

Racial and Ethnic Health Disparities and Chronic Disease Issue Brief



Introduction

This issue brief was created to educate Academy members about racial and ethnic health disparities in chronic diseases and policy opportunities to address these issues. The brief:

- Highlights the disproportionate impact of chronic diseases on minority populations
- Outlines how the social determinants of health have contributed to health disparities among minority populations
- Provides federal policy recommendations to support diversity in allied health education programs and strengthen our response to racial and ethnic health disparities.

Overview

The most recent U.S. Census reports that approximately 40 percent of the U.S. population belong to a racial or ethnic minority group. Many minority populations in the United States have long faced chronic disease health disparities due to socioeconomic inequities, barriers to education, systemic racism, insufficient access to health care, as well as limited access to healthful and affordable foods and safe places to be active. The historical practice of redlining and subsequent racial segregation across the country that remains today also has impacts on economic stability, educational access, and neighborhood and built environment. These systemic inequities contribute to racial disparities in chronic diseases such as cardiovascular disease, hypertension, diabetes, some cancers and obesity.¹

¹ National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on Community-Based Solutions to Promote Health Equity in the United States; Baciu A, Negussie Y, Geller A, et al., editors. *Communities in Action: Pathways to Health Equity*. Washington (DC): National Academies Press (US); 2017 Jan 11. 2, *The State of Health Disparities in the United States*. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425844/>

Social Determinants of Health

Health begins in our homes, schools, workplaces, neighborhoods and communities. Factors that influence overall health include eating nutritious foods, staying active, not smoking, staying current with immunizations and screening tests, as well as going to the doctor when sick.

Social determinants of health – defined by the Centers for Disease Control and Prevention as conditions in the environments in which people live, learn, work, play, worship and age – have contributed to the disproportionate impact of chronic diseases on minority populations in a variety of ways.² These determinants are shaped by the distribution of money, power and resources at global, national and local levels. Social determinants are most responsible for health inequities, the unfair and avoidable differences in health status seen within and between communities.³ Specific to the nutrition and dietetics field, poverty and racial segregation limit access to healthful foods and safe neighborhoods.

The following five key areas of social determinants of health are outlined in the Healthy People 2030 framework:



EDUCATION



ECONOMIC STABILITY



SOCIAL & COMMUNITY CONTEXT



HEALTH AND HEALTH CARE



THE BUILT ENVIRONMENT

These five areas are discussed below with an emphasis on how each factor relates to health disparities, access to and consumption of culturally acceptable, healthful food and the development of non-communicable chronic diseases with nutrition implications.

² CDC SDOH website: <https://www.cdc.gov/socialdeterminants/>.
³ World Health Organization, Commission on Social Determinants of Health. Closing the Gap in a Generation: Health equity through action on the social determinants of health. Available from: http://www.who.int/social_determinants/en.

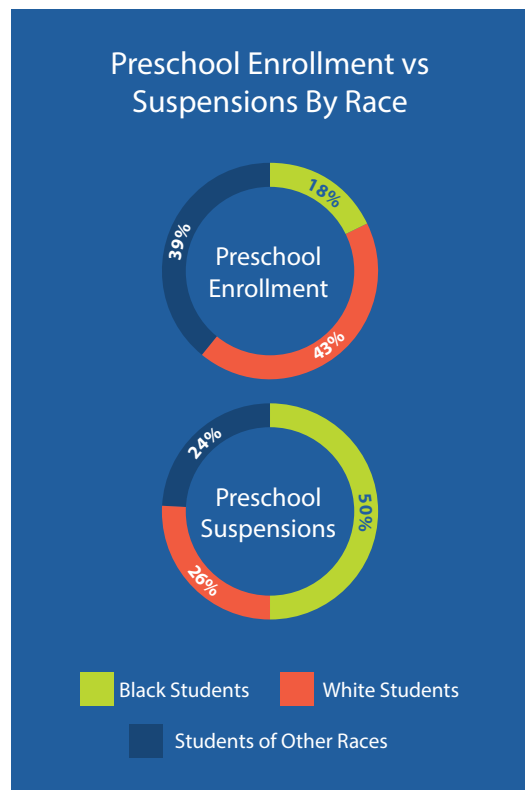


Education

Systemic racism infiltrates the most critical path to achievement and advancement: education. In many marginalized communities, systemic racism has resulted in limited access to well-resourced neighborhoods and quality education.^{4,5} This includes access to adequately funded schools, given that school funding is often derived from property taxes. Insufficient funding results in fewer resources to support not only learning activities, but student health and safety, as well as teacher support, which can lead to negative physical and mental health outcomes.^{6,7}

From a very early age, people of color face obstacles to achievement and advancement every day.⁸⁻¹⁰ Systemic racism infiltrates education as early as preschool. Research shows that Black students are much more likely to be suspended from preschool than white students. Black students make up only 18 percent of all preschoolers but represent almost 50 percent of all preschool suspensions. In comparison, white children, make up 43 percent of all preschoolers, yet represent only 26 percent of those receiving suspensions.¹¹

Several studies have found that Black boys as young as 10 are routinely perceived to be significantly older and less innocent, compared to white boys of the same age.¹² The statistics do not improve for Black children ages 10 to 17: when Black students and white students in this age range commit similar infractions, it is more likely for Black students to be held responsible for their actions because they are perceived to be significantly older and less innocent than white students.¹³



⁴Kosciw JG, Palmer NA, Kull RM, Greytak EA. The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *J Sch Violence*. 2013;12(1):45–63.

