



2018 HARKIN ON WELLNESS REPORT

 The Harkin Institute

 Drake
UNIVERSITY

FOREWORD

Healthy people require an active and engaged community that is willing, and able, to provide effective programming that can address health problems and inequities within their community. We are fortunate to live in a country with active, engaged community health coalitions and innovative ideas; however, often times the most innovative and adoptable wellness and nutrition initiatives are not shared with other communities and community leaders.

It is the goal of this report, the first annual Harkin on Wellness report, to highlight wtop wellness and nutrition initiatives throughout the United States. We encourage others to use this as a tool to build partnerships and create sustainable, cross-sector coalitions within their own community and beyond.

Tom Harkin

Senator Tom Harkin (Retired)



Introduction

Healthy people require an active and engaged community that is willing, and able, to provide effective programming that can address health problems and inequities within their community. We are fortunate to live in a country with active, engaged community health coalitions and innovative ideas; however, often times the most innovative and adoptable wellness and nutrition initiatives are not shared with other communities and community leaders.

We recognize that health is a complex issue and hard to address across all communities and populations. That is why the creation and in turn, appropriate translation of actionable, cross-sectional wellness programming is important to share. We encourage others to use this as a tool to build partnerships and create sustainable, cross-sector coalitions within their own community and beyond.

Research shows that not only does a successful program have to be cost effective but it has to include participatory engagement. In other words, it needs to be community driven. Successful buy-in from an organization or community is inspired by meaningful engagement, engaged stakeholders, and an innovation idea or concept.

As shown in numerous health needs assessment reports over the last decade, our communities and society as a whole are struggling with ongoing health problems, access to healthy food, adequate physical activity, and the struggles and stress of daily living. Both the individual and larger public health concerns

are a burden on us as a population. Improving community conditions for health such as access to healthy food, clean and safe neighborhoods, and opportunities for physical activity can positively influence individual health behaviors and in turn, lead to an economically prosperous workforce and community.

When we invest our time, money, energy, and talent into health programming, we show how much we value health and preventive care in our workplace and communities. Knowing the value of wellness programs, it is our mission to share a selection of best practices for community wellness initiatives and programs throughout the United States so that other communities and organizations can use them to invest in health.

We also know that innovation is the key to continued program development and improvement. With innovation comes a better understanding of what works and for whom and the ability to identify the areas that are not working as expected. This information is essential to program dissemination, replication, and wide-scale use as a public health program. The Harkin On Wellness programs illustrate what it means to create an innovative project. From a youth farm in Oakland California to a mobile food truck in Wisconsin, all the way to an east coast multi-state project that leverages local Health Councils to drive impactful, sustainable change. This report shows that motivated individuals, communities, and organizations can influence health and wellness in a novel, meaningful way.

How we selected the Harkin On Wellness programs and initiatives:

In the Fall of 2017, The Harkin Institute began the search for top wellness and nutrition initiatives from across the United States. The call for submissions was distributed nation-wide through professional organizations, public agencies, and publishing resources. A total of 61 submissions were reviewed

internally at The Harkin Institute to narrow down the applicant field. The review process included an analysis of each program that helped identify a series of elements necessary to enhance the quality, acceptability, and impact of health programming.

Submissions were rated on relevancy, adaptability, acceptance, implementation, reach, and cost. For this report, we took special care to consider the following questions when selecting the top initiatives:

1. *Is this a relevant wellness or nutrition program for community health?*
2. *Can it be easily adopted by the community?*
3. *Will members of any community accept the program?*
4. *How well will the program be utilized and/or implemented?*
5. *Can it reach a wide population of people within the community?*
6. *And, what is the cost to the community? (fiscal, time, leadership, infrastructure)*

Following the internal review, an external group of reviewers (box x), including experts in the field of health care and community programming, was asked to select the top programs based on the same criteria used for the internal review. Based on the responses from the external committee, a total of 11 programs were selected as the best examples of wellness programs and initiatives in the United States.

Angela Franklin, PhD, President, Des Moines University

Bill Dietz, MD, Director, Sumner M. Redstone Global Center for Prevention & Wellness, Milken Institute School of Public Health, The George Washington University

Jenelle Krishnamoorthy, PhD, Associate Vice President, U.S. Policy, Communications and Population Health, Merck

Justin Platt, PLA, ASLA, LEED AP, RDG Planning & Design; Chair, Urban Land Institute Iowa

Richard Deming, MD, Medical Director, Mercy Cancer Center; Above & Beyond Cancer Founder & Chairman

*Suzanne Mineck, President, Mid Iowa Health Foundation
Angela Franklin, PhD, President, Des Moines University*

Health System Partnerships & Programs

Many hospitals and clinics are moving away from solely treating the sick and moving towards a model that fosters cross-sectional care, emphasizing the use of community health partnerships to improve public health. This move was supported in the Affordable Care Act with the inclusion of a mandate for nonprofit hospitals to conduct community health needs assessments every three years. This mandate was included to help identify and address areas of public health concerns in our communities. Not only can this lead to improved health for our community members, it is also a win for our nation's health care budget. In 2016, 3.3 trillion dollars was spent on national health care expenditures yet reports suggest that 60% of death is preventable by modifying behavior and environmental factors in the community.^{1,2}

Building health care systems and community relationships is one specific way to address the variety of factors that impact our health. Although the care we receive in our hospitals and clinic is critical to our health, where we live, our education, jobs, income, access to housing and transportation, and safety of our communities all contribute to our overall health and well-being. Combining public health and private-sector care is critical to improving overall health, reducing costs, and supporting sustainable change.³ With our ever-expanding diverse population, it is critical that we address health from a more holistic framework, one that addresses both societal and individual level factors and policies.

