes, Alaska Native villages, tribal organizations, and tribal epidemiology centers to promote health, prevent disease, reduce health disparities, and strengthen connections to culture and lifeways that improve health and wellness. In order to fund the creation of the Good Health and Wellness in Indian Country grant program, which has been instrumental in tribal communities, the core REACH grants have had \$53 million diverted over the past three fiscal years.

CDC Childhood Obesity Research Demonstration

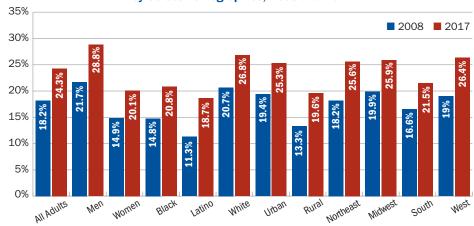
Now in in its third funding period, the Childhood Obesity Research Demonstration (CORD) is currently focused on creating and adapting "packaged" obesity-reduction materials and messages that healthcare and community organizations can use with children and families in real-world settings. The CORD 3.0 grantees for the funding period 2019–2024 are: Massachusetts General Hospital in Boston; Miriam Hospital in Providence, Rhode Island; Stanford University in Palo Alto, California; University of Nebraska in Lincoln; and Washington University in St. Louis. Missouri. 359

CORD 3.0 builds on progress made during CORD 1.0, which focused on combining obesity-prevention efforts in pediatric settings with public-school interventions, 360 and CORD 2.0, which focused on weight-management interventions for children in low-income families struggling with obesity in Massachusetts and Arizona, and used electronic records to refer patients for BMI screenings, nutrition and physical-activity counseling, and healthy-weight programs. 361

National Diabetes Prevention Program

CDC created the National Diabetes Prevention Program (DPP), a publicprivate partnership, in 2010 to support evidence-based type 2 diabetesprevention interventions in communities around the country. The program works to prevent or delay a diagnosis of type 2 diabetes for the 84.1 million Americans with prediabetes, a condition in which a patient has glucose levels that are elevated but not high enough for a diagnosis of diabetes.362 A key feature of the DPP is its evidence-based lifestyle-change program, which researchers have found can cut participants' risk of developing type 2 diabetes by 58 percent.363

Percent of Adults Meeting Physical Activity Guidelines, by Select Demographics, 2008 and 2017



Source: National Health Interview Survey

The DPP is a particularly important tool for addressing health disparities, as diabetes has a disproportionate effect on communities of color. Among adults, Native Americans and Alaska Natives have the highest prevalence of diagnosed and undiagnosed diabetes (15.1 percent), followed by Blacks (12.7 percent), Latinos (12.1 percent), and Asians (8 percent), while the prevalence rate among Whites is 7.4 percent.³⁶⁴

Congress funded the DPP at \$25.3 million for FY 2019.³⁶⁵

Physical Activity Guidelines

In 2018, HHS released the second edition of *Physical Activity Guidelines for Americans*. The guidelines have recommendations for different age groups:

- Children ages 3 to 5 should be active throughout the day;
- Children ages 6 to 17 should engage in at least 60 minutes per day of moderate-to-vigorous physical activity, which should include musclestrengthening activities three days per week and bone-strengthening activities three days per week; and

 Adults should have at least 150 to 300 minutes of moderate-intensity aerobic activity or 75–150 minutes of vigorous-intensity aerobic activity per week and two or more days of musclestrengthening training.³⁶⁶

Currently, about one-quarter of American adults meet the Physical Activity Guidelines for Americans, which is up 34 percent over the past decade (from 18.2 percent in 2008 to 24.3 percent in 2017) and suggests that the combination of policy and community-design changes and public-awareness campaigns across the country can change behavior over time.367 Women, older Americans, Blacks, Latinos, those with a high school education or less, rural residents, and Southerners, however, continue to have the lowest proportion of individuals meeting the guidelines, highlighting a need to focus communitydesign changes and programs on areas and populations with lower activity rates.

To build on the improvements made over the last decade, CDC created the Active People, Healthy Nation publicawareness and education campaign. Active People, Healthy Nation has a goal of helping 27 million Americans become more physically active by 2027. 368