July 15, 2022

President Joe Biden
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Ambassador Susan Rice
Assistant to the President for Domestic Policy
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear President Biden and Ambassador Rice,

The American Heart Association (the Association) – the largest health organization representing more than 40 million volunteers – applauds the White House's plan to convene the White House Conference on Hunger, Nutrition, and Health (Conference) and for the opportunity to provide feedback. The last White House Conference on Nutrition, which was held more than 50 years ago, resulted in the expansion of critical nutrition assistance and hunger safety net programs, such as the Supplemental Nutrition Assistance Program (SNAP) and the National School Lunch and Breakfast Programs (NSLP/SBP). This conference presents an opportunity to further advance the efforts all levels of government and the private sector are making to address hunger, nutrition, and health.

Hunger, nutrition, and health are inextricably linked. An unhealthy diet, often characterized by a high consumption of added sugars, saturated fat, and sodium and a low intake of fruits, vegetables, and whole grains, is one of the leading risk factors for the development of chronic diseases such as cardiovascular disease (CVD), stroke, and diabetes.[1] Diet-related chronic diseases are the leading causes of death in the United States (U.S.).[2] Almost half (126.9 million) of all American adults have at least one form of CVD (i.e., coronary heart disease, stroke, or hypertension) resulting in one CVD death every 36 seconds.[3] Chronic diseases are the main drivers of rising health care costs in the U.S., accounting for 90 percent ($3.8 trillion) of annual health care costs.[4]

Hunger, poor nutrition, and diet-related chronic diseases disproportionately impact those living with lower income and people of color. Non-Hispanic Black women and men have a higher prevalence of CVD than any other racial and ethnic group, at 58.8 percent and 60.1 percent respectively.[3] The COVID-19 pandemic has only exacerbated these disparities.

The federal government has been integral to addressing hunger in the U.S. through federal nutrition assistance programs such as SNAP and the Summer Food Service Program (SFSP). Many existing U.S. food policies and programs focus on improving access to *sufficient quantities* of food. However, there is a need to expand these policies and programs to focus on improving nutrition security—that is, the *quality* of food—so people have access to enough *nutritious* food.

Since the 1990s, at least one in ten American households have been food insecure.[5] In 2020, at the height of the COVID-19 pandemic, food insecurity rates largely remained stable due in part to the swift response from the federal government and charitable food system; however, higher rates were found among households with children (14.8 percent), Hispanic households (17 percent), Black households (21 percent), and households living at or below the federal poverty line (35 percent).[6] Nutrition security, the individual or household condition of having equitable and stable availability, access, affordability, and utilization of foods and beverages that promote well-being and prevent and treat disease,[7] is increasingly being acknowledged as a concern. Lack of access to affordable, nutritious food makes adhering to a healthy diet difficult for many populations, especially those with lower incomes and people of color.

While the Conference is emphasizing hunger, healthy eating, and nutrition, the Association is pleased to see that physical activity is one of the pillars and strongly encourages the White House to include robust recommendations to promote physical activity in the final report. Regular physical activity combined with a healthy diet are critical components to holistic health and well-being. Being physically active is one of the most important health behaviors people can engage in to maintain physical health, mental health, and well-being.[8] Regular physical activity is both health-promoting and important for disease treatment and prevention with numerous benefits that contribute to a disability-free lifespan.[9]

New research shows that more than 110,000 lives could be saved annually if adults in the U.S. increased their physical activity by just ten minutes per day.[10] Physical activity reduces the risk of several of the leading causes of death and disability, including cardiovascular disease and colon, breast, and endometrial cancers.[11] Physical activity is also important for improving outcomes for the approximately two-thirds of Americans who have a chronic condition.

If all Americans met current physical activity guidelines, Medicare could save $73.9 billion per year.[12] Low physical activity and fitness also pose immediate and long-term threats to our nation's safety and security. Seventy-one percent of Americans ages 17-24 fail to meet core eligibility requirements for entrance into the military, creating a serious recruiting deficit.[13]

The Conference presents an opportunity to address food and nutrition insecurity and unhealthy diets as well as insufficient physical activity – the main drivers of chronic diseases. Generally, the burden of addressing nutrition and health has been pushed onto the individual. However, structural factors (i.e., access, affordability, availability, and utilization of healthy food) impact people's ability to access and consume healthy diets. Efforts to reduce hunger, improve nutrition, increase physical activity, and reduce the burden of chronic diseases should focus on the structural factors beyond an individual's control. This letter highlights myriad opportunities for the federal government to address some of the structural barriers that prevent people from accessing and consuming healthy diets through coordinated actions across all levels of

government and with the private sector. Prioritizing actions to address structural barriers will help to reduce racial and ethnic disparities in access and consumption of healthy diets.

While this letter lays out a plethora of recommendations, we want to draw your attention to our top three priority recommendations:

1. Prioritize actions to address child nutrition:
    a. Strengthen nutrition standards for school meal programs and Smart Snacks; provide greater reimbursement for meals and robust technical assistance; and increase access through healthy school meals for all or Community Eligibility Provision (CEP) expansion.
    b. Improve summer feeding by strengthening the nutrition standards for the SFSP; increase reimbursement for Seamless Summer Option (SSO); and expand Summer Electronic Benefits Transfer (EBT).
2. Improve diet quality of federal nutrition assistance programs by aligning with the nutrition standards outlined in the Dietary Guidelines for Americans.
3. Modernize SNAP to increase the benefit amount; expand SNAP online; eliminate draconian prohibitions on eligibility; and improve SNAP-Ed.

The American Heart Association has outlined suggested policy recommendations by the five identified White House pillars:

Pillar 1: Improve food access and affordability

Access to hunger and nutrition programs are critical to ensuring nutrition security in the U.S. Access remains an issue, and healthy eating is often cost-prohibitive. Funding for federal nutrition and food assistance programs needs to increase to ensure adequate benefit levels, and the federal government should look for opportunities to expand access as appropriate, rather than prohibit access. Expanding access can include extending or widening eligibility; simplifying the application process; and cross-coordinating between programs to make it easier to apply for multiple safety net programs at once (i.e., SNAP and Medicaid). In addition, some federal programs like the National School Lunch Program (NSLP), School Breakfast Program (SBP), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) have a deliberate mission to improve diet quality through nutrition standards and food packages; other programs, such as SNAP, do not. Federal nutrition assistance programs should align with the nutrition standards outlined in the Dietary Guidelines for Americans, which may also result in a need for increased benefits levels, as well as consider the cultural relevancy of food.

Child nutrition programs are reauthorized through child nutrition reauthorization (CNR). Programs that are covered in CNR include the NSLP, the SBP, Smart Snacks in Schools, the SFSP, the Seamless Summer Option (SSO), the Fresh Fruit and Vegetable Program (FFVP), WIC, and the Child and Adult Care Food Program (CACFP). Unfortunately, the last reauthorization occurred more than a decade ago, leaving a gap in opportunities to update and improve the programs. The COVID-19 pandemic has provided a rare

opportunity to pilot – in real time – innovative changes to these programs that will ultimately help children thrive and set them on a life-long path of healthy eating.

Data have shown that school meals are the healthiest source of calories for children.[14] Given that the COVID-19 pandemic has led to an increase in childhood obesity rates,[15] it is more important than ever to ensure that nutrition standards are based on science and align with the DGAs. Unfortunately, since implementation of the Healthy, Hunger-Free Kids Act, there have been coordinated efforts to roll back the standards, particularly around sodium and whole grains. The U.S. Department of Agriculture (USDA) and the Administration must keep these standards strong to ensure optimal health for children. We encourage the Administration to move forward with its plan to issue a "durable rule" in early 2023 that strengthens the sodium and whole grains standards and creates an added sugars standard. The competitive foods – or Smart Snacks – should also be updated to include an added sugars rather than a total sugars standard. In addition, we recommend the following changes to ensure success for the NSLP, the SBP, and Smart Snacks:

- increase per meal reimbursement for meeting nutrition standards, which is especially critical given the increasing cost of food and labor;
- invest in robust technical assistance, with particular focus on sodium, whole grains, and added sugars;
- work with public health, nutrition groups, industry, and program professionals to craft timelines that are aggressive but realistic with the need for reformulation, palate shifts, and training; and
- simplify the application process and bureaucracy so school food professionals can focus on the most important aspect of their jobs – feeding children.

One of the best ways to simplify school meals is to implement healthy school meals for all at the federal level. Healthy school meals for all not only ensure that every child gets a healthy meal, but they also minimize the bureaucratic burden for school food service personnel and parents or guardians and decrease or eliminate the stigma that can be associated with the programs.[16] In addition, healthy school meals for all ensures that programs remain fiscally solvent – and can benefit local producers and industry as well with the increased demand. If healthy school meals for all is not feasible at the federal level, the Administration and Congress should work together to expand the Community Eligibility Provision (CEP) and change the reduced-price qualification to free.

Programs that participate in summer feeding have two options: SFSP and SSO. These programs can be improved by also simplifying the application process and expanding their reach by exploring whether some to implement the innovative delivery services brought about by lifting the congregate feeding requirement that led to an increase participation during the COVID-19 pandemic. However, while SSO needs to align with the nutrition standards for school meals, SFSP are ruled by a different – and much weaker – set of nutrition standards. Yet SFSP receives higher reimbursement rates so often programs have facilities to prepare and store foods – like school programs – will switch to SFSP for the higher reimbursement rates. To mitigate these issues, SFSP needs to have stronger nutrition standards that closely align with the DGAs with the understanding

that some programs do not have the same storage and preparation capacity, and SSO needs to increase reimbursement to encourage programs that do have the resources to provide summer meals under the more robust nutrition standards. Summer EBT should also be expanded to help close the gaps for children who cannot access SSO or SFSP.

The FFVP is an innovative program that provides a fresh produce snack to the schools with the highest level of poverty. FFVP has been shown to increase consumption of all forms of fruits and vegetables and has proven to be useful in complimenting nutrition education curriculum.[17] This program should be expanded to all schools that are eligible for CEP and remain fresh only.

With WIC, steps should be taken to improve online access, loosen the in-person certification requirements, and allow states to certify infants for two years instead of one. Eligibility should be extended for children to age 6 and for postpartum women to two years. The Administration and Congress should make the Cash Value Voucher (CVV) to purchase more fruits and vegetables permanent, and USDA should update the WIC food package and ensure that it is aligned with the DGA. In updating the WIC food package, more options should be provided for traditional and first foods for Native Americans.

Finally, under the auspices of child nutrition, the Administration and Congress should increase the value of reimbursements for CACFP, simplify the application process, and reduce administrative burden for childcare providers. We also recommend providing technical assistance to providers to help meet nutrition standards as implementation may be a challenge for some facilities.

In complement with CNR, every five years Congress passes the farm bill, a comprehensive piece of legislation that addresses agriculture and nutrition policy. Title IV, the nutrition title, is the largest title and where the majority of all other nutrition and food assistance programs are addressed. Relatedly, USDA should work to increase the nutritional value and healthy options for USDA foods and commodities, a change that would benefit the programs under both CNR and the farm bill that use these foods.

The largest component of Title IV in the farm bill is SNAP. SNAP has been a highly successful anti-poverty and food security program. Given the reach SNAP has in influencing food policies, and data that shows SNAP participants have a slightly worse diet quality than eligible non-participants,[18-20] it is time to modernize SNAP to live up to its nomenclature. While we address recommendations on how to improve diet quality in the research section of this letter, the underlying structure of SNAP can be improved in several ways by: increasing the benefit amount to be aligned with the low-cost food plan rather than the thrifty food plan; increasing funding for SNAP and SNAP online purchasing in the 2023 farm bill, with a particular focus and funding for resources and technical assistance to expand to regional and local retailers; improving the application process including eliminating draconian prohibitions on eligibility; and improving SNAP-Ed access and delivery.

In addition to SNAP, the farm bill addresses the Gus Schumacher Nutrition Incentive Program (GusNIP). Historically, GusNIP has contributed to a system where state and local communities with well-established organizations have been able to access significant funding. However, opportunities exist within GusNIP to make the program more equitable and increase access to the most under-served populations. The Association recommends eliminating – or at least decreasing – the match requirement and considering allowing applicants to use other federal sources of funding for their match. USDA should better assess and communicate the nutrition value of foods provided through The Emergency Food Assistance Program (TEFAP) and the Commodity Supplemental Food Program (CSFP) to partners using appropriate standards and expand options in both to include more culturally appropriate foods. In addition, the Administration and Congress should expand access to CSFP to reduce lengthy waitlists. Federal funding should also be increased for Meals on Wheels to expand access to all eligible older adults and include more culturally appropriate food. Finally, the Seniors Farmers' Market Nutrition Program (SFMNP) should be expanded to encourage and allow greater participation and simplify the application process.

Policy recommendations:

1. Improve diet quality of federal nutrition assistance programs by aligning with the nutrition standards outlined in the Dietary Guidelines for Americans.
2. Strengthen nutrition standards for school meal programs and Smart Snacks; provide greater reimbursement for meals and robust technical assistance; and increase access through healthy school meals for all or CEP expansion.
3. Improve summer feeding by strengthening the nutrition standards for the SFSP, increasing reimbursement for SSO, and expanding Summer EBT.
4. Expand FFVP to all CEP-eligible schools and keep the program fresh-only.
5. Improve WIC access through expanding eligibility through six years old and two years postpartum; improve access to healthy foods by making CVV permanent and update the WIC food package; ease bureaucracy and eliminate barriers to applying; and improve online availability.
6. Increase the reimbursement value for CACFP and reduce administrative burden.
7. Improve nutritional value of USDA foods and commodities.
8. Modernize SNAP to increase the benefit amount; expand SNAP online; eliminate draconian prohibitions on eligibility; and improving SNAP-Ed.
9. Make GusNIP more equitable by either eliminating the match requirement or decreasing it and allowing applicants to use other sources of federal funding for their match.
10. Improve assessment and communication on the nutrient value of foods in TEFAP and CSFP and include more culturally appropriate foods; expand access to CSFP, Meals on Wheels, and SFMNP.

State, local, and tribal governments can also play a role in increasing access and affordability by being proactive and filling in the gaps left by the federal government. These levels of governance can strengthen nutrition standards for child nutrition programs and expand access should the federal government fail to do so, protecting

these vital programs from potential attacks and rollbacks at the national level in the future. In addition, states and localities can provide additional funding for FFVP to expand programs to more schools and age groups.

The Administration and Congress should work together to expand opportunities for tribal self-government administration and decisions about procurement in the Food Distribution Program on Indian Reservations (FDPIR). Under self-administration, tribal government can increase use of Native food producers, expand inclusion of more traditional foods, and allow Native households to use both FDPIR and SNAP in the same month.

Policy recommendations:

1. Codify nutrition standards for school meals and expand healthy school meals for all.
2. Expand FFVP to more schools and age groups
3. Improve FDPIR to provide more self-governance; include more Native food producers and traditional foods; and allow Native households to use both FDPIR and SNAP in the same month.

The private sector of the food system, including farming, processing, packaging, manufacturing, distribution, retail, and food service, has considerable influence over the type, quantity, quality, and affordability of foods available in the U.S. Several companies have made commitments and significant progress towards improving the nutritional quality of their product portfolios in balance with consumer demand, measures to improve environmental impact, and preservation of food safety. The Sustainable Food Policy Alliance is an exemplary example of working with partners across the spectrum and all levels to advance goals that improve the nutrition and health of their consumers. Others in industry should adopt similar policies and approaches.

The Association has engaged with experts in the food industry for nearly three decades via the Industry Nutrition Forum. There are unique roles for the food industry with respect to affordability and nutritional quality, such as maximizing cost efficiencies throughout food production, distribution, and marketing, innovating to protect the nutritional quality of foods post-harvest, improving the nutritional quality of affordable foods, and marketing food and eating practices in a manner that is culturally appropriate and prioritizes good health for consumers (e.g., product offerings in various markets, advertising, product placement in stores, artificial intelligence algorithms in digital shopping platforms, and donations to food banks).

One of the key things that all levels of government, non-government organizations (NGOs), and the private sector can do is coordinate efforts. For example, there should be coordination and integrated resources to sign up for SNAP and/or WIC in food pantries, grocery stores, medical provider offices, and at points of contact for other government safety net programs (like Medicaid). The Association partners with communities to implement systems in health care and community settings for both identifying people

experiencing food insecurity and connecting them to resources such as SNAP, WIC, food pantries, food retailers, and nutrition education, as well as health care resources such as Medicaid and medical nutrition therapy. Community members must lead the way for such interventions in order to ensure cultural alignment with respect to available foods, views regarding dignity and engagement with government programs, and more, as well as robust understanding of logistical realities that increase opportunity for success and reduce risk of unintended consequences.

Policy recommendations:

1. Work with industry to improve diet quality and prioritize equity and health in marketing practices.
2. Work to better coordinate all levels of government, NGOs, and the private sector to coordinate resources to make accessing food and nutrition assistance programs easier.

Pillar 2: Integrate nutrition and health

In general, the Association supports the proposed pillar to integrate nutrition and health. Nutrition is a critical component of health and development. Healthy dietary habits are linked to improved infant, child, and maternal health, stronger immune systems, and lower risk of chronic diseases.[21, 22] Developing healthy dietary habits during pregnancy and maintaining these behaviors throughout childhood can facilitate healthy weight gain and appropriate maintenance earlier in life thereby reducing chronic diseases[23] and their impact on health care expenditures.

Unhealthy dietary habits have been linked to poor health outcomes, contributing to the development of precursors for chronic diseases such as obesity, hypertension, and prediabetes. There are opportunities within the health care delivery system to improve access and consumption of healthy foods. To address unhealthy diets and food and nutrition security, the main drivers of chronic diseases, evidence-based, cost-effective food and nutrition interventions should be integrated into the health care delivery system. Actions can be taken across all levels of government (federal, state, local, and tribal) and through coordinated efforts with the private sector to integrate nutrition into the health care delivery system.

The Association recognizes the importance of "food as medicine" programs which integrate food and nutrition programs into the health care delivery system and supports policies to increase access to healthy food across the care continuum. Several pilot projects have been conducted on "food as medicine" interventions such as medically tailored meals, medically tailored groceries, and produce prescription programs. These food and nutrition programs have been shown to improve health outcomes[24-26], reduce household food insecurity[27, 28], and reduce health care utilization and cost.[29-31] While the evidence is promising, there is a need for larger scale projects to determine the effectiveness of these interventions. The Administration and Congress should consider providing additional funding for research on the use of safety net and health care systems-based food and nutrition programs in preventing and treating chronic diseases and on the impact of these programs on health outcomes, use, and costs.

Incorporating food and nutrition programs into the health care delivery system also aligns with recent calls for health care-based programs to address social determinants of health and achieve improvements in health equity.[32, 33] Integrating nutrition into the health care system has the potential to improve health and access to healthy food. Unfortunately, despite recognition from the medical community that food and health are fundamentally linked, major public insurance programs historically have not provided coverage for food and nutrition programs. The Administration and Congress have the opportunity to improve coverage for and reach of these programs by adding medically tailored meals and produce prescriptions programs to the definition of "medical and other health services" in the Medicare statue for Medicare Part B, changing billing methods to allow for nutrition and physical activity visits, and expanding eligibility for dietitians and nutritionists to be reimbursed for their services.

The federal government should also consider creating a position to coordinate nutrition policies and programs across agencies. Having such a person would ensure that nutrition policies and programs are effectively implemented; there is coordination in delivery of programs that touch on nutrition (i.e., those who are eligible for multiple safety net programs like SNAP and Medicaid) and improve efficacy of these programs; research is synergetic; and duplication of efforts don't occur.

Policy recommendations:

1. Increase funding for research on the use of safety net and health care systems-based food and nutrition programs in preventing and treating chronic diseases and on the impact of these programs on health outcomes, use, and costs.
2. Provide the Centers for Medicare and Medicaid Services (CMS) funding to improve nutrition through specific interventions to prevent or treat chronic diseases.
3. Expand the reach of food and nutrition programs such as medically tailored meals and produce prescription programs by adding them to the definition of "medical and other health services" in the Medicare statute for Medicare Part B.
4. Change billing methods to allow for nutrition visits.
5. Expand eligibility for dieticians and nutritionists for reimbursement.
6. Improve coverage for nutrition for primary prevention of chronic diseases.
7. Appoint a nutrition policy and program coordinator to harmonize work across agencies

State, local, and tribal governments can also take advantage of policies, regulations, and legislation that are in their purview to integrate nutrition into the health care system. There are opportunities at the state and local levels to provide coverage for food and nutrition programs through public insurance programs such as Medicaid. The Association recommends the Administration and Congress provide CMS funding to improve nutrition through specific interventions, such as medically tailored meals, produce prescription programs, and medically tailored groceries, to prevent or treat chronic diseases.

As we stated above, these programs have been shown to improve diet quality and reduce health care use and costs. Adhering to healthy dietary habits reduces the risk of developing chronic diseases and may even alleviate symptoms of chronic diseases.[1] In California, the state government is working with the state health care system to provide patients with meal deliveries that are tailored to their nutritional needs and health conditions. A recent article highlighted the experience of two kidney failure patients living with diabetes, one of whom participates in the program and the other who does not. The patient receiving the meal deliveries was able to manage their diabetes, while the patient who did not receive the meals continued to struggle to control their glucose levels. Their experiences suggest that incorporating food and nutrition programs into the health care delivery system aids patients in managing their chronic diseases by providing prepared meals that allow them to adhere to the dietary advice recommended by their provider.

The Association supports state efforts to increase access to healthy food by integrating funding for food and nutrition programs into standard Medicaid services rather than requiring a waiver. Several states with waivers are using Medicaid funding for programs to reduce food insecurity including California, New York, Oregon, and Massachusetts. However, integrating food and nutrition programs into standard services will improve the sustainability of these programs.

Policy recommendations:

1. Provide CMS funding to improve nutrition through specific interventions to prevent or treat chronic diseases.
2. Expand the reach of food and nutrition programs by integrating funding into standard Medicaid services rather than requiring a waiver.

The Administration and Congress can also work with the private sector and civil society to integrate nutrition and health. Specifically, the Administration and Congress can work with the medical community to incorporate nutrition education as part of the medical school curriculum for providers. Nutrition plays a key role in disease prevention and treatment. However, providers are not equipped to give nutritional advice during a primary care visit. Providers often cite insufficient knowledge and training as barriers to providing nutrition counseling.[34] By incorporating nutrition and physical activity education into medical school education, providers will be better prepared to conduct nutritional assessments and provide sufficient advice to address chronic diseases.

Continuing education is another path to improving nutritional and cultural competence for medical and health professionals. The Association created the *Leveraging Grocery Stores to Deliver Personalized Nutrition: An Interdisciplinary Model of Care in the Community* professional education course to raise awareness about an interdisciplinary model of care to deliver accessible, personalized nutrition and related services in a grocery store setting, and the importance of collaboration among a Registered Dietitian Nutritionist, patients' physician and other community-based health professional's benefits both patients and health care providers. The target audience for this course included physicians, nurses, pharmacists, and registered dietitian nutritionists.

Food and nutrition insecurity screening and referrals should be implemented and tracked within the health care delivery system. There are many barriers and considerations in developing and implementing such as tool, requiring collaboration between researchers, clinicians, health care institutions, and payers, a process to which the Association is strongly committed. The Administration and Congress can support civil society, including the health care system, to develop a validated screening tool for use in health care to identify food and nutrition security. A validated screening tool is essential to effectively assess food and nutrition security and connect patients with food and nutrition programs within the health care delivery system. The screening tool would help providers identify under-served patients to refer them to appropriate services, such as federal nutrition assistance programs.

The Administration and Congress could also work with the medical community to create a bidirectional referral system among health care entities, community-based organizations (CBOs), and food providers that serve as pathways for patients to access health care, nutrition counseling and education, nutritious food, and other social needs. A bidirectional referral system will help strengthen clinic to community linkages, increase existing resources, and improve service delivery. This system would ensure that people with or at risk of chronic diseases have access to the resources they need to prevent, delay, or manage chronic diseases once they occur. The Association partners with communities to implement such tools in health care in coordination with community resources and services, a process which is complicated, community-specific, and critical.

Policy recommendations:

1. Incorporate nutrition education into the curriculum for health care professionals.
2. Develop validated screening tool for use in health care to identify food and nutrition security.
3. Create bidirectional referral systems amongst health care entities, CBOs, and food providers that serve as pathways for patients to access health care, nutritious food, and other social needs.

Pillar 3: Empower all consumers to make and have access to healthy choices

The food environment has a significant impact on people's food choices, diet quality, and health.[35] There are several factors that interfere with people's ability to purchase and consume healthy diets, such as the built environment and neighborhood segregation, targeted marketing of unhealthy foods and beverages to communities of color, and structural racism embedded in policies and programs.[36] These factors affect access, availability, price, promotion, and placement of food, making it easier to choose unhealthy foods, and even eliminating choice in neighborhoods where there is no place to purchase, for example, fresh produce or WIC-approved foods. Effectively improving diet quality and reduce related chronic diseases will require fostering environments that make healthy foods available and accessible, inform healthy choices, and combat nutrition misinformation.

The Association works to empower consumers to have access to and make healthy dietary choices. To help foster a more positive food environment, the Administration and Congress should consider increasing funding to improve the reach of fundamental nutrition programs such as SNAP-Ed and the Expanded Food and Nutrition Education Program (EFNEP). Within SNAP-Ed, opportunities should be expanded for communities to implement culturally appropriate policies, systems, and environmental approaches to support healthier shopping and cooking. Likewise, within EFNEP, there are opportunities to increase the reach of nutrition education to more adults and children through additional funding and providing longer term programs to improve the stability of nutrition behavior over time. Healthy for Life®, developed by the Association in collaboration with Aramark, is an example of a community-based, nutrition education program in the SNAP-Education Policy, System, and Environmental Toolkit.[37] Research conducted in 2020-2021 by the Association's Center for Health Metrics and Evaluation on the program saw a 1.21 servings/day increase in fruit and/or vegetable consumption on average, with 63 percent increasing daily intake by one or more servings of fruit and/or vegetable; and confidence in using healthier food preparation methods, choosing appropriate serving sizes, and reading food labels increased by 34 percent, 40 percent, and 47 percent respectively.[37]

Nutrition education campaigns and programs for all population groups can help facilitate efforts to improve consumer choices. Mandatory food and nutrition education incorporated at all levels from K-12 in public schools and in medical schools, will help empower consumers by increasing basic nutrition knowledge and ensure that nutrition is part of the visits to medical practitioners. In support of this, the Association is currently developing a relationship with a local historically black college and university (HBCU) in Maryland and their School of Public Health and Nutrition Sciences to build a train-the-trainer model to develop more professionals from underrepresented communities that have both a nutrition background and practical skills to drive behavior change.

The Administration and Congress can also support opportunities to address consumer choice within the built environment. One opportunity is to pilot healthy food marketing in stores. Unhealthy food marketing is a significant contributor to poor diet quality and diet-related chronic diseases, especially for children and adolescents.[38, 39] Grocery stores and supermarkets are prime locations for marketing interventions to improve consumer knowledge and promote healthy choices. Typically, grocery store and supermarket marketing is designed to promote the purchase of unhealthy, high calorie, and low nutrient-dense products such as chips, soda, and candy which are prominently displayed in high volume areas and attached to in-store promotions.[40, 41] The development of a pilot to test healthy food marketing in stores will help to support consumer efforts to make healthy food choices.

Additionally, there are opportunities within the Food and Drug Administration (FDA) to improve consumer choice and access. The Association is working with the FDA on its Nutrition Innovation Strategy to improve food package labeling and consumer labeling. Almost all Americans (95 percent) report that they sometimes or always look for healthier options when shopping for food.[42] However, a consumer survey showed that

consumers are confused about what is healthy, which is a major barrier to making healthier choices.[43] Food package labeling can go a long way in encouraging better dietary choices. The Association recommends the establishment of a directed, standardized, comprehensive front-of-package labeling program and icon system with unified criteria based on the best available science and consumer research.

The FDA should release the longer-term voluntary sodium reduction targets for processed, packaged, and prepared foods. The Association strongly supported the release of FDA's short-term targets for the food industry. These targets will play a critical role in helping people across the country achieve healthier levels of sodium and improve well-being overall. We are hopeful that the FDA targets will provide industry with another incentive to reformulate and lower the amount of sodium in the overall food supply. The shorter-term sodium targets represent an important first step forward, but we urge FDA to release the longer-term sodium reduction targets. The FDA should explore a similar project for added sugars.

Policy recommendations:

1. Increase funding to improve the reach of SNAP-Ed and expand opportunities for communities to implement culturally appropriate policies, systems, and environmental approaches to support healthier shopping and cooking.
2. Expand EFNEP to increase the reach of nutrition education to more adults and children and provide longer-term programs to improve stability of nutrition behavior over time.
3. Incorporate mandatory food and nutrition education at all education levels from K-12 in public schools.
4. Pilot healthy food marketing in retail environments.
5. Develop a directed, standardized, comprehensive front-of-package labeling program and icon system with unified criteria based on science and consumer research.
6. Release longer-term sodium reduction targets.

There are also opportunities within the state, local, and tribal governments to empower consumers to make and access healthy choices through the establishment of healthy beverage and nutrition standards in restaurant kids' meals. More families are eating out than ever before. A national survey showed that about one-third of children and adolescents in the U.S. eat fast food on a given day.[44] While children frequently eat out at fast food restaurants and other food service establishments, those with lower income and children of color are disproportionately impacted. Restaurant meals are often high in calories, saturated fats, sugar, and sodium. Developing healthy beverages and nutrition standards will help to improve children's diets when eating outside the home. Further, these policies may serve as ground-softening tools to pass more rigorous policies to limit sugary drink consumption, such as sugary drink taxes.

Following the lead of California, Hawaii, and Delaware (statewide policies) and communities in Colorado, Missouri, Louisiana, Maryland, New York, and elsewhere (local policies), other communities and states can consider legislation or regulation to require

that all restaurants automatically provide healthy options as the default in children's menus and ensure that those policies are consistently implemented.

Policy recommendations:

1. Ensure all restaurant meals offered to children meet healthy food and beverage standards through healthy kids' meal policies.

Coordinated efforts among the private sector, civil society, and the federal government can positively impact health behaviors and outcomes population wide. The Administration and Congress can work with the food and beverage industry to improve diet quality of the food supply. Federal regulations regarding nutrition and ingredient labeling, front-of-pack labeling, and health and nutrient content claims provide opportunities for companies to communicate the nutritional quality of their products to the public.

As we mentioned above, the FDA can continue to work on its Nutrition Innovation Strategy to strengthen food package labeling, establish a comprehensive front-of-package food labeling program and icon system, and remove barriers to health claims for prepared, canned, and frozen fruit and vegetables. Another recommendation is to enforce and provide technical assistance to meet the menu labeling requirements. The FDA provided restaurants and similar retail establishments with temporary flexibility due to the COVID-19 pandemic. But as society transitions to a new normal and people are starting to eat out again, robust menu labeling enforcement needs to be a priority. Menu labeling not only provides transparency to consumers on the nutritional content of their food, but it also helps them make healthier choices while dining out.

The Administration and Congress should also consider working with the food and beverage industry to limit marketing of unhealthy foods and beverages to the most under-served populations, such as children. The food and beverage industry has combined targeted marketing and advertising efforts with sponsorships of events and organizations towards people of color aimed at establishing a positive presence within these communities. Black and Hispanic children are exposed to advertising for processed foods and beverages at a higher rate that non-Hispanic white children. Black children and teens are likely to see twice as many sugary drink ads as white children and teens.[45] The food industry has a unique role to play in shifting advertising and marketing efforts towards foods and eating behaviors that support good health, and the Association is committed to engaging with food companies to explore ways to transform the way we collectively leverage marketing and advertising to support and empower healthy communities and individuals and reduce health disparities.

Public places such as hospitals and government buildings should improve their food quality by increasing access to healthier food and beverages and making those options more affordable and appealing. Employers can help their employees live healthier by providing more nutritious food and beverages in cafeterias and vending machines by adopting food service guidelines. The Administration has the authority to implement food service guidelines at federal facilities and programs to increase healthy food

options for employees, while also supporting the community through sourcing and procurement of local and regional foods. These guidelines can also be adapted to be used in other settings, such as correctional institutions, eldercare facilities, faith-based organizations, and food pantries. The Administration and Congress can also support efforts for employers to provide confidential means for employees to learn about federal, state, and local food and nutrition assistance programs.

The charitable food system includes food banks, food pantries, and meal programs. Generally, food banks and food pantries have prioritized the distribution of any food to reduce hunger.[46] This system has led to distribution of food that is often inexpensive, calorie-dense, and nutrient poor. However, the evidence suggests that food insecure households often use the charitable food system as a primary source of food.[47] There is an opportunity within the charitable food system to support nutrition security and promote nutrition-focused food banking.[48] The Administration and Congress could provide federal support to assess and communicate the nutritional value of food as it travels from donor to client using appropriate standards and implement programs to treat chronic diseases such as medically tailored food boxes.

Policy recommendations:

1. Strengthen food package labeling.
2. Enforce menu labeling requirements.
3. Incorporate food service guidelines into all federal, state, and local public facilities and programs
4. Provide resources so employers can provide confidential means for employees to learn about federal, state, and local food and nutrition assistance programs.
5. Provide federal support to the charitable food system to assess and communicate the nutritional value of food as it travels from donor to client using appropriate standards and implement programs to treat chronic diseases such as medically tailored boxes

Pillar 4: Support physical activity for all

The Association supports increased opportunities for physical activity. Nutrition and physical activity are both critical aspects of overall individual health and well-being and addressing both is imperative for a healthier population. Robust policies are needed to ensure that everyone has access to safe places to be active, increase awareness on the benefits of physical activity, and conduct research on and measure physical activity.

Despite the many benefits of physical activity, we know that youth physical activity decreased during the COVID-19 pandemic.[49] The overall prevalence of physical inactivity among adults in our nation is alarmingly high (25.3 percent), and significant disparities exist among race/ethnic groups (e.g., non-Hispanic Asian adults, 20.1 percent; non-Hispanic White, 23.0 percent; non-Hispanic American Indian/Alaska Native, 29.1 percent; non-Hispanic Black, 30.0 percent; and Hispanic adults, 32.1 percent).[50]

A recent systematic review has shown that physical activity significantly reduces the risk of more severe clinical outcomes in those infected with severe COVID.[51] Recent studies

show that physical activity is associated with strong immune response, reduced risk from community-acquired infectious disease and mortality, and increased vaccine potency.[52-54] Physical activity also contributes to social connectedness, quality of life, and environmental sustainability.[55]

The National Physical Activity Plan (NPAP) is a comprehensive set of policies, programs, and initiatives, which provide a road map across ten societal sectors for implementing the Physical Activity Guidelines for Americans. We hope the federal government will use this resource as a foundation for legislative and regulatory policy change to promote increased physical activity across the population, with a keen focus on equity.

The recent Infrastructure Investment and Jobs Act gives us a great roadmap on how to increase physical activity and improve access to active transportation opportunities. Active transportation is one of the leading evidence-based strategies to increase physical activity regardless of age, income, racial/ethnic background, ability, or disability.[56] Initiatives require coordination across federal, state, and local agencies. The Association recommends implementing the law to its full capacity, with a particular focus on equity and funding for bike, walk, and roll infrastructure. This work also includes addressing policies rooted in systemic racism, such as red lining and eminent domain through low-income areas to build highways. In addition, the federal government can provide incentives to state and local governments to adopt land use policies that put housing, jobs, retail, institutions, and recreational opportunities close enough to each other to support walking, biking, and transit use, and encourage all levels of government to prioritize reducing pedestrian and bicyclist fatalities.

Just as active transportation is vitally important in getting people physically active, so is having access to recreational and outdoor space. Equitable access to safe outdoor places not only improves physical health, but mental health as well. Federal, state, and local governments should appropriate funding to build and adequately maintain parks and recreational spaces. In addition, the Land and Water Conservation Fund should be indexed to inflation and the federal government should use additional revenue streams beyond oil and gas revenue, and fully appropriate available funding for the program. Finally, The Administration and Congress should continue to expand and fund the Every Kid Outdoors program, and pass legislation that would provide transit to help close the gaps for children in under-resourced areas to give access to parks and recreational spaces.

The Administration and Congress should work together to codify the Physical Activity Guidelines by passing the Promoting Physical Activity for Americans Act and ensure that the Guidelines are regularly revised and released. Concurrent to bill passage, the Administration and Congress should appropriate funding for communicating and promoting the Guidelines. Finally, the Guidelines should be integrated across federal policy. This can include ensuring legislative efforts to increase physical activity align with the Guidelines and appropriating further funds to help agencies implement activities to achieve the goals of the Guidelines.

Just as with our recommendation to create a position to coordinate nutrition work across the federal government, the Administration should similarly create an interagency task force that is focused on achieving sustainable solutions for integrating physical activity and physical fitness promotion in policy areas such as national security and emergency response, education, labor, public health, transportation, environmental sustainability, research, infrastructure investment, and community and economic development.

In addition, there needs to be greater coordination for physical activity research across the federal government to develop cross-cutting strategic prioritization. This can be achieved by:

- Creating a dedicated system to identify and track federal investments in physical activity and physical fitness research;
- Dedicating funding for developing and regularly monitoring and updating a research agenda that addresses key gaps in physical activity and physical fitness research;
- Supporting ongoing research with school districts, academic partnerships, and government agencies to measure the short- and long-term impacts on student health and well-being, the use of assessment, and correlation with measures of social and emotional learning, academic achievement, attendance, graduation outcomes, and student behavior;
- Pushing for greater collaboration between the U.S. National Institute of Education and National Institutes of Health to jointly fund school health research, including physical education and physical activity studies.

Finally, the Association recommends improving physical activity surveillance to guide planning, implementation, and evaluation of government programs, funding, and practice. As part of this surveillance, the Centers for Disease Control and Prevention (CDC) should incorporate the standardized measures for physical activity and physical fitness into their surveillance and data modernization efforts.

To compliment the efforts in better coordination and research, the President should name a permanent executive director for the Office of the President's Council on Sports, Fitness and Nutrition (PCSFN) and fill appointments to the Council as soon as possible. The PCFSN and its expert science board are tasked with advocating for the critical role that physical activity and fitness have in addressing the mental health and well-being issues and chronic disease conditions across the U.S. population. In addition, the National Fitness Foundation (NFF) should be sustained with a robust board of directors to create funding for the PCSFN initiatives and build the National Endowment for Youth Sports, providing resources and participation opportunities for all kids in the U.S. Finally, the Presidential Youth Fitness Challenge should continue and be adequately funded, supported, and promoted for implementation in schools across the country.

The Association recommends allocating $125 million for fiscal year 2023 (FY23) with yearly increases for the CDC Division of Nutrition, Physical Activity and Obesity (DNPAO), which would include $10 million for Active People Healthy Nation and $15 million for the High Obesity Program initiative. Currently, DNPAO funds a limited

number of states and communities to support these effective evidence-based programs and strategies. An increase in funding at this level for DNPAO would allow CDC to fund all 50 states and D.C. and implement programs that could substantially reduce health care costs. In addition, the National Institutes of Health (NIH) should receive ongoing robust funding for physical activity and physical fitness research across the institutes.

Millions of Americans lack appropriate counseling and prescription for active living that would not only prevent or manage most of the chronic diseases and their associated risk factors, but also improve mental health and well-being. CMS should include coverage and payment determinations for lifestyle behavioral counseling and physical activity interventions that allow health and fitness professionals integrated within a health care team to develop and deliver exercise prescriptions for patients. In addition, the National Commission for Quality Assurance and the National Quality Forum should support quality and performance measures, such as the Health Care Effectiveness Data and Information Set (HEDIS) to incentivize clinicians to integrate physical activity assessment, prescription, and referral into standard of practice. The U.S. Preventive Services Task Force[57] should review the evidence for preventive services and physical activity counseling in health care delivery. Finally, clinic to community opportunities (such as active transportation initiatives) should be funded to help ensure that patients have access to the resources and infrastructure they need to be physically active.

With more than 55 million students in 130,930 K-12 schools,[58] there is tremendous opportunity to impact child and adolescent health and well-being with effective physical education and activity before, during, and after school. The Whole School, Whole Community, Whole Child Model (WSCC) and the Comprehensive School Physical Activity Programs (CSPAP) are fundamental for guiding policy development and fostering student health and well-being. Congress and the U.S. Department of Education (DoE) should support, prioritize, and fund CSPAP, and purposefully integrate the DoE, state departments of health and education, higher learning institutions, and research institutions. The Administration and Congress can also provide adequate funding for 21st Century Learning Centers, Title IV Part A, and programs that provide physical activity opportunities for students who need accommodation. In addition, a national registry of local and state policies addressing physical education and activity should be established and implemented, and the DoE should have dedicated staff for physical education and activity, health, and wellness.

Physical inactivity is more than a public health epidemic, it is also a significant threat to U.S. national security.[59] Recent Pentagon data reveals that only 29 percent of youth are eligible for military service because they do not meet the core eligibility requirements for entrance, and a mere two percent of 17- to 21-year-olds are both eligible and have the propensity to serve.[60] Physical activity is vital to increasing the health and military readiness of our nation[61] and improving the quality and length of life among veterans,[62] civilian employees of the U.S. Department of Defense (DoD) and the U.S. Department of Veterans Affairs (VA), and families of service members. The DoD and VA should prioritize and implement policies and programs to enhance physical activity on and around

military installations and VA medical centers, and in settings where access to facilities is limited.

Policy recommendations:

1. Fully implement the Infrastructure Investment and Jobs Act with a focus on equity and active transportation infrastructure.
2. Improve access to outdoor space and recreational opportunities through robust funding for these programs and closing equity gaps.
3. Codify the Physical Activity Guidelines for Americans and provide appropriations to implement and promote.
4. Create a physical activity interagency task force to ensure physical activity is integrated into all relevant policies.
5. Coordinate and invest in robust physical activity research, as well as physical activity surveillance.
6. Appoint a director and council for the PCFSN and ensure that the NFF has the resources it needs to support the PCFSN and to increase physical activity opportunities for children.
7. Fund DNPAO at $125 million for FY23 and provide the NIH robust funding for physical activity and physical fitness research.
8. Have CMS include coverage and payment determinations for physical activity counseling and prescription while working to develop quality and performance measures to incentivize providers to integrate into their practice.
9. Have USPSTF review the evidence for physical activity counseling and fund clinic to community opportunities.
10. Fully fund physical activity and education opportunities in K-12 schools, create a registry of state and local policies, and have dedicated staff at the DoE focus on physical education and activity, wellness, and health.
11. Prioritize and implement policies and programs at the DoD and VA to increase physical activity.

There are also opportunities within the state, local, and tribal governments to increase opportunities and provide support for physical activity. In addition to the federal government establishing physical activity plans, we would also encourage states and localities to establish their own state-level physical activity plans to tailor priorities for their populations, maintaining specific focus on under-resourced communities. State and local departments of transportation can help ensure that the Infrastructure Investment and Jobs Act is implemented, and fund and support efforts to adopt Safe Routes to School and Complete Streets policies, and fund walk, bike, and roll infrastructure with a focus on equity and safety as a critical part of transportation infrastructure. Like the federal government, state and local governments can also expand Every Kid Outdoors, fund transit to park and recreation opportunities for under-resourced communities, and fund clinic to community linkages.

Probably the greatest opportunities for physical activity policy at the state, local, and tribal levels are within education institutions. Like the DoE, state education agencies, state Boards of Education, and local school boards should support, fund, and prioritize

CSPAP. The role of the school physical educator should be modified to include responsibilities as the "school physical activity coordinator" which would include responsibility for implementation of CSPAP at the school level. Funded districts should appoint a coordinator who will be held accountable for ensuring that the district properly implements CSPAP, linking to social and emotional learning objectives and integrating into the districts' strategic planning. As part of a CSPAP, state and local policy should require that physical education be a cornerstone, in addition to other physical activity opportunities including daily recess, classroom breaks, active transport to and from school, and before and after school programs, with a planning committee responsible for implementing and integrating the CSPAP into their districts' strategic plans.

Other education opportunities at the state and local level should include: enacting laws to encourage and facilitate shared use agreements of school facilities and protect all parties from liability; prohibiting withholding recess as a punishment; incorporating more inclusivity and diversity in physical education programs; providing robust professional development and training for physical education teachers and training for other educators to integrate movement throughout the day; and having dedicated staff at state departments of education for physical education and activity, health, and wellness.

Policy recommendations:

1. Create state and local physical activity plans and help support tribal physical activity plans for Bureau of Indian Education funded schools.
2. Fully implement the Infrastructure Investment and Jobs Act with fidelity.
3. Fund and support active transportation policies and infrastructure.
4. Adopt, support, fund, and prioritize CSPAP, with physical education a cornerstone and priority for other physical activities opportunities.
5. Enact shared use agreements.
6. Prohibit using withholding recess as a punishment.
7. Invest in professional development and training for educators.
8. Have dedicated staff at the state department of education for physical education and activity, health, and wellness.

Coordinated efforts among the private sector, civil society, and the federal government can be effective in increasing physical activity opportunities. Private payers, like CMS, should provide coverage for physical activity counseling and prescriptions.

Also, despite the abundance of evidence on the importance of physical activity for individuals of all ages, races and abilities,[8] our current health care system lacks a set of standardized measures for physical activity that can be incorporated into electronic health record (EHR) systems and easily used by health care clinicians.[63] With this in mind, the American Medical Association and the Digital Medicine Payment Advisory Group[63] should develop and approve the most appropriate Current Procedural Terminology (CPT®) Codes[64] for physical activity assessment, prescription, and referral to assure payment for services.

Finally, nutrition and physical activity are, for the most part, missing in the formal training of physicians and other clinicians. The Association recommends including physical activity education in the curriculum for all medical and health professionals, from pre-professional to undergraduate to residency to CME/CE.

Policy recommendations:

1. Provide coverage for physical activity counseling and prescriptions under private payers.
2. Incorporate physical activity assessments into EHR systems and develop payment coding.
3. Include physical activity education for medical and health professional training and degrees.

Pillar 5: Enhance nutrition and food security research

The Association supports efforts to enhance nutrition and food security research. Food and nutrition research is needed to inform U.S. policies and programs that improve food and nutrition security and reduce disparities in diet-related chronic diseases. This research plays an essential role in advancing healthy diets and building a more sustainable food system.

USDA's recent announcement for actions on nutrition security aligns with recent calls to transition away from the current, somewhat narrow term "food security" towards the broader term "nutrition security." USDA defines nutrition security as "consistent access, availability, and affordability of foods and beverages that promote well-being, prevent disease, and, if needed, treat disease, particularly among racial/ethnic minority populations, lower income populations, and rural and remote populations including tribal communities and Insular areas." The definition should be expanded to include stability and utilization. Nutrition security requires stability of a nutritious diet across the lifespan, ensuring all people have availability, access, affordability, and utilization of nutritious food at all ages and stages of life. Additionally, food should not only be available, accessible, and affordable but people should also be able to properly utilize food. Utilization refers to all steps that occur between the time of access to food to the time when nutrients from the food are made available by the body. This includes proper food storage, preparation, and distribution within the household as well as having the ability to chew, digest, absorb, and distribute nutrients within the body. The Association has developed its own definition for nutrition security that includes these components and encourages USDA to review our recent article, Strengthening U.S. Food Policies and Programs to Promote Equity in Nutrition Security, for our rationale for expanding this definition.

The Association also recommends expanding USDA's measure of food security to include the metrics of nutrition security: availability, access, affordability, utilization, and stability of nutritious foods. Measuring metrics of nutrition security will help inform the development of food and nutrition security policies, especially for issues related to nutrition such as equity, access, and disparities. We would also like to see this data

disaggregated so we can measure the equity impact, which would in turn improve nutrition security for the most under-served populations.

As the U.S. continues to explore opportunities to improve hunger, nutrition, and health, the Administration and Congress should invest funding for nutrition research to improve nutritional quality of food, diet quality, and, ultimately, overall health. The Association supports increasing funding for the evaluation of GusNIP, particularly around equity. The Association also recommends expanding baseline funding to further test the GusNIP program design and capitalize on current and future investments into organizational capacity. In addition to the recommendations for GusNIP, the Association also makes the following research and evaluation recommendations:

- With the Association's recommendation above to expand SNAP and SNAP online purchasing, we also recommend that funding be set aside to determine the effectiveness of the SNAP online program and its impact on SNAP recipients.
- Fund pilot projects that focus on nutrition security and diet quality. The Association supports the creation of an enhanced pilot program within SNAP that assesses the outcome of fruit and vegetable incentive purchasing combined with disincentivizing sugary drinks to evaluate the effects on consumer purchasing, healthy food and beverage consumption, short-term health outcomes, and retailer implementation.
- Increase funding for research on sustainability, specifically looking at the intersection of food production, climate change, and nutrition, as well as the implications for equity. Current U.S. dietary patterns contribute to the more than 40 percent of adults living with obesity.[4] There are concerns that current dietary patterns, which are characterized by high consumption of red meat, processed foods, added sugars, and unhealthy fats, and food systems have a large environmental impact contributing to increased levels of greenhouse gas emissions and water and land usage.[65, 66] Conversely, the food system has considerable opportunity to attenuate or even address impacts on climate change through efforts such as shifting agricultural practices and food loss and waste management. While the U.S. is starting to acknowledge the need to address sustainability within food systems, these principles have yet to be incorporated in the U.S. food policies and programs.
- Fund research on water cleanliness, access, and affordability. In the U.S., more than half (54.5 percent) of all children and adolescents and a third (32.6 percent) of all adults do not drink enough water.[67, 68] Not drinking enough water is especially concerning among people of color. Black children are 1.34 times and Hispanic children are 1.23 times less likely to drink enough water per day than white children,[67] which can impact overall health. When water is not readily available – or is unsafe, or even perceived to be unsafe – people are more likely to consume sugary beverages, such as fruit-flavored drinks with added sugars, energy drinks, and soda, which are linked to chronic diseases such as CVD and type 2 diabetes. An estimated 50,000 people living in the U.S. die each year from CVD and type 2 diabetes caused by a high intake of sugar sweetened beverages.[69] People of color are more susceptible to a higher intake of sugary drinks and higher rates of chronic diseases in part because of discriminatory

practices embedded in structural policies and programs that prevent them from accessing safe, affordable water. Increased funding for research on water cleanliness, access, and affordability can inform policies and programs to reduce disparities in access and affordability of water to the most under-resourced populations.

Policy recommendations:

1. Expand USDA definition of nutrition security to include equity, stability, and utilization.
2. Develop metrics around nutrition security to allow researchers and practitioners to adequately assess barriers to having consistent access to foods that promote well-being.
3. Increase funding for the evaluation of GusNIP, particularly around equity, and expand baseline funding to further test the GusNIP program design and capitalize on current and future investments into organizational capacity.
4. Increase funding for evaluation of SNAP and SNAP online purchasing.
5. Increase funding for pilot projects that focus on nutrition security and diet quality, including an incentive/disincentive pilot to increase fruit and vegetable consumption and decrease sugary beverage consumption.
6. Increase funding for research on sustainability, specifically looking at the intersection of food production, climate change, and nutrition as well as the implications for equity.
7. Increase funding for research on water cleanliness (beyond current EPA monitoring), access, and affordability.

Opportunities and barriers to achieving recommended actions

There are several avenues in which Congress could advance the many policy recommendations we have outlined above and that will be put forward at the White House Conference on Hunger, Nutrition, and Health. The Association supports efforts to enact the many recommendations put forth in the following legislative mechanisms:

- **Child Nutrition Reauthorization**
- **Farm Bill**
- **Agriculture Appropriations**
- **Budget Reconciliation**

In addition, states and localities should take advantage of all federal funding and initiatives, as well as an authority they have, to increase access to and improve diet quality in nutrition and feeding programs.

While there are many avenues to fund the proposed policy recommendations, we must acknowledge that some barriers exist that may impede the implementation of these recommendations.

- **Political will**: There must be political will to support implementation of the proposed policy recommendations. Lack of political will can lead to limited

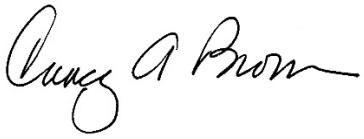
resources, management and oversight, and accountability, which would greatly hinder effectiveness of the policies. Congress must have the will to act and to support actions addressing nutrition security and physical activity. Programs need to be consistent from administration to administration. All policies should follow the evidence and science, with the understanding that change may be gradual to meet people where they are. There are several factors that may impact political willingness to act including effective partnerships, public opinion, and industry opposition (discussed below). Congress and the Administration will need support from civil society and other sectors such as nonprofits, academia, etc., to implement and sustain policy actions. If these partnerships are not established, there may be less political will to implement these policy recommendations. Additionally, there may be concerns that the policy recommendations do not align with public priorities or sentiments which may impact the willingness to prioritize these policy recommendations.

- **Pushback from industry**: Certain food industry stakeholders have leveraged financial resources, political lobbying, and marketing campaigns to create major barriers to the development and implementation of effective nutrition policies and programs, especially around sugary beverage taxes. Engaging industry partners will be critical for success.
- **Available funding**: As there are many competing priorities for Congress and the Administration, policymakers must commit to dedicating meaningful funding to implement and evaluate the proposed policy recommendations. Depending on the current political priorities, funding for nutrition policies may not be readily available. Insufficient funding will reduce the effectiveness of these policy recommendations by limiting their reach, leading to more negative health consequences, and ultimately costing the government more money in Medicare and Medicaid expenditures, and to the private sector in health care costs and lost productivity.

Conclusion

The American Heart Association would like to thank you again for the opportunity to provide feedback on the upcoming White House Conference on Hunger, Nutrition, and Health. Should you have any questions or need more information, please contact Kristy Anderson, Senior Government Relations Advisor at kristy.anderson@heart.org.

Sincerely,



Nancy Brown
Chief Executive Officer

Annex. Table of Policy Recommendations

Policy Recommendations
Pillar 1: Improve food access and affordability
Federal Government Actions:
1. Improve diet quality of federal nutrition assistance programs by aligning with the nutrition standards outlined in the Dietary Guidelines for Americans.
2. Strengthen nutrition standards for school meal programs and Smart Snacks; provide greater reimbursement for meals and robust technical assistance; and increase access through healthy school meals for all or CEP expansion.
3. Improve summer feeding by strengthening the nutrition standards for the SFSP; increase reimbursement for SSO; and expand Summer EBT.
4. Expand FFVP to all CEP-eligible schools and keep the program fresh-only.
5. Improve WIC access through expanding eligibility through six years old and two years postpartum; improve access to healthy foods by making CVV permanent and update the WIC food package; ease bureaucracy and eliminate barriers to applying; and improve online availability.
6. Increase the reimbursement value for CACFP and reduce administrative burden.
7. Improve nutritional value of USDA foods and commodities.
8. Modernize SNAP to increase the benefit amount; expand SNAP online; eliminate draconian prohibitions on eligibility; and improve SNAP-Ed.
9. Make GusNIP more equitable by either eliminating the match requirement or decreasing it and allowing applicants to use other sources of federal funding for their match.
10. Improve assessment and communication on the nutrient value of foods in TEFAP and CSFP and include more culturally appropriate foods; expand access to CSFP, Meals on Wheels, and SFMNP.
State, Local and Tribal Government Actions:
11. Codify nutrition standards for school meals and expand healthy school meals for all.
12. Expand FFVP to more schools and age groups.
13. Improve FDPIR to provide more self-governance; include more Native food producers and traditional foods; and allow Native households to use both FDPIR and SNAP in the same month.
Private Sector and Civil Society Actions:
14. Work with industry to improve diet quality and prioritize equity and health in marketing practices.
15. Work to better coordinate all levels of government, NGOs, and the private sector to coordinate resources to make accessing food and nutrition assistance programs easier.
Pillar 2: Integrate nutrition and health
Federal Government Actions:

1. Increase funding for research on the use of safety net and health care systems-based food and nutrition programs in preventing and treating chronic diseases and on the impact of these programs on health outcomes, use, and costs.
2. Provide CMS funding to improve nutrition through specific interventions to prevent or treat chronic diseases.
3. Expand the reach of food and nutrition programs such as medically tailored meals and produce prescription programs by adding them to the definition of "medical and other health services" in the Medicare statute for Medicare Part B.
4. Change billing methods to allow for nutrition visits.
5. Expand eligibility for dieticians and nutritionists for reimbursement.
6. Improve coverage for nutrition for primary prevention of chronic diseases.
7. Appoint a nutrition policy and program coordinator to harmonize work across agencies.
State, Local and Tribal Government Actions:
8. Provide CMS funding to improve nutrition through specific interventions to prevent or treat chronic diseases.
9. Expand the reach of food and nutrition programs by integrating funding into standard Medicaid services rather than requiring a waiver.
Private Sector and Civil Society Actions:
10. Incorporate nutrition education into the curriculum for health care professionals.
11. Develop a validated screening tool for use in the health care setting to identify food and nutrition security.
12. Create bidirectional referral systems among health care entities, CBOs, and food providers that serve as pathways for patients to access health care, nutritious food, and other social needs.
Pillar 3: Empower all consumers to make and have access to healthy choices
Federal Government Actions:
1. Increase funding to improve the reach of SNAP-Ed and expand opportunities for communities to implement culturally appropriate policies, systems, and environmental approaches to support healthier shopping and cooking.
2. Expand EFNEP to increase the reach of nutrition education to more adults and children and provide longer-term programs to improve stability of nutrition behavior over time.
3. Incorporate mandatory food and nutrition education at all education levels from K-12 in public schools.
4. Pilot healthy food marketing in retail environments.
5. Develop a directed, standardized, comprehensive front-of-package labeling program and icon system with unified criteria based on science and consumer research.
6. Release longer-term sodium reduction targets.
State, Local and Tribal Government Actions:

7. Ensure all restaurant meals offered to children meet healthy food and beverage nutrition standards through healthy kids' meal policies.
Private Sector and Civil Society Actions:
8. Strengthen food package labeling.
9. Enforce menu labeling requirements.
10. Incorporate food service guidelines in all federal, state, and local public facilities and programs.
11. Provide resources so employers can provide confidential means for employees to learn about federal, state, and local food and nutrition assistance programs.
12. Provide federal support to the charitable food system to assess and communicate the nutritional value of food as it travels from donor to client using appropriate standards and implement programs to treat chronic diseases such as medically tailored food boxes.
Pillar 4: Support physical activity for all
Federal Government Actions:
1. Fully implement the Infrastructure Investment and Jobs Act with a focus on equity and active transportation infrastructure.
2. Improve access to outdoor space and recreational opportunities through robust funding for these programs and closing equity gaps.
3. Codify the Physical Activity Guidelines for Americans and provide appropriations to implement and promote.
4. Create a physical activity interagency task force to ensure physical activity is integrated into all relevant policies.
5. Coordinate and invest in robust physical activity research, as well as physical activity surveillance.
6. Appoint a director and council for the PCFSN and ensure that the NFF has the resources it needs to support the PCFSN and to increase physical activity opportunities for children.
7. Fund DNPAO at $125 million for FY23 and provide the NIH robust funding for physical activity and physical fitness research.
8. Have CMS include coverage and payment determinations for physical activity counseling and prescription while working to develop quality and performance measures to incentivize providers to integrate into their practice.
9. Have USPSTF review the evidence for physical activity counseling and fund clinic to community opportunities.
10. Fully fund physical activity and education opportunities in K-12 schools, create a registry of state and local policies, and have dedicated staff at the DoE focus on physical education and activity, wellness, and health.
11. Prioritize and implement policies and programs at the DoD and VA to increase physical activity.
State, Local and Tribal Government Actions:
1. Create state and local physical activity plans and help support tribal physical activity plans for Bureau of Indian Education funded schools.
2. Fully implement the Infrastructure Investment and Jobs Act with fidelity.

3. Fund and support active transportation policies and infrastructure.
4. Adopt, support, fund, and prioritize CSPAP, with physical education a cornerstone and priority for other physical activities opportunities.
5. Enact shared use agreements.
6. Prohibit using withholding recess as a punishment.
7. Invest in professional development and training for educators.
8. Have dedicated staff at the state department of education for physical education and activity, health, and wellness.
Private Sector and Civil Society Actions:
1. Provide coverage for physical activity counseling and prescriptions under private payers.
2. Incorporate physical activity assessments into EHR systems and develop payment coding.
3. Include physical activity education for medical and health professional training and degrees.
Pillar 5: Enhance nutrition and food security research
1. Expand USDA definition of nutrition security to include equity, stability, and utilization.
2. Develop metrics around nutrition security to allow researchers and practitioners to adequately assess barriers to having consistent access to foods that promote well-being.
3. Increase funding for the evaluation of GusNIP, particularly around equity, and expand baseline funding to further test the GusNIP program design and capitalize on current and future investments into organizational capacity.
4. Increase funding for evaluation of SNAP and SNAP online purchasing.
5. Increase funding for pilot projects that focus on nutrition security and diet quality, including an incentive/disincentive pilot to increase fruit and vegetable consumption and decrease sugary beverage consumption.
6. Increase funding for research on sustainability, specifically looking at the intersection of food production, climate change, and nutrition as well as the implications for equity.
7. Increase funding for research on water cleanliness (beyond current EPA monitoring), access, and affordability.

References

1. Jayedi A, Soltani S, Abdolshahi A and Shab-Bidar S. Healthy and unhealthy dietary patterns and the risk of chronic disease: an umbrella review of meta-analyses of prospective cohort studies. *Br J Nutr*. 2020;124:1133-1144.
2. Murphy SL, Kochanek KD, Xu J and Arias E. Mortality in the United States, 2020. *NCHS Data Briefs*. 2021.
3. Tsao CW, Aday AW, Almarzooq ZI, Alonso A, Beaton AZ, Bittencourt MS, Boehme AK, Buxton AE, Carson AP, Commodore-Mensah Y, Elkind MSV, Evenson KR, Eze-Nliam C, Ferguson JF, Generoso G, Ho JE, Kalani R, Khan SS, Kissela BM, Knutson KL, Levine DA, Lewis TT, Liu J, Loop MS, Ma J, Mussolino ME, Navaneethan SD, Perak AM, Poudel R, Rezk-Hanna M, Roth GA, Schroeder EB, Shah SH, Thacker EL, VanWagner LB, Virani SS, Voecks JH, Wang N-Y, Yaffe K and Martin SS. Heart Disease and Stroke Statistics—2022 Update: A Report From the American Heart Association. *Circulation*. 2022;145:e153-e639.
4. Virani SS, Alonso A, Aparicio HJ, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Cheng S, Delling FN, Elkind MSV, Evenson KR, Ferguson JF, Gupta DK, Khan SS, Kissela BM, Knutson KL, Lee CD, Lewis TT, Liu J, Loop MS, Lutsey PL, Ma J, Mackey J, Martin SS, Matchar DB, Mussolino ME, Navaneethan SD, Perak AM, Roth GA, Samad Z, Satou GM, Schroeder EB, Shah SH, Shay CM, Stokes A, VanWagner LB, Wang NY and Tsao CW. Heart Disease and Stroke Statistics-2021 Update: A Report From the American Heart Association. *Circulation*. 2021;143:e254-e743.
5. Coleman-Jensen A, Rabbit MP, Gregory CA and Singh A. Household Food Security in the United States in 2019. 2020;Economic Research Report No. (ERR-275).
6. Coleman-Jensen A, Rabbitt MP, Gregory CA and Singh A. Household Food Security in the United States in 2020. *Economic Research Report No (ERR-298) 55 pp*. 2021.
7. Thorndike AN, Gardner CD, Kendrick KB, Seligman HK, Yaroch AL, Gomes AV, Ivy KN, Scarmo S, Cotwright CJ and Schwartz MB. Strengthening US Food Policies and Programs to Promote Equity in Nutrition Security: A Policy Statement From the American Heart Association. *Circulation*. 2022;145.
8. US Department of Health and Human Services. Physical Activity Guidelines for Americans. 2018.
9. Wen CP and Wu X. Stressing harms of physical inactivity to promote exercise. *Lancet*. 2012;380:192-193.
10. Saint-Maurice PF, Graubard BI, Troiano RP, Berrigan D, Galuska DA, Fulton JE and Matthews CE. Estimated Number of Deaths Prevented Through Increased Physical Activity Among US Adults. *JAMA Intern Med*. 2022;182:349-352.
11. American Institute for Cancer and World Cancer Research Fund. Continuous Update Project: Physical Activity. 2020;2022.
12. HHS FY2016 Budget in Brief. 2016.
13. U.S. Department of Defense and Joint Advertising Market Research and Studies. The target population for military recruitment: youth eligible to enlist without a waiver 2016.
14. Liu J, Micha R, Li Y and Mozaffarian D. Trends in Food Sources and Diet Quality Among US Children and Adults, 2003-2018. *JAMA Netw Open*. 2021;4:e215262.
15. Lange SJ, Kompaniyets L, Freedman DS, Kraus EM, Porter R, Blanck HM and Goodman AB. Longitudinal Trends in Body Mass Index Before and During the COVID-19 Pandemic Among Persons Aged 2–19 Years — United States, 2018–2020. *MMWR Morb Mortal Wkly Rep*. 2021;70:1278-1283.
16. Cohen JFW, Hecht AA, McLoughlin GM, Turner L and Schwartz MB. Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review. *Nutrients*. 2021;13:911.
17. Bartlett S, Olsho L, Klerman J, Patlan KL, Blocklin M, Connor P, Webb K, Ritchie L, Wakimoto P and Crawford P. Evaluation of the Fresh Fruit and Vegetable Program (FFVP): Final Evaluation Report. 2013.

18. Andreyeva T, Tripp AS and Schwartz MB. Dietary Quality of Americans by Supplemental Nutrition Assistance Program Participation Status: A Systematic Review. *American journal of preventive medicine*. 2015;49:594-604.
19. Zhang FF, Liu J, Rehm CD, Wilde P and Mande JR. Trends and Disparities in Diet Quality Among US Adults by Supplemental Nutrition Assistance Program Participation Status. *JAMA Netw Open*. 2018;1:e180237.
20. Whiteman ED, Chrisinger BW and Hillier A. Diet Quality Over the Monthly Supplemental Nutrition Assistance Program Cycle. *Am J Prev Med*. 2018;55:205-212.
21. Lloyd-Jones DM, Hong Y, Labarthe D, Mozaffarian D, Appel LJ, Van Horn L, Greenlund K, Daniels S, Nichol G, Tomaselli GF, Arnett DK, Fonarow GC, Ho PM, Lauer MS, Masoudi FA, Robertson RM, Roger V, Schwamm LH, Sorlie P, Yancy CW and Rosamond WD. Defining and setting national goals for cardiovascular health promotion and disease reduction: the American Heart Association's strategic Impact Goal through 2020 and beyond. *Circulation*. 2010;121:586-613.
22. Liese AD, Krebs-Smith SM, Subar AF, George SM, Harmon BE, Neuhouser ML, Boushey CJ, Schap TE and Reedy J. The Dietary Patterns Methods Project: Synthesis of Findings across Cohorts and Relevance to Dietary Guidance. *Journal of Nutrition*. 2015;145:393-402.
23. Gillman MW, Rifas-Shiman SL, Fernandez-Barres S, Kleinman K, Taveras EM and Oken E. Beverage Intake During Pregnancy and Childhood Adiposity. *Pediatrics*. 2017;140:e20170031.
24. Bryce R, Guajardo C, Ilarraza D, Milgrom N, Pike D, Savoie K, Valbuena F and Miller-Matero LR. Participation in a farmers' market fruit and vegetable prescription program at a federally qualified health center improves hemoglobin A1C in low income uncontrolled diabetics. *Prev Med Rep*. 2017;7.
25. Cavanagh M, Jurkowski J, Bozlak C, Hastings J and Klein A. Veggie Rx: an outcome evaluation of a healthy food incentive programme. *Public Health Nutr*. 2017;20:2636-2641.
26. Ishaq O, Vega RM, Zullig L, Wassung A, Walters D, Du NBL, Ahn J, Leichman CG, Cohen DJ, Gu P, Chachoua A, Leichman LP, Pearl K and Schiff PB. Food as medicine: A randomized controlled trial (RCT) of home delivered, medically tailored meals (HDMTM) on quality of life (QoL) in metastatic lung and non-colorectal GI cancer patients. *Journal of Clinical Oncology*. 2016;34.
27. Ridberg RA, Bell JF, Merritt KE, Harris DM, Young HM and Tancredi DJ. A Pediatric Fruit and Vegetable Prescription Program Increases Food Security in Low-Income Households. *J Nutr Educ Behav*. 2019;51:224-230.e1.
28. Berkowitz SA, Delahanty LM, Terranova J, Steiner B, Ruazol MP, Singh R, Shahid NN and Wexler DJ. Medically Tailored Meal Delivery for Diabetes Patients with Food Insecurity: a Randomized Cross-over Trial. *J Gen Intern Med*. 2019;34:396-404.
29. Lee Y, Mozaffarian D, Sy S, Huang Y, Liu J, Wilde PE, Abrahams-Gessel S, Jardim TdSV, Gaziano TA and Micha R. Cost-effectiveness of financial incentives for improving diet and health through Medicare and Medicaid: A microsimulation study. *PLoS Med*. 2019;16:e1002761.
30. Berkowitz SA, Terranova J, Randall L, Cranston K, Waters DB and Hsu J. Association Between Receipt of a Medically Tailored Meal Program and Health Care Use. *JAMA Intern Med*. 2019;179:786-793.
31. Berkowitz SA, Terranova J, Hill C, Ajayi T, Linsky T, Tishler LW and DeWalt DA. Meal Delivery Programs Reduce The Use Of Costly Health Care In Dually Eligible Medicare And Medicaid Beneficiaries. *Health Aff (Millwood)*. 2018;37:535-542.
32. Gottlieb L, Fichtenberg C, Alderwick H and Adler N. Social Determinants of Health: What's a Healthcare System to Do? *J Healthc Manag*. 2019;64:243-257.
33. Harolds JA. Quality and Safety in Health Care, Part VI: More on Crossing the Quality Chasm. *Clin Nucl Med*. 2016;41:41-43.
34. Aspry KE, Van Horn L, Carson JAS, Wylie-Rosett J, Kushner RF, Lichtenstein AH, Devries S, Freeman AM, Crawford A and Kris-Etherton P. Medical Nutrition Education, Training, and Competencies to Advance

Guideline-Based Diet Counseling by Physicians: A Science Advisory From the American Heart Association. *Circulation*. 2018;137:e821-e841.
35. Caspi CE, Sorensen G, Subramanian SV and Kawachi I. The local food environment and diet: a systematic review. *Health Place* 2012;18:1172-1187.
36. Lichtenstein AH, Appel LJ, Vadiveloo M, Hu FB, Kris-Etherton PM, Rebholz CM, Sacks FM, Thorndike AN, Horn LV and Wylie-Rosett J. 2021 Dietary Guidance to Improve Cardiovascular Health: A Scientific Statement From the American Heart Association. *Circulation*. 2021;144:e1-e17.
37. SNAP-ED Toolkit. Healthy for Life Community Nutrition Program (HFL). *SNAP-ED Toolkit*. 2016;2022.
38. Sadeghirad B, Duhaney T, Motaghipisheh S, Campbell NRC and Johnston BC. Influence of unhealthy food and beverage marketing on children's dietary intake and preference: a systematic review and meta-analysis of randomized trials. *Obes Rev*. 2016;17:945-959.
39. Smith R, Kelly B, Yeatman H and Boyland E. Food Marketing Influences Children's Attitudes, Preferences and Consumption: A Systematic Critical Review. *Nutrients*. 2019;11:875.
40. Farley TA, Rice J, Bodor JN, Cohen DA, Bluthenthal RN and Rose D. Measuring the food environment: shelf space of fruits, vegetables, and snack foods in stores. *Journal of Urban Health*. 2009;86:672-82.
41. Thornton LE, Cameron AJ, McNaughton SA, Waterlander WE, Sodergren M, Svastisalee C, Blanchard L, Liese AD, Battersby S, Carter M-A, Sheeshka J, Kirkpatrick SI, Sherma S, Cowburn G, Foster C and Crawford DA. Does the availability of snack foods in supermarkets vary internationally? *The International Journal of Behavioral Nutrition and Physical Activity*. 2013;10.
42. International Food Information Council Foundation and American Heart Association. Food Labeling Survey. 2019.
43. Lusk JL. Consumer beliefs about healthy foods and diets. *PLoS One*. 2019;14:e0223098.
44. Vikraman S, Fryar CD and Ogden CL. Caloric Intake From Fast Food Among Children and Adolescents in the United States, 2011-2012. *NCHS Data Brief*. 2015.
45. Harris J, Fleming-Milici F, Kibwana-Jaff A and Phaneuf L. Sugary drink advertising to youth: Continued barrier to public health progress. *Sugary Drink FACTS 2020*. 2020.
46. Martin KS. *Reinventing Food Banks and Pantries: New Tools to End Hunger*. Washington, DC: Island Press; 2021.
47. Cooksey-Stowers K, Martin KS and Schwartz M. Client Preferences for Nutrition Interventions in Food Pantries. *Journal of Hunger & Environmental Nutrition*. 2019;14:18-34.
48. Campbell E, Webb K, Ross M, Hudson H and Hecht K. Nutrition-Focused Food Banking. 2015.
49. Grimes A, Lightner JS, Eighmy K, Steel C, Shook RP and Carlson J. Decreased Physical Activity Among Youth Resulting From COVID-19 Pandemic–Related School Closures: Natural Experimental Study. *JMIR Formative Research*. 2022;6:e35854.
50. Centers for Disease Control and Prevention. Adult physical inactivity prevalence maps by race/ethnicity 2022.
51. Hill AL, Whitfield G, Morford M, Okasako-Schmucker DL, So CN, Wassef M, Henry MC, Robinson TM, Kumasaka JK, Stone EC, Taliano J, Siegel DA, Koumans E and Sircar KD. Brief Summary of Findings on the Association Between Physical Inactivity and Severe COVID-19 Outcomes. 2022.
52. Nieman DC and Wentz LM. The compelling link between physical activity and the body's defense system. *J Sport Health Sci*. 2019;8:201-217.
53. Hamer M, Kivimäki M, Gale CR and Batty GD. Lifestyle risk factors, inflammatory mechanisms, and COVID-19 hospitalization: A community-based cohort study of 387,109 adults in UK. *Brain Behav Immun*. 2020;87:184-187.
54. Dixit S. Can moderate intensity aerobic exercise be an effective and valuable therapy in preventing and controlling the pandemic of COVID-19? *Med Hypotheses*. 2020;143:109854.

55. Global Advocacy Council for Physical Activity International Society for Physical Activity and Health. The Toronto Charter for Physical Activity: A Global Call for Action. *J Phys Act Health*. 2010:S370-S385.
56. Young DR, Cradock AL, Eyler AA, Fenton M, Pedroso M, Sallis JF and Whitsel LP. Creating Built Environments That Expand Active Transportation and Active Living Across the United States. *Circulation*. 2020;142:e167-e183.
57. U.S. Preventive Services Task Force. 2022.
58. Riser-Kositsky M. Education Statistics: Facts About American Schools. *Educaton Weekly*. 2019.
59. Bornstein DB, Grieve GL, Clennin MN, McLain AC, Whitsel LP, Beets MW, Hauret KG, Jones BH and Sarzynski MA. Which US States Pose the Greatest Threats to Military Readiness and Public Health? Public Health Policy Implications for a Cross-sectional Investigation of Cardiorespiratory Fitness, Body Mass Index, and Injuries Among US Army Recruits. *Journal of Public Health Management and Practice* 2019;25:36-44.
60. Garamone J. DOD Official Cites Widening Military-Civilian Gap. 2019.
61. Knapik JJ, Sharp MA and Steelman RA. Secular Trends in the Physical Fitness of United States Army Recruits on Entry to Service, 1975-2013. *J Strength Cond Res*. 2017;31:2030-2052.
62. Malecki HL, Gollie JM and Scholten J. Physical Activity, Exercise, Whole Health, and Integrative Health Coaching. *Phys Med Rehabil Clin N Am*. 2020;31:649-663.
63. American Medical Association. Digital Medicine Payment Advisory Group. 2022.
64. American Medical Association. CPT Codes. 2022.
65. United States Environmental Protections Agency. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. 2021.
66. IPCC. Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. 2014.
67. Kenney EL, Long MW, Cradock AL and Gortmaker SL. Prevalence of Inadequate Hydration Among US Children and Disparities by Gender and Race/Ethnicity: National Health and Nutrition Examination Survey, 2009-2012. *Am J Public Health*. 2015;105:113-118.
68. Chang T, Ravi N, Plegue MA, Sonneville KR and Davis MM. Inadequate Hydration, BMI, and Obesity Among US Adults: NHANES 2009–2012. *Ann Fam Med*. 2016;14:320-324.
69. Micha R, Peñalvo JL, Cudhea F, Imamura F, Rehm CD and Mozaffarian D. Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *Jama*. 2017;317:912-924.