The **Baylor Scott & White Health Thrive** program provides a holistic framework of health management to their workplace. The program provides every employee and their families with the tools and resources to target individual health needs, all with the mission to improve the health of the larger organization. The goal of Thrive is to set the standard for health and wellness in the Dallas Fort Worth and Central Texas area.

To achieve that goal, it offers every employee (and their families) access to an online portal with comprehensive, robust resources. Among other tools and features, the site provides personalized resources that allow participants to choose their wellness mission from a number of focus areas including: weight loss, increased exercise, better nutrition, improved work-life balance, tobacco cessation, or a combination of several areas.

Since 2007, Thrive has successfully implemented a variety of health initiatives and programming within their health care system and to local employers in Dallas Fort Worth and Central Texas. Programs range from wellness and health education classes, including healthy cooking classes, to ongoing wellness challenges and in recent years, use of virtual wellness coaching. Big picture, Thrive aims to improve the health environment of their organization and communities. The initiatives start in their own cafeteria including a progression of making healthier options the easier choice. Thrive changed the way they prepare, serve, and advertise the food offered in their cafeteria. In 2010 all trans-fat was banned from the public and patient menus; in 2012 high sugar drinks and snacks

were removed from the cafeteria and now 90% of all food offered is considered healthy; and in 2014, all fryers were removed from the cafeterias. Lastly, Baylor Scott & White Health altered their human resources practices to reflect their commitment to health. As of 2012, Baylor Scott & White Health no longer hires employees who use tobacco or nicotine.

Baylor Scott & White Health Thrive is a great example of how our health systems are making the change from viewing health care as a means to “treat” disease, but instead using their expertise, knowledge, and resources to address health and

wellness before treatment is necessary. Unlike the traditional use of health care delivery systems (e.g., hospitals, clinics, and in-patient settings), health and wellness organizations, like Baylor Scott & White Health, are changing the way they work and how they partner to build sustainable and effective public health systems. In the last decade, there has been an ever-increasing focus on how to create social and physical environments that promote good health for all, specifically how we target the social determinants of health.⁴

Just six years after Thrive began, the program saw the following results:

A total population weight loss of 52,831 lbs.

90% of participants participated in the online health assessment and screening.

90% of participants completed a wellness challenge.

In total, the high- and medium-risk employee pools were reduced by 10%, with a 10% increase in the low-risk pool

total population
weight loss of

52,831 lbs



The Dallas County Public Health Nursing Services, **Health Navigation Program** focuses on improving health outcomes by addressing the fact that health is integral to our environment, in our homes, schools, workplaces, neighborhoods, and communities. The Health Navigation program helps to address these factors, leading to increased health and wellness opportunities for residents. Specifically, the Health Navigation program helps advance wellness in Iowa's Dallas County by addressing root causes of poor health outcomes. To get to the heart of the issue, the Health Navigators help connect clients to available community resources that address a variety of social factors affecting overall health. By limiting barriers to health care and increasing access to critical resources with a focus on transportation, food, housing, employment, mental health, and other community resources, Dallas County is able to better address their citizen's health needs.

Since 2010, this service has been offered free of charge to all Dallas County Residents regardless of age or income and serves as an extension of medical care received in a hospital or clinic. The program works by receiving referrals, either from the clients themselves or for clients referred by providers or partners. Once a referral is received, Navigators, employees of the program, meet one-on-one with the client and their family in the home or a location convenient for them, to assess the unique situation and needs of that client and their family. Meeting in the client's location of choice allows the Navigators to better identify and understand the social factors influencing the health of the client and the client's family.

With the help of the Navigators, patients are connected to resources that alleviate barriers such as access to healthy food, transportation to medical appointments, health insurance, housing repairs to create a safe environment, language interpretation, employment

opportunities, and more. Client information is tracked in a custom-built database. Tracking helps to identify client barriers that prevent them from achieving their desired health. This information helps track community-wide trends to inform community public health programs where gaps in services exist, allowing for continued growth, relevance, and program sustainability.

Integration of key services and resources is the goal of another group from Iowa. The **UnityPoint Health Berryhill Center** is an integrated Community Mental Health Center that offers mental health services to 10 counties in Northern Iowa. Using coordinated and integrated services through the co-location of primary and specialty care medical services in community-based behavioral health settings, the Berryhill Center strives to improve the physical health status of adults with serious mental illnesses and those with co-occurring substance use disorders who have or are at risk for co-morbid primary care conditions and chronic disorders.

Knowing that adults with serious mental illness experience heightened morbidity and mortality, in large part due to the high incidence and prevalence of obesity, diabetes, hypertension, and dyslipidemia, the Berryhill Center created resources to address these highly preventable issues. Using a series of evidence-based programs, the staff, which includes a Health and Wellness Coordinator and a Peer Support Specialist, provide support to patients working towards improved health and wellness.

Berryhill Center's programs target smoking cessation using the Learning About Healthy Living model, nutrition & exercise through Nutrition and Exercise for Wellness and Recovery (NEW-R), and chronic disease self-management with implementation of Whole Health Action Management (WHAM). Each program

is evidence-based and uses facilitator-educator and peer support groups to promote positive health change. Furthermore, to support the home health framework and primary-behavioral health integration, providers are trained to use Motivational Interviewing and Trauma Informed Care. Combining evidence-based programs, Berryhill supports improvements to both physical and mental health and sustainable change.