⁵Hernandez DJ. Double jeopardy: how third-grade reading skills and poverty influence high school graduation. New York: The Annie E. Casey Foundation; 2011

⁶Magnuson KA, Waldfogel J. Early childhood care and education: effects on ethnic and racial gaps in school readiness. *Future Child*. 2005;15(1):169–96.

⁷Huang KY, Cheng S, Theise R. School contexts as social determinants of child health: Current practices and implications for future public health practice. *Public Health Rep*. 2013;128(Suppl 3):21–28.

⁸How Systematic Racism Infiltrate Education ben jerry.com Published 2020, Accessed August 6, 2020

⁹United States Department of Education; Office of Civil Rights Data Collection Snapshot: School discipline Issue Brief, (March 2014). <http://www.ed.gov/OCR>. Retrieved August 6, 2020.

¹⁰School to Pipeline. American Civil Liberties Union Published, Retrieved August 8, 2020

¹¹US Department of Education Office for Civil Rights. Civil Rights Data Collection Data Snapshot: School Discipline. <https://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf>. Published 2014. Accessed October 14, 2020.

¹²The Essence of Innocence: Consequences of Dehumanizing Black Children

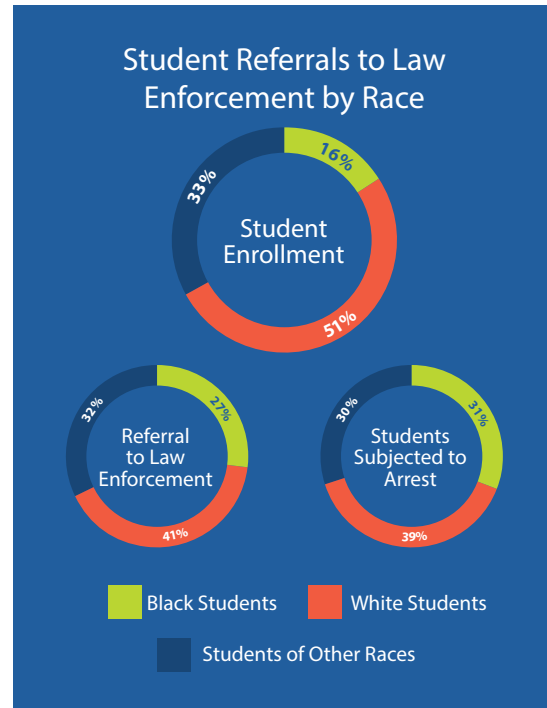
¹³The Essence of Innocence: Consequences of Dehumanizing Black Children

¹⁴Heitzeg N. Education or Incarceration: Zero Tolerance Policies and the School to Prison Pipeline. *Forum on Public Policy Online*. 2009;2009(2):1–21.

¹⁵US Department of Education Office for Civil Rights. Civil Rights Data Collection Data Snapshot: School Discipline. <https://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf>. Published 2014. Accessed October 14, 2020.

According to a 2015 report from the National Center for Education Statistics, there were more than 43,000 school resource officers and other sworn police officers, and an additional 39,000 security guards working in the nation’s 84,000 public schools. The heightened level of policing in public schools leads to students of color being disproportionately identified as unruly and referred to law enforcement. This phenomenon is known as the “school to prison pipeline” because it is transporting students right into the criminal justice system where people of color can expect to receive unfair treatment.¹⁴ This has clear consequences for Black students in the school system:

- Black students make up only 16 percent of student enrollment, but represent 27 percent of students referred to law enforcement and 31 percent of students subjected to arrest
- White students make up over half (51 percent) of student enrollment, 41 percent of students referred to law enforcement and 39 percent of those arrested.¹⁵



Achievements during preschool and K-12 education are critical to advancing towards higher education. Higher education is linked to improved health outcomes, yet racial and ethnic minorities experience significant challenges in pursuit of advanced degrees.¹⁶⁻¹⁹ Challenges ranging from insufficient preparation for college level coursework to the ability to afford tuition and fees, have resulted in lower college enrollment and graduation rates for Latino and Black students.²⁰⁻²²

¹⁶Kawachi I, Adler NE, Dow WH. Money, schooling, and health: mechanisms and causal evidence. *Ann NY Acad Sci.* 2010;1186(1):56–68
¹⁷Cutler DM, Lleras-Muney A. Education and health: evaluating theories and evidence. No. W12352. Cambridge (MA): National Bureau of Economic Research; 2006
¹⁸Rogers RG, Everett BG, Zajacova A, Hummer RA. Educational degrees and adult mortality risk in the United States. *Biodemography Soc Biol.* 2010;56(1):80–99.
¹⁹Goesling B. The rising significance of education for health? *Soc Forces.* 2007;85(4):1621–44.
²⁰Horn L, Berger R. College persistence on the rise? changes in 5-year degree completion and postsecondary persistence rates between 1994 and 2000. *NCES 2005–156.* Washington (DC): U.S. Department of Education, National Center for Education Statistics; 2004.
²¹Snyder TD, de Brey C, Dillow SA. *Digest of education statistics 2015.* NCES 2016-014. Washington (DC): U.S. Department of Education, National Center for Education Statistics; 2016.
²²Grinstein-Weiss M, Perantie DC, Taylor SH, Guo S, Raghavan R. Racial disparities in education debt burden among low- and moderate-income households. *Child Youth Serv Rev.* 2016;65:166–74.

Research illustrates that college professors, spanning race and gender, respond more consistently to questions and requests from students with “white sounding” names.²³ This provides easier access to information for white students than it does for people of color. Researchers argue that for students from minority communities, the constant stress of combating micro-aggressions and other daily encounters with racism and prejudice can result in negative mental health outcomes that often go undetected. Additionally, the type of institution minority students attend may impact graduation outcomes. One study indicated that Black students attending Historically Black Colleges or Universities had better academic success than their counterparts attending predominantly white colleges or universities. This may be attributed to the negative mental health outcomes caused by increased stress experienced by Black students on predominantly white campuses, as a direct result of systemic racial discrimination.²⁴

Many Black students that have the opportunity to participate in higher education are first-generation college students. Black graduates are twice as likely to be unemployed as white graduates. Even Black students who graduated with degrees in so-called “high demand” fields, such as engineering, struggle: 10 percent of Black engineering graduates, for example, are unemployed, compared to six percent of all engineering graduates. This is explained by the study “Bias Against ‘Black’ Names on Resumes,” which found that students are 50 percent less likely to get a job interview if their application has a “Black-sounding” name.²⁵

Black graduates that are employed still face adversity after graduation. Black students routinely take on more student loan debt than white students, which interferes with their ability to accumulate wealth and invest in the future for themselves and for their families.²⁶

²³How Systematic Racism Infiltrate Education ben jerry.com Published 2020, Accessed August 6, 2020

²⁴Greer TM, Chwalisz K. Minority-related stressors and coping processes among African American college students. *J Coll Stud Dev.* 2007;48(4):388–404.

²⁵Study Suggests Bias Against ‘Black’ Names On Resumes <https://www.shrm.org/hr-today/news/hr-magazine/pages/0203hrnews2.aspx>, Bill Leonard, Published February 1, 2003, Retrieved August 8, 2020.

²⁶Scott-Clayton J, Li J. Black-white disparity in Student loan debt more than triples after graduation. *Brookings.* 2016;2:1-22.

Economic Stability

There are 47 million people in the United States living below the poverty line and less than 10 percent are white. The highest percentage of adults living below the poverty line are: Black or Hispanic, individuals with less than a high school education, with a disability and are foreign born. Higher prevalence of unemployment was found among Hispanics, Blacks and American Indians/Alaska Natives.²⁷ Poverty is linked to an increased prevalence of food insecurity.²⁸ As a result, racial and ethnic minorities are at a higher risk of food insecurity.

Prior to the COVID-19 pandemic, more than 37 million people in the United States were affected by food insecurity; now more than 54 million people are projected to experience food insecurity due to the pandemic.²⁹ The COVID-19 national emergency has increased unemployment and has shrunk household food budgets. COVID-19 has caused disruption throughout the U.S. food system, introducing some families to food insecurity for the first time and putting new strains on those already struggling. Current evidence from the U.S. Department of Agriculture suggests minority populations, especially Blacks and Latinos, are at a higher risk of dying from COVID-19.³⁰

Food insecurity significantly affects the health and well-being of individuals and families across generations and is associated with costly and preventable chronic diseases, including high blood pressure, coronary heart disease, hepatitis, stroke, cancer, arthritis, chronic obstructive pulmonary disease and kidney disease. Individuals experiencing food insecurity are often forced to stretch their budgets in ways that are detrimental to their health, with paying rent or bills taking precedent over food and health. Some households experience financial insecurity and food insecurity simultaneously and are also forced to go without costly prescription drugs or postpone or forgo preventive services and other medical care.³¹⁻³³ Forgoing medications and services leads to the increased prevalence of chronic diseases among these populations. The Centers for Disease Control and Prevention reports that the novel coronavirus has targeted people with these underlying medical conditions.

The differences in economic stability experienced in minority populations is directly connected to greater risk of poverty and food insecurity, which leads to the chronic conditions that put minority communities at great risk of dying from COVID-19.

²⁷ Applying a Racial Equity Lens to End Hunger. <https://www.bread.org/library/applying-racial-equity-lens-end-hunger>

²⁸ USDA. Economic Research Service. Food Security in the U.S. Key Statistics & Graphics. Food Insecurity by Household Characteristics. September 09, 2020.

²⁹ Feeding America. The Impact of the Coronavirus on Child Food Insecurity. https://www.feedingamerica.org/sites/default/files/2020-04/Brief_Impact%20of%20Covid%20on%20Child%20Food%20Insecurity%204.22.20.pdf. Published April 22, 2020. Accessed October 2020. 3. Food Research and Action Center. The Role of the

³⁰ Centers for Disease Control and Prevention. Health Equity Considerations and Racial and Ethnic Minority Groups. <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html>. Published 2020. Accessed October 14, 2020.

³¹ Herman, D., Afulani, P., Coleman-Jensen, A., & Harrison, G. G. (2015). Food insecurity and cost-related medication underuse among nonelderly adults in a nationally representative sample: American Journal of Public Health, 105(10), 48-59.

³² Afulani, P., Herman, D., Coleman-Jensen, A., & Harrison G. G. (2015). Food insecurity and health outcomes among older adults: The role of cost-related medication underuse. Journal of Nutrition in Gerontology and Geriatrics, 34(3), 319-343.

³³ Knight, C. K., Probst, J. C., Liese, A., D., Sercy, E., & Jones, S.J. (2016). Household food insecurity and medication "scrimping" among US adults with diabetes. Public Health Nutrition, 19(6), 1103-1111.



Social & Community Context

A 1930s housing policy known as “redlining” had such major racial implications that even after it was outlawed in the 1960s, it continues to have lasting effects on social and community boundaries. Redlining has led to neighborhood segregation and is a form of systemic racism in the housing market, accounting for the unequal allocation of resources at the individual, family and community level, resulting in health disparities between Blacks and whites.^{34,35}

Another community context subject to explore is criminal justice policies and their impact on health disparities. As addressed previously, Black students are arrested on school campuses more often than white students. This trend continues into adulthood, with Blacks being incarcerated at five times the rate as their white counterparts.³⁶ Research confirms that Black inmates have a higher prevalence of chronic diseases such as hypertension, coupled with limited access to care, perpetuating racial health disparities.^{37,38} Incarceration dramatically disrupts a person’s life and often alters the family structure. This is particularly critical as single parent households are more likely to experience food insecurity and, as noted previously, this dramatically increases the family’s risk of experiencing negative health outcomes.

Civic participation is important to consider when addressing the social and community context of health equity. Civic participation includes voting, community activities and gardening and volunteering. Voting has a direct impact on the current and future health of Americans; a study referenced by Healthy People 2020, found that voter participation is associated with “better self-reported health.”³⁹ In addition to being connected to improved health, voting provides citizens with the opportunity to select policymakers that share their racial, ethnic and cultural backgrounds. Legislators from diverse backgrounds can more accurately advocate and address the needs of racial, ethnic and cultural minority groups, including health disparities.

The 2018 midterm election had record voter turnout rates. The turnout rate for white voters remained the highest in 2018 with 57.5 percent; Black voters followed with 51.4 percent, while Hispanic and Asian voter turnout rates were similar at 40.4 percent and 40.2 percent, respectively.⁴⁰ These voters selected the 116th U.S. Congress, the most diverse U.S. Congress to date, with 22 percent of its members being nonwhite.⁴¹

³⁴ Pager D, Shepherd H. The sociology of discrimination: racial discrimination in employment, housing, credit, and consumer markets. *Annu Review of Sociol.* 2008;34:181–209.

³⁵ Williams DR, Collins C. Racial residential segregation: a fundamental cause of racial disparities in health. *Public Health Rep.* 2001;116(5):404–16

³⁶ Travis J, Western B, Redburn FS. *The growth of incarceration in the United States: Exploring causes and consequences.* Washington (DC): The National Academies Press; 2014

³⁷ Lukachko A, Hatzenbuehler ML, Keyes KM. Structural racism and myocardial infarction in the United States. *Soc Sci Med.* 2014;103:42–50.

³⁸ Krieger N. Discrimination and health. *Social Epidemiology.* 2000;1:36–75.

³⁹ Civic Participation.” Civic Participation | Healthy People 2020, www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/civic-participation.

⁴⁰ Krogstad, Jens Manuel, et al. “Historic Highs in 2018 Voter Turnout Extended across Racial and Ethnic Groups.” Pew Research Center, Pew Research Center, 1 May 2019, www.pewresearch.org/fact-tank/2019/05/01/historic-highs-in-2018-voter-turnout-extended-across-racial-and-ethnic-groups/.

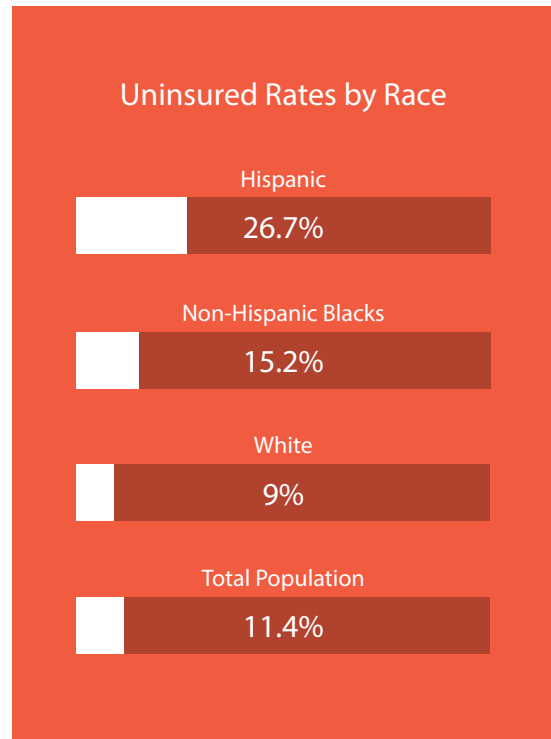
⁴¹ Bialik, Kristen. “For the Fifth Time in a Row, the New Congress Is the Most Racially and Ethnically Diverse Ever.” Pew Research Center, Pew Research Center, 8 Feb. 2019, www.pewresearch.org/fact-tank/2019/02/08/for-the-fifth-time-in-a-row-the-new-congress-is-the-most-racially-and-ethnically-diverse-ever.



Health Systems and Health Care

Access to primary care improves health outcomes through prevention, screening and disease management.⁴²⁻⁴⁴ Root causes of disparities in access to care include lack of health insurance, language barriers, disabilities, transportation limitations, lack of diversity among health care professionals or health care provider shortages in low-income and rural areas.^{45,46} For example, in 2018, the CDC reported that 26.7 percent of Hispanic and 15.2 percent of non-Hispanic Blacks were uninsured, compared to 9.0 percent of whites and 11.4 percent of people nationally.⁴⁷

The National Healthcare Quality and Disparities Report provides an assessment for the performance of America’s health care system, identifying strengths and weaknesses of the system as well as inconsistencies in access to and quality of the services provided. The report defines the six priorities of “quality” as: patient safety, person-centered care, care coordination, effective treatment, healthful living and care affordability. This report indicates that Blacks, American Indians/Alaska Natives and Native Hawaiian/Pacific Islanders receive lower quality of care as compared to whites.⁴⁸





Built Environment

The historical practice of redlining and subsequent racial segregation across the country that remains today also has impacts on the built environment. Rural communities often experience the closing of hospitals, insufficient broadband internet access and increased exposure to environmental toxins from agricultural run-off.⁴⁹ These problems set the stage for limited access to resources for education, health and food security, factors that contribute to greater health disparities over time and often result in the flight of rural youth to urban areas with more employment opportunities. However, the flight of rural youth to urban areas does not guarantee greater access to these resources. Urban settings also present challenges to accessing healthful foods and for people to connect to how their food is grown and processed.⁵⁰

The majority of food-insecure individuals in the United States are from communities of color and, when compared to their white peers, have poorer access to affordable, healthful foods including lean meats, whole grains, low-fat dairy and fresh produce.⁵¹ Urban communities of color may purchase food from smaller, bodega-style corner stores that typically carry lower quality, over-priced food rather than large supermarkets that carry more variety and quality with economical pricing.⁵² In fact, a multi-state study revealed an alarming disparity between Blacks' and whites' access to supermarkets, with whites being four times more likely to live close to a supermarket.⁵³ In contrast, individuals from minority communities have less access to healthful foods and are twice as likely to live near fast food restaurants.⁵⁴

⁴⁹ Ziller E, Coburn A. The state of health care in America: Health Equity Challenges in Rural America. *Hum Rights*. 1995;43(3).

⁵⁰ (Gundersen, 2015). (Cannuscio et al., 2010). (Prevention Institute, 2011). (Levi et al., 2015a). (Pinderhughes et al., 2015). (Prevention Institute, 2011). (Egerter et al., 2011). (Gern, 2010). (Kozyrskyj et al., 2004). (Keet et al., 2015).

⁵¹ Brooks K. Research shows food deserts more abundant in minority neighborhoods. *The Hub*. <https://hub.jhu.edu/magazine/2014/spring/racial-food-deserts/>. Published March 10, 2014. Accessed June 5, 2020.

⁵² Raja, S., Ma, C., & Yadav, P. (2008). Beyond food deserts: measuring and mapping racial disparities in neighborhood food environments. *Journal of Planning Education and Research*, 27(4), 469-482.

⁵³ Measuring Racial Equity in the Food System: Established and Suggested Metrics. Michigan State University Center for Regional Food Systems. <https://www.canr.msu.edu/foodsystems/uploads/files/measuring-racial-equity-in-the-food-system.pdf>. Published May, 2019.

⁵⁴ Brooks K. Research shows food deserts more abundant in minority neighborhoods. *The Hub*. <https://hub.jhu.edu/magazine/2014/spring/racial-food-deserts/>. Published March 10, 2014. Accessed June 5, 2020.

Academy Legislative Strategies to Mitigate Health Disparities

The Academy advocates for a broad range of policies to target social determinants of health and address these racial and ethnic health disparities, including economic stability and access to healthful food, adequate access to health care and reducing barriers to education.

Food Assistance Programs Contribute to Economic Stability, Reduce Food Insecurity and Improve Dietary Intake

It is the position of the Academy that systematic and sustained action is needed to achieve food and nutrition security in the United States. To achieve food security, effective interventions are needed, along with adequate funding for, and increased utilization of: food and nutrition assistance programs; inclusion of nutrition education in such programs; strategies to support individual and household economic stability; and research to measure impact on food insecurity and health related outcomes.⁵⁵

Dietary recommendations should be culturally appropriate and providers should be culturally responsive. Many of the studies that the Dietary Guidelines Advisory Committee analyzed do not reflect the nation's growing diversity. For example, nutrition recommendations from the *Dietary Guidelines for Americans* may not resonate with many Black, Latino, Asian and Native American consumers. In comments submitted in response to the Dietary Guidelines Advisory Committee's Scientific Report, the Academy emphasized the committee's repeated admonition that studies underpinning the Scientific Report's recommendations may not be completely generalizable to the U.S. population because studies are not adjusted for key confounders, such as race and ethnicity.⁵⁶ The lack of cultural appropriateness of the Dietary Guidelines is concerning because these recommendations serve to inform the policies/regulations of the federally food assistance programs. Thus, these policies are not culturally appropriate, yet they serve a disproportionately diverse population. Federal food assistance programs, including the Supplemental Nutrition Assistance Program; the Special Supplemental Nutrition Program for Women, Infants, and Children, and the School Nutrition Programs are the first line of defense against food insecurity in the United States. The lack of culturally appropriate *Dietary Guidelines* affect food assistance programs, making it more challenging for food insecure populations to improve their intake.

⁵⁵ Holben, D. (2010). Position of the American Dietetic Association: Food Insecurity in the United States. *Journal of the American Dietetic Association*. 110(9), 1368-1377.

⁵⁶ Academy of Nutrition and Dietetics. Re: Scientific Report of the 2020-2025 Dietary Guidelines Advisory Committee. Published August 13, 2020. Accessed September 19, 2020.

The following food assistance programs help augment household budgets to contribute to economic stability while providing access to healthful food to reduce food insecurity and potentially improve dietary intake:



Supplemental Nutrition Assistance Program

- SNAP reduces food insecurity⁵⁷⁻⁶⁰ and reduces health care utilization and costs⁶¹⁻⁶³
- On average, adults participating in SNAP incurred health care costs nearly 25 percent less than costs incurred by their non-participating counterparts over a 12-month period.⁶⁴
- In 37 reporting states, diet quality, food resource management and physical activity rose significantly.⁶⁵ Twice, statewide surveys found that children, youth and moms in low-resource census tracts with SNAP-Education interventions reported significantly more healthy behaviors than in those without SNAP-Education.^{66,67}



School Nutrition Programs

- Households with children are at greatest risk for food insecurity. Food-insecure children are more likely to have poor long-term physical and mental health outcomes. A new study from Harvard University suggests the prevalence of obesity among low income children was 47 percent lower than would have been expected had the new school nutrition standards not been put into place.⁶⁸
- Participation in school meals not only improves food security, it can help develop lifelong healthful eating habits.

⁵⁷ Mabli, J., & Worthington, J. (2014). Supplemental Nutrition Assistance Program participation and child food security. *Pediatrics*, 133(4), 1-10.

⁵⁸ Ratcliffe, C., McKernan, S. M., & Zhang, S. (2011). How much does the Supplemental Nutrition Assistance Program reduce food insecurity? *American Journal of Agricultural Economics*, 93(4), 1082-1098.

⁵⁹ Nord, M. (2012). How much does the Supplemental Nutrition Assistance Program alleviate food insecurity? Evidence from recent programme leavers. *Public Health Nutrition*, 15(5), 811-817.

⁶⁰ Ratcliffe, C., McKernan, S. M., & Zhang, S. (2011). How much does the Supplemental Nutrition Assistance Program reduce food insecurity? *American Journal of Agricultural Economics*, 93(4), 1082-1098.

⁶¹ Gregory, C. A., & Deb, P. (2015). Does SNAP improve your health? *Food Policy*, 50, 11-19.

⁶² Berkowitz, S. A., Seligman, H. K., Rigdon, J., Meigs, J. B., & Basu, S. (2017). Supplemental Nutrition Assistance Program (SNAP) participation and health care expenditures among low-income adults. *JAMA Internal Medicine*, 177(11), 1642-1649.

⁶³ Seligman, H. K., Bolger, A. F., Guzman, D., Lopez, A., & Bibbins-Domingo, K. (2014). Exhaustion of food budgets at month's end and hospital admissions for hyperglycemia. *Health Affairs*, 33(1), 116-123.

⁶⁴ Berkowitz, S. A., Seligman, H. K., Rigdon, J., Meigs, J. B., & Basu, S. (2017). Supplemental Nutrition Assistance Program (SNAP) participation and health care expenditures among low-income adults. *JAMA Internal Medicine*, 177(11), 1642-1649.

⁶⁵ SNAP-Education 2019: A Retrospective Review of LGU SNAP-Education Programs and Impacts (2020) https://nifa.usda.gov/sites/default/files/resource/LGU-SNAP-Education-FY2019-Impacts-Infographic-12-16-2020_508.pdf

⁶⁶ Molitor, F, S Sugerman, H Yu et al (2015). Reach of Supplemental Nutrition Assistance Program-Education (SNAP-Education) Interventions and Nutrition and Physical Activity-Related Outcomes, California, 2011-2012. *Preventing Chronic Disease*, 12, E33. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4362390/>

⁶⁷ Molitor, F, and C Doerr (2020). SNAP-Education Policy, Systems, and Environmental Interventions and Caregivers' Dietary Behaviors. *Journal of Nutrition Education and Behavior*, 000, 1-6. <https://doi.org/10.1016/j.jneb.2020.05.013>

⁶⁸ Kenney EL, Barrett JL, Bleich SN, Ward ZJ, Cradock AL, Gortmaker SL. Impact Of The Healthy, Hunger-Free Kids Act On Obesity Trends. *Health Aff (Millwood)*. 2020. doi:10.1377/hlthaff.2020.00133

Special Supplemental Nutrition Program for Women, Infants, and Children



- For more than 40 years, WIC has provided healthy beginnings and access to quality nutrition education to millions of nutritionally at-risk mothers and children
- WIC currently serves 6.9 million participants each month nationwide, with an average food benefit per month of about \$40⁶⁹
- Reaching mothers and their children through education, breastfeeding support, links to health care providers and providing a prescriptive supplemental food package, has made WIC a vital and cost-effective health care strategy.

Access to Nutrition Services



Medical Nutrition Therapy

MNT is a cost-effective component of treatment for obesity, diabetes, hypertension, dyslipidemia, HIV infection, unintended weight loss in older adults and other chronic conditions.⁷⁰⁻⁷⁵ Counseling provided by an RDN as part of a health care team can positively impact weight, blood pressure, blood lipids and blood sugar control.^{76,77}

Access to medical nutrition therapy through Medicare is one tool that can help prevent, manage and treat a wide range of chronic conditions that have disproportionately impacted communities of color. The Academy worked closely with U.S. Reps. Eliot Engel (N.Y.) and Pete King (N.Y.) and U.S. Sens. Susan Collins (M.E.) and Gary Peters (M.I.) to introduce the Medical Nutrition Therapy Act (H.R. 6971/S.4504) in the 116th U.S. Congress. This bipartisan, bicameral piece of legislation would expand access through Medicare Part B coverage of outpatient MNT for prediabetes, obesity, high blood pressure, high cholesterol, malnutrition, eating disorders, cancer, celiac disease, HIV/AIDS and any other disease or condition causing unintentional weight loss, with authority granted to the Secretary of Health to include other diseases based on medical necessity. The bill also authorizes nurse practitioners, physician's assistants, clinical nurse specialists and psychologists to refer patients for MNT.

⁶⁹ USDA. WIC Data Tables. https://fns-prod.azureedge.net/sites/default/files/resourcefiles/37WIC_Monthly-5.pdf Accessed on June 8, 2019.

⁷⁰ Academy of Nutrition and Dietetics. What is the evidence to support the cost-effectiveness, cost benefit or economic savings of outpatient MNT services provided by an RD? Available at: <https://www.andeal.org/topic.cfm?cat=4085>. Accessed March 30, 2020.

⁷¹ Academy of Nutrition and Dietetics Evidence Analysis Library. Medical Nutrition Therapy Effectiveness Systematic Review 2009, 2013-2015. Available at: <http://www.andeal.org/mnt>. Accessed March 30, 2020.

⁷² Academy of Nutrition and Dietetics. MNT: Weight Management. <https://www.andeal.org/topic.cfm?menu=5284&cat=5230>. 2015. Accessed March 30, 2020.

⁷³ Sikand G, Cole RE, Handu D, deWaal D, Christaldi J, Johnson EQ, Arpino LM, Ekvall SM. Clinical and cost benefits of medical nutrition therapy by registered dietitian nutritionists for management of dyslipidemia: A systematic review and meta-analysis. *J Clin Lipid*(2018); 12(5): 1113-22.

⁷⁴ Academy of Nutrition and Dietetics. What is the evidence to support effectiveness of nutrition interventions and counseling provided by an RD when part of a healthcare team? (Evidence Analysis Library website) (Reviewed 2009. Accessed 2020.) <https://www.andeal.org/topic.cfm?menu=4085&cat=3676>

⁷⁵ Academy of Nutrition and Dietetics. MNT: RDN in Medical Team. <https://www.andeal.org/topic.cfm?menu=5284&cat=5233>. 2015. Accessed March 30, 2020.

⁷⁶ Academy of Nutrition and Dietetics. What is the evidence to support effectiveness of nutrition interventions and counseling provided by an RD when part of a healthcare team? 2009. Available at <https://www.andeal.org/topic.cfm?menu=4085&cat=3676>. Accessed March 30, 2020.

⁷⁷ Academy of Nutrition and Dietetics. MNT: RDN in Medical Team. 2015. Available at <https://www.andeal.org/topic.cfm?menu=5284&cat=5233>. 2015. Accessed March 30, 2020.



Diabetes Self-Management Education and Support

As outlined above, there are stark racial disparities in diabetes rates across race and ethnic groups. Diabetes self-management education and support is a program for individuals with diagnosed diabetes that focuses on lifestyle modifications, such as healthful eating and physical activity, medication usage, blood glucose monitoring, emotional concerns and coping skills, health literacy and more.

In collaboration with the Diabetes Advocacy Alliance, the Academy has advocated the Expanding Access to Diabetes Self-Management Training Act (H.R.1840/S.814). This bill would make changes to the Medicare benefits to eliminate the co-payment for this service, increase the flexibility for using the allotted hours and pilot a virtual version of the service to help individuals who cannot easily access in-person classes.



Intensive Behavioral Therapy for Obesity

It is also critically important that individuals with obesity – who are disproportionately from Black and Latino communities – have access to a comprehensive range of options to treat and manage their disease.

For the last decade, the Academy has advocated for the Treat and Reduce Obesity Act, which would allow RDNs and other qualified health care providers to bill Medicare for intensive behavioral therapy for obesity. The bill would also allow Medicare to cover FDA-approved anti-obesity medications, which are currently singled out as not allowable under Medicare.



Investment in Helping Minority Students Become Allied Health Professionals

Cultural understanding and relatability are often the touchstones of success for engaging patients and clients and motivating them to change dietary patterns. The National Academy of Medicine report “Unequal Treatment Confronting Racial and Ethnic Disparities in Health Care” recommended increasing the proportion of health professionals from underrepresented racial and ethnic minority groups.

In particular, Blacks and Latinos account for only two percent and three percent of RDNs, respectively, with even less representation from American Indian, Native Hawaiian and Pacific Islanders.⁷⁸ This is especially concerning given the prevalence of diet-related chronic diseases in these minority populations. The lack of diversity in the RDN profession can lead to lower quality of care and unintentional harm inflicted upon the patient when a cultural barrier or language barrier exists between the practitioner and patient.⁷⁹ The low numbers of minority dietitians reflect a lack of adequate resources to diversify the field.

The Academy has partnered with the National Association for Equal Opportunity in Higher Education to urge Congress to provide \$300 million in targeted Department of Education funding for Historically Black Colleges and Universities, Tribal Colleges and Universities and other minority serving institutions to strengthen and grow their allied health education programs, including in nutrition and dietetics. The Academy is requesting an additional \$10 million in outreach funding to encourage underrepresented racial/ethnic students to pursue careers in nutrition. Investing in education funding for minority populations will strengthen our response to health disparities now and long term.

Conclusion

In conclusion, the Academy of Nutrition and Dietetics recognizes that it is essential to address the root causes of health inequities by examining the social determinants of health that play a role in the etiology and amplification of chronic health disparities. These root causes of health disparities must be addressed to achieve health equity.

The Academy, in partnership with other allied organizations, will continue to promote and advocate for policies and programs that are aimed at improving these social determinants, from access to health care and education funding to food security and medical nutrition therapy.

⁷⁸ Burt, K. G., Delgado, K., Chen, M., & Paul, R. (2019). Strategies and recommendations to increase diversity in dietetics. *Journal of the Academy of Nutrition and Dietetics*, 119(5), 737-738.

⁷⁹ Flores G. Language barriers to health care in the United States. *N Engl J Med*. 2006. doi:10.1056/NEJMp058316