With funds from a 2015 Primary and Behavioral Health Care Integration initiative and community partners, Berryhill is able to connect individuals with clinic and community resources. With the help of the affiliated Diabetes Center, Berryhill offers a pre-diabetes, diabetes, and a Healthy Weight 4 Life program. In addition to the adult services, the center offers a school-based counseling service, parent-child interaction therapy, and a variety of counseling and therapy services for individuals, couples, families, and groups. As of 2017, Berryhill Center patients have shown significant improvements in various clinical and behavioral outcomes including body mass index (BMI), weight, blood pressure, lipid panel, glucose and hemoglobin A1c.

Community-based participatory research brings together academics and community members as equal partners in the research process.^{5,6} This model of program creation and implementation helps community and researchers jointly identify where research gaps exist. If the community can identify the gap and bring it to the attention of change agents, effective partnerships are more likely to occur. Members of the community do not want to feel that they are simply a measure used to inform research, they want the research and the researchers engaged in the work of communities. Fostering engagement from the invested partners, including community members and researchers, supports progress for all involved.

The Cooperative Extension System (CES) is working to break the divide between community and research through the collaboration of a network of educators, organizations, and communities invested in health. With a goal of reaching 1,000 communities across the nation, CES is working with the National 4-H Council (Council) with the assistance of the Robert Wood Johnson Foundation over the next ten years. The Council and CES, a network of land-grant universities that serve every county and parish in the United States, teamed up to create a strong partnership, one that can pull from the strengths of both groups to address our nation's current health priorities. Leveraging 4-H's proven leadership model, youth work alongside community members, local public health organizations, businesses, government entities, and non-profit agencies to address public health priorities, such as individual and community well-being, prevention and treatment of chronic disease, and reductions in health care costs.

The focus on evidence-based health strategies often slows things down or alienates people. The CES and Councils partnerships provides an example of how we can work across sectors to increase citizen engagement. Specifically, the partnership empowers young people to help local Health Councils implement action plans that address health at every age. To begin, the project focused on five land-grant universities and fifteen communities. One advantage of partnering with Extension services is the access to a diverse population and landscape. Extension services are integral parts of urban and especially rural communities in which a high proportion of the population struggle with all aspects of health and wellness and experience the widest health disparities.



With the mission of reaching over 1,200 communities and 66 land-grant universities by 2022, the project is starting on a smaller scale partnering with South Dakota State University, University of Maryland Eastern Shore, University of Minnesota, University of Tennessee, and Utah University. The pilot programs focus on three key elements to accomplish transformational and sustainable change including: designing a sustainable network of structures to promote health and well-being in communities across the nation; creating and disseminating tools for healthier communities; and launching a training curriculum for local community advocates. One thing is clear, this partnership and approach to an integrated and holistic framework of health has the potential to increase the impact and outcomes of otherwise singular organizations.

On the opposite coast, **Alameda County Nutrition Action Partnership (CNAP)** highlights another outstanding example of a community-based participatory project. This collaborative draws on the strengths of established community resources that joined together as a unified partnership. Alameda County's CNAP coordinates the teamwork between USDA funded partners and unfunded organizations in their community.

CNAP partners have built on the ideal that there is strength in numbers. Fourteen members work as a united front to reduce competition and duplication, identify partners best situated to implement programming, and promote consistent messaging countywide. Alameda CNAP meets monthly with a formal agenda, minutes of discussion, results, and

actions recorded that are used to evaluate progress towards common goals and future interventions.

Within the partnership, USDA funded partners and unfunded organizations work together to achieve Supplemental Nutrition Assistance Program Education (SNAP-ed) goals and objectives. Harnessing the power of both USDA and non-USDA sources, groups can work better together to coordinate and cross-promote direct and indirect nutrition education and other obesity-related interventions throughout the county.

The list of partners and collaborations is astounding (see programming box CNAP). Each entity contributes to the combined goal by leveraging the resources available. In order to work towards a singular goal, CNAP conducts/reviews community assessments, analyzes data, and established priorities to guide its collaborative projects. It is through this process that CNAP can appropriately identify which partner is best suited to lead and implement specific interventions and thus reduces duplication of efforts allowing other organizations to use their time and energy elsewhere.

Through the partnership, CNAP is able to help implement and work with programs including: Safe Routes to School, Alameda County Community Food Bank nutrition education and

CNAP connects:

**Alameda County Nutrition Services (ACNS)-
responsible for convening CNAP**

Alameda County Community Food Bank (ACCFB)

Alameda County Area Agency on Aging (ACAAA)

City Slickers Farmers

Project EAT (Educate, Act, Thrive)

University of California Cooperative Extension (UCCE)

**Oakland Unified School District (OUSD)
Health & Wellness and Nutrition Services**

Alameda County Social Services Agency (ACSSA)

All In To End Hunger 2020

Fresh Approach

Healthy Oakland People and Environments (HOPE)

Mandela Marketplace

Oakland Food Policy Council (OFPC)

**The Alameda County Women, Infant and Children
(WIC) Supplemental Nutrition Program**

training, brown bag recovery for low income seniors, Project EAT (Educate, Act, Thrive), Fresh Approach, Oakland Unified School District Health & Wellness and Nutrition Services, Get Fresh Stay Healthy Campaign, and many, many more. Each partner in CNAP provides a unique service that address a specific need without stepping on the toes of other programs within the community, all while addressing a unified message. For example, CNAP piloted a streamlined application, Single App, to share information that promotes the benefits of all partners including: a combined brochure of all food assistance programs; information on USDA food/nutrition resources countywide; standardized nutrition messaging; and information for school and CalFresh applicants across government departments. CNAP is the living example of how we can work smarter not harder to accomplish a cohesive goal.

Each group in CNAP has a success story to share, whether that be the 4,500 low income seniors that receive a twice-monthly bag of groceries through the Alameda County Area Agency on Aging or working with state legislators to pass legislation that allows the sharing of confidential information across USDA programs to make it easier when applying for multiple services. Success for CNAP is also demonstrated in their reach; in 2016, CNAP partners made over 590,149 diverse client contacts by direct, indirect, and policy system and environmental activities, 209,928 of those with SNAP-Ed and 380,221 with non-SNAP contacts. Furthermore, one non-SNAP partner provided over 4,613,418 meals in a single year. The achievements of CNAP have not gone unrecognized. This is evidenced by the large grant the group received in 2016 that will contribute to the continued implementation of CNAP's plan.

Our health cannot be looked at through a single lens. It is influenced by a multitude of factors from where we live, what we eat, to what care we are provided, both within and outside of the traditional health care setting. As we begin to focus more on the larger picture of health, our health care systems should adapt and offer programs and policies that impact how we provide care using innovative and non-traditional partnerships and collaborations.

References:

1. National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017.
2. McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. *Health Aff (Millwood)*. 2002;21:78-93
3. National Prevention Council. National Prevention Strategy: America's Plan for Better Health and Wellness. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General; 2011.
4. Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020. Healthy People 2020: An Opportunity to Address the Societal Determinants of Health in the United States. July 26, 2010. Available from: <http://www.healthypeople.gov/2010/hp2020/advisory/SocietalDeterminantsHealth.htm>
5. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health*. 1998;19:173-202.
6. Viswanathan M, Ammerman A, Eng E, et al. Community-Based Participatory Research: Assessing the Evidence. Rockville, MD: Agency for Healthcare Research and Quality; 2004. Evidence report/technology assessment 99.

Youth Wellness Programs

Research shows that teaching children to grow and prepare their own food can have a lasting effect on their habits.^{1,2} Influencing those habits at a young age can have long-lasting effects on the future of our nation, including our physical, social, and economic health. It is crucial that we address how to modify behavior and are intentional with the who, where, and the what of the intended intervention.

Data from the 2015-2016 National Health and Nutrition Examination Survey (NHANES) shows that obesity is still a concern among youth in the United States (US).³ Although obesity prevalence has not significantly increased over the last few years, remaining at 18.5%, we are far from the Healthy People 2020 goal of reducing obesity prevalence to 14.5% US children.⁴

The disparities in childhood obesity prevalence are important to the who, where, and what kind of care we provide. The percentage of obesity in Non-Hispanic black (22.0%) and Hispanic children (25.8) are nearly double that of non-Hispanic white children (14.1%).⁴ We should not take these statistics lightly. Instead, we need to use innovative, meaningful interventions to target positive health behavior change using evidence-based programming.

Facilitating the necessary physical, social, and mental change is not as simple as telling children they need to eat more vegetables, get more exercise, or connect with more people- modifiable behaviors are more likely to change when we address the barriers, motivations, and satisfaction with participating in those healthy behaviors. One of the best ways to make healthy eating the norm is to develop food preferences early in

life.⁵ Children that have direct experience with growing and harvesting vegetables are more likely to eat them and to try a diverse array of foods, which will lead to healthier eating patterns both now and in the future.⁵ At a time when only 40% of children eat enough fruit and only 7% of children eat enough vegetables to meet daily recommendations, this is a critical first step.⁶ Empowering students to make healthier choices about food can also help curb the incidence of preventable diseases, improving not only their own lives, their families' lives and their communities as a whole.

One such youth garden embodies the components necessary in a successful nutrition intervention. **Edible Schoolyard NYC** works to transform the eating habits of New York City public school students through garden and kitchen classes that are incorporated into the school day. The curriculum was adapted in 2010 from a successful curriculum created in Berkeley, California in the 1990s. The NYC Edible Schoolyard believes that "all children are educated and empowered to make healthy food choices for themselves, their communities, and their environment" with the help of a curriculum to support those beliefs.

The program is targeted towards the low-income neighborhoods and communities they serve, striving to address the prevalent food insecurity and limited access to healthy food. In New York City, nearly one in four children are food insecure and over 40% of NYC public school children are obese or overweight, an issue that disproportionally affects low-income and minority populations.³ In order to address these issues, Edible Schoolyard NYC designed a curriculum that aligns with Common Core standards to improve overall academic performance and provides classes



and workshops free of charge that are fully accessible to the communities in need.

Through the use of three programs, Demonstration Schools, Network Schools, and Professional Development, Edible Schoolyard NYC provides the opportunity to change the preferences, attitudes, and eating behaviors of children and community members in order to support life-long healthy food choices. At the two Demonstration Schools Pre-Kindergarten through 8th graders receive an average of 21 hours of edible education per year including hands-on lessons that incorporate Common Core Standards in English language arts, math, science, and social studies. In addition to the school day classes, the Demonstration Schools provide free evening workshops, weekend community days where gardens and kitchens are open to the public, a weekly low-cost farmstand that accepts EBT/SNAP benefits, and student-organized tastings of recipes using farmstand produce.



**Edible Schoolyard
reached almost
86,000 students in 2017**

With 1.1 million public school students in the school district, the need for food education citywide is enormous.

About 2,500+ students taught annually through direct classroom experience

In just one year:

716 garden and 625 kitchen lessons taught
97 crop varieties were grown in two teaching gardens, yielding a total of 1,534 pounds of produce

In the 2015-2016 school year:

209 educators participated in professional development workshops
53,377 students learned from Edible Schoolyard educators

In the 2016-2017 school year:

Over 3,000 students were taught directly (1,243 in Demonstration Schools and 2,090 in Network Schools)
595 educators were taught through Professional Development workshops, impacting an additional 80,000+ students.

Parents survey results show that:

75% reported their children are more interested in cooking
73% said their children are more engaged in school

The Network Schools Program brings the education and curriculum of Edible Schoolyard NYC to four additional schools located in neighborhoods with high rates of diet-related diseases and a large proportion of children from low-income families. Edible Schoolyard NYC also offers Professional Development workshops to help educators from a variety of backgrounds including public and private school teachers, nonprofit workers, volunteers, community educators, and more. At the workshops, educators learn the Edible Schoolyard curriculum, how to set up a garden and kitchen with the resources that they have available, teach the techniques needed for managing cooking and gardening with students, and learn strategies to increase parent and community engagement in the gardens and kitchen classrooms.

Combined, the different programs of Edible Schoolyard NYC compose the necessary components of a successful nutrition intervention: the programs are activity based, implemented in the school environment, and involve parents and the wider community.² The success of Edible Schoolyard NYC is evident in its reach and community impact.

Edible Schoolyard NYC was the first New York State Partner for FoodCorps, a division of AmeriCorps leaders who connect kids to real food and help them grow up healthy. Four service members work in Network Schools and six service members are serving in 11 other NYC

A study conducted in partnership with the Laurie M. Tisch Center for Food, Education & Policy at Columbia University Teachers College measured impact. One particular area studied included the consumption habits of Edible Schoolyard NYC's Manhattan Demonstration School.

Using information collected with the help of the Laurie M. Tisch Center for Food, Education, & Policy at Columbia Teachers College, impact results show that:

19% of the students took food from the salad bar in 2015, compared to less than 1% in 2013,

Consumption of salad bar items increased from 0% in 2013 to 11% in 2015

The percentage of students who ate vegetables increased from 11% to 18%, and

The percentage of students who ate fruit increased from 29% to 42%.

schools through partnerships with Wellness in the Schools, Bronx Health REACH, Bubble Foundation, Harlem Grown, Morris Heights Health Center, and New Settlement Apartments.

Acta Non Verba (ANV), a youth urban farm project in Tassafaronga Village in East Oakland is another example of how to engage youth in activities that shape positive health behaviors. The integration of urban farming, nutrition education, and community engagement can help nurture and support the social, economic, and physical habits of the youth that participate. The farm, founded by Navy veteran Kelly Carlisle, teaches youth farming and business practices, putting the literal meaning of Acta Non Verba, latin for "Deeds Not Words", into action. Along with the youth farm, programming is used to teach nutrition, cooking, fitness, and financial literacy.

The one-fourth acre farm at Tassafaronga Recreation Center in the middle of a food desert was founded in 2011 in response to the severe socioeconomic and health disparities affecting Kelly's childhood home. Kelly formed ANV to "elevate inner-city life by challenging oppressive dynamics and environments through urban farming".

In order to provide community and economic support to the nation's second most dangerous city, East Oakland, ANV connects people to a safe and creative outdoor space. Three thousand plus low-income youth and families work with the farm to focus on wellness, education, and improving quality of life. ANV offers access to farming beds, nutrition and cooking classes, community building events, educational childcare camps for 300 plus local youth, a CSA, food pantry, a Farmstand that supplies produce to residents (accepting EBT payments), and the installation of gardens in local schools with their partner, Alameda County.

ANV offers services in education, child care, economic empowerment, and access to green, safe spaces and healthy food to a community (East Oakland) lacking in these areas. With tremendous community support, ANV camps serve low-income African American and Latino children in a community where 99% of the students in the local schools qualify for free and reduced lunches. Only 17% of Latinos and African-Americans in the county consume the recommended daily allowance of fruits and vegetables, in part due to lack of access. The neighborhood is a USDA-defined food desert with only two grocery stores within three miles providing limited fresh produce.



ANV Programming

Camp ANV serves Oakland children ages 5-14 for Summer (8-weeks), Fall, Winter, and Spring (school holiday) camps. At the camps, local youth learn sustainable agriculture and business practices, and healthy cooking and nutrition, as well as work on arts, science, and reading projects, and develop their financial literacy by depositing the earnings from the harvest into bank accounts that can only be used by the student for educational purposes.

Field trips and farm visits to provide educational programming for pre-K through 12th grade students, college students, and adults by giving a tour of the farm and participating in activities such as food sampling and age-appropriate work projects. Topics can include exploring soil and compost, planting and transplanting,

understanding food sources, learning how to become an urban farmer, and more.

ANV also partners with Project Access and Oakland Parks and Recreation to provide opportunities in the community for education, employment, and health such as an after school program, a free food pantry and happy hour event, and a Community Farm Day.

ANV offers a bag of seasonal fruits and vegetables to subscribers in the East Bay (Berkeley, Oakland, Emeryville, Alameda, and San Leandro) for \$25 per week and to Tassafaronga Village residents for \$15 per week. All of the money earned from the CSA goes into the youth's saving accounts.

Through the use of numerous partnerships, ANV is able to offer a variety of programming including Camp ANV, field trips and farm visits, after school, free food pantry, and community supported agriculture. In addition to programming, ANV works with children to learn financial literacy by using the earnings from the produce sold in the gardens they helped plan, plant, and harvest to create bank accounts that can only be used by students for educational purposes like buying laptops, taking piano lessons, or preparing for the SAT. The youth savings accounts are an important stepping stone for many children learning how to manage money and save for their future. ANV was able to provide approximately \$172 per saving account (\$4,000 in total earnings) over the course of 2016.

Moving beyond the farm and into the kitchen is an important step that both Edible Schoolyard NYC and ANV offer; however, **Common Threads** takes it one step further. Founded in Chicago in 2003, Common Threads brings health and wellness to children, families, and communities through cooking and nutrition education. The goal of Common Threads is simple, use the common knowledge and language of cooking to inspire healthy cooking, healthy eating, and healthy living.

In order to achieve this goal, Common Threads offers research-based cooking and nutrition programs and a classroom curriculum. Since its inception in 2003, Common Threads has partnered with more than 750 schools and communities, reached more than 118,000 students, parents, students, and teachers, and provided more than 750,000 healthy meals and snacks in nine major cities across the United States. The core curriculum is approved to work within school districts, integrating the standard learning concepts with nutrition, healthy cooking, and school gardens.

Following the tenets of successful youth nutrition interventions, Common Threads focuses on building a community-wide culture of health with parents, family, schools, and the community as a whole. Within the school setting, three different programs were created to engage students. The Small Bites Program, used both in- and after-school, teaches students about nutrition and healthy cooking while also supporting Common Core State Standards math and English learning. The Garden curriculum is taught at all grade levels over eight sessions to extend nutrition education into a school garden. In the Cooking Skills and World Cuisine course, 3rd through 8th graders learn how to follow a recipe, prepare and cook ingredients, and explore the culture and cuisine of 10 different countries.

Outside of the classroom, parents and the community have the opportunity to engage in family cooking classes, parent workshops, grocery store tours, healthy teacher trainings, and teacher cooking classes (see program box). With the help of a diverse group of school, nonprofit, corporate, foundation partners, and over 600 volunteers each year, Common Threads has provided healthy eating and nutrition lesson training for more than 4,200 teachers and spent 1.1 million hours giving nutrition education and cooking skills classes.

According to a 2016-2017 school year evaluation, after participating in Common Threads' programming, 79% of students correctly answered nutrition questions; 51% of students reported liking vegetables; 43% of students reported consuming vegetables at least once a day; 67% of students told their families about healthy eating; 54% of students showed their families how to cook at home; 90% of students reported self-confidence in their cooking skills; and 40% of students reported helping to cook at home three or more nights per week.

Reaching beyond the classroom and community, Common Thread now partners with healthcare professionals and organizations to teach practitioners how to cross-over the clinical and community divide. Working with the Osher Center for Integrative Medicine at the Northwestern University Feinberg School of Medicine, Common Threads helped create

programming for medical students that empowers them and other practitioners with the knowledge and skills they need to offer preventative nutrition-related healthcare to their patients. Furthermore, they recently collaborated with Baptist Health South Florida to create a hands-on culinary and nutrition education curriculum for adult patients.

Common Threads Programming:

Family Cooking Classes: this program is for students and parents to cook together. Three focus areas are available to choose from, including **Breakfast: Getting a Healthy Start, Family Meals Made Easy, and Restaurant Meals You Can Make at Home.**

Parent and Community Workshops: this program engages parents in topics like basic nutrition, grocery shopping, and cooking with kids. The workshops have flexible formatting that allow them to be incorporated into other parent-related programs like parent meetings, school wellness council events, and more.

Grocery Store Tours: this program provides chef-guided tours that take place at a local grocery store and engages parents on how to economically buy healthy foods.

Healthy Teacher Trainings: this professional development program for educators teaches basic nutrition and healthy cooking through classroom-based activities.

Teacher Cooking Classes: these hands-on cooking classes for educators focus on nutrition concepts and healthy, simple recipes for busy teachers.

Common Bytes: Launched in 2016, this digital nutrition education platform mobilizes classrooms, communities, and families around nutrition and cooking through access to interactive recipes, games, videos and resources.



Children are our future, and as such, we must consider how to best address the current health and wellness challenges we face in our youth population. It is clear that integration is the key, integration of health and wellness into academic curriculum; integration of family and the community into children's health initiatives; and integration of healthy hands-on experience into children's daily life.

References:

1. Miller DL. The seeds of Learning: Young children develop important skills through their gardening activities at a Midwestern early education program. *Appl Environ Educ Commun* 2007;6(1), 49-66.
2. Morgan PJ, Warren JM, Lubans DR, Saunders KL, Quick GI, & Collins CE. The impact of nutrition education with and without a school garden on knowledge, vegetable intake and preferences and quality of school life among primary-school students. *Public Health Nutrition* 2010;13(11), 1931-1940.
3. Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity among adults and youth: United States, 2015-2016. *NCHS Data Brief*. 2017;(288):1-8.
4. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. *Healthy People 2020 Topics & Objectives: Nutrition and weight status*. Available from: <https://www.healthypeople.gov/2020/topics-objectives/topic/nutrition-and-weight-status>.
5. Domel SB, Baranowski T, Davis HC, Thompson WO, Leonard SB, Baranowski J. A measure of stages of change in fruit and vegetable consumption among fourth- and fifth-grade school children: reliability and validity. *J Am Coll Nutr* 1996; 15(1):56-64.
6. Kim A, Moore LV, Galuska D, Wright D, Harris D, Grummer-Strawn LM, Merlo CL, Nihiser AJ, Rhodes DG. Vital Signs: Fruit and Vegetable Intake Among Children - United States, 2003-2010. *MMWR. Morbidity and mortality weekly report*. 2014;63:671-676.
7. Lytle L & Achterberg C. Changing the diet of America's children: what works and why? *J Nutr Educ* 1995;27:250-257.

Food Security Programs

For many in the United States, eating healthier starts with increasing access to fresh produce and nutritious food. Unfortunately, many Americans experience food insecurity or lack of access, both financial and geographical, to the healthier food options. Food insecurity affects approximately 12.7% of households in the United States¹ and more than 2.3 million households live in a food desert.² This is of particular concern for older adults and low-income residents that may lack the means to find or afford transportation to traditional grocery stores.

Limited access to food has meaningful implications to our health. Food security can be defined as more than just the access and affordability of food; current definitions expand to include *access* to and *affordability* of *nutritious* food.¹ The importance of nutrition in the definition is clear when we consider that the most prevalent chronic illnesses are diet-related, including obesity, cardiovascular disease, hypertension, and type 2 diabetes.

It is important that we are aware of the complex components that define food insecurity and the issues that those who are food insecure face on a daily basis. Those most in need of food assistance often do not make enough money to put food on the table and in turn, also struggle with several factors that increase risk for developing chronic diet-related health issues. Unfortunately, both the food- and health-related struggles exacerbate the conditions for those who are already food insecure, including: limited financial resources, lack of regular access to healthy affordable foods, and limited access to basic health care.

One way in which we can help our communities and our underserved, at-risk populations attain health equity and self-sufficiency is by connecting and empowering those who grow, make, and eat healthy food. Recent research suggests that shopping at farmers markets are positively associated with fruit and vegetable intake.³⁻⁵ More so, programs that assist in creating access to farmers markets for low-income families significantly increase self-reported vegetable consumption.⁶⁻⁹ New and innovative farmers markets and community kitchens view the food system as an ideal environment to facilitate employment and professional growth for the large proportion of underemployed or unemployed community members that they serve.

The Hunger Task Force, The Fresh Picks Mobile Market was created to address food deserts for residents in Milwaukee County. In 2015, the Hunger Task Force partnered with Pick 'n Save, a local Milwaukee grocer, to convert a former NASCAR trailer into a mobile grocery store. Using this innovative model of food transportation, the mobile market provides 40 plus seasonal fruits and vegetables and more than 10 high demand meat and dairy products to their customers.

In order to maximize the Mobile Market success, the Hunger Task Force identifies communities in need of Market stops and ensure that they are stocked with food that reflects the specific wants of the community at the appropriate price point. In the spirit of collaboration, Hunger Task Force supplies the driver and funds all operational costs and Pick 'n Save supports the Mobile Market by managing retail operations (e.g., conducting transactions and providing

items for sale).

The Mobile Market achieves what many anti-hunger and nutrition groups are working towards today: accessible, affordable, and nutritious food distribution to fight food insecurity. Since it began, the Mobile Market has served over 25,000 people at close to 40 stops located outside of traditional senior centers, food pantries, and community centers. More than \$254,120 has been spent at the 90 minute stops between October 2015 and February 2017, and average sales have increased year to year.

In addition to increased sales, the Market also tracks product purchases and found that from February 2016 to February 2017 produce, meat, and dairy

sales increased by 11%, 14%, and 77%, respectively. Increased purchase of fresh food is meaningful to the population the market serves considering that 66.5% of people with Supplemental Nutrition Assistance Program (SNAP) benefits used their dollars to buy food at the market. Furthermore, there is always an employee in the Market to provide information about SNAP and electronic benefit transfer (EBT) and help customers find resources or apply to receive benefits.

To further incentivize healthy food purchasing, Hunger Task Force received a federal grant from the USDA's Food Insecurity Nutrition Incentive (FINI) that allowed the Mobile Market to provide a 25% incentive discount on healthy foods. The success and popularity of the Fresh Picks Mobile Market, even without the extra



incentive, debunks the myth that low-income people do not want or will not purchase healthy foods. Since the market was launched, it has helped over 20,000 people get the nutritious, fresh foods they need to maintain good health. The Mobile market makes it their mission to help increase access year-round and will continue to do so for the low income and senior housing developments, food pantries, and community centers that utilize their service.

In recent years, community kitchens have stepped up to the plate to combat food insecurity and health disparities. Like the traditional form of food pantries, community kitchens are focused on community food relief; however, community kitchens are much more than an emergency food relief system. **DC Central Kitchen**, the nation's first community kitchen opened in the 1980's, was created to combat the cycle of hunger and poverty. The longevity of the program stems from its mission to develop participant resilience to food insecurity by fostering an environment in which participants can develop food skills and expand their health and nutrition knowledge.

As a community kitchen, DC Central Kitchen works within their own small food system- sourcing the food, preparing the food, and providing nutritious meals for homeless shelters, schools, and nonprofit centers. The chain starts with the collection of local farm produce and food from wholesalers and restaurants that they would otherwise throw away as food waste.

The centralized kitchen serves a dual purpose: food preparation and job training. As part of a larger social enterprise, the kitchen trains DC residents with high barriers to employment for a career in the culinary field. Graduates of the DC Central kitchen are part of the cyclical nature of the program: residents benefit from the food prepared, they are students of the kitchen, secure gainful employment, and in turn

prepare the nutritious meals for the next cycle of people who benefit from DC Central Kitchen.

DC Kitchen is truly replicable having served as a model for more than 60 similar central kitchens across the United States. The idea of a community kitchen was also adopted by college campuses as The Campus Kitchens Project, a similar approach that facilitates the recovery of food waste from dining halls that can be used in preparing community meals.

Just outside Washington, D.C. another organization uses an innovative food system that brings local produce to underserved areas and supports healthy eating through incentive programs and culturally appropriate, farm-to-fork programming. The **Crossroads Community Food Network's** mission is to build a healthier, more inclusive food system in the Takoma/Langley Crossroads, a primarily immigrant, low-income community. Since 2007, Crossroads has connected underserved areas with seasonal farmers markets to increase access to healthy, local produce.

In addition to creating an integrated network of food growers, makers, and consumers, Crossroads Farmers Markets uses incentive programs to make it easier for consumers to make the healthy choice all while purchasing foods that supports local farmers and vendors. In addition to the farmers markets, Crossroads works for and with the community to provide healthy eating education, microenterprise training for aspiring food entrepreneurs, and opened their own community kitchen, the Takoma Park Silver Spring community kitchen.

To further close the divide between community and the Crossroads food system, Crossroads' Healthy Eating Program offers culturally appropriate, farm-to-fork programming to students and parents at several Takoma Park elementary schools with diverse populations and high Free and Reduced Meals

participation, as well as to shoppers at Crossroads Farmers Market. These programs include fun and interactive sessions that include cooking lessons, food tastings, farmer visits, and other hands-on educational activities.

In the spirit of social enterprise and to address the high proportion of underemployed or unemployed residents served at the network, Crossroads' Microenterprise Training Program offers free, bilingual business support to aspiring food entrepreneurs. The 10-part workshop series covers food safety basics, business fundamentals, and everything in between, and the new shared-use Takoma Park Silver Spring Community Kitchen provides an affordable means of production.

Throughout the United States, we can name many area organizations that feed the hungry, promote healthy eating, or support local farmers or start-up food businesses. Hunger Task Force Mobile Market, DC Central Kitchen, and Crossroads stand apart from those traditional hunger rescue organizations.

These programs touch on many of the necessary components in a sustainable local food system including: increasing access to healthy food and knowledge about making healthy food choices that contribute to improved overall public health; making the healthy choice the easy choice; creating a consistent demand for fresh fruits and vegetables that help make local, small-scale farming more economically viable; and facilitating the transition to self-employment via entrepreneurship to foster financial stability.

Crossroads originated the idea of using private funds to double federal nutrition benefits like SNAP when people use them to buy fresh fruits and vegetables at the market.

Over the last 10 seasons, the program has distributed over \$410,000 in Fresh Checks incentives to more than 13,000 individuals, families, and seniors.



References:

1. Coleman-Jensen A, Rabbitt MP, Gregory CA, et al. Household Food Security in the United States in 2015. US Department of Agriculture, Economic Research Service, 2016.
2. Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences.” Report (2009) to Congress from the United States Department of Agriculture.
3. Jilcott Pitts S, Gustafson A, Wu Q, et al. Farmers’ market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutr J* 2014;13:1.
4. Jilcott Pitts S, Wu Q, McGuirt J, Crawford T, Keyserling T, Ammerman A. Associations between access to farmers’ markets and supermarkets, shopping patterns, fruit and vegetable consumption and health indicators among women of reproductive age in eastern North Carolina, USA. *Public Health Nutr* 2013;24:1–9.
5. Ruelas V, Iverson E, Kiekel P, Peters A. The role of farmers’ markets in two low income, urban communities. *J Community Health* 2012;37:554–562.
6. Bowling A, Moretti M, Ringelheim K, Tran A, Davison K. Healthy foods, healthy families: Combining incentives and exposure interventions at urban farmers’ markets to improve nutrition among recipients of U.S. federal food assistance. *Health Promot Perspect* 2016;6:10–16.
7. Young C, Aquilante J, Solomon S, Colby L, Kawinzi M, Mallya G. Improving fruit and vegetable consumption among low-income customers at farmers markets: Philly food bucks, Philadelphia, Pennsylvania. 2011. *Prev Chronic Dis* 2013;10.
8. McCormack LA, Laska MN, Larson NI, Story M. Review of the nutritional implications of farmers’ markets and community gardens: A call for evaluation and research efforts. *J Am Diet Assoc* 2010;110:399–408.
9. Olsho L, Payne G, Walker D, Baronberg S, Jernigan J, Abrami A. Impacts of a farmers’ market incentive programme on fruit and vegetable access, purchase and consumption. *Public Health Nutr* 2015;18:2712–2721.

Conclusion

This report offers a small snap shot of a few, select health and wellness programs that have demonstrated ability to develop and implement an innovative program in their community or organization.

There is a good chance you are reading this report because you are invested in health. It could be that you are interested in bettering your own health, your families, your community members, or our nation as a whole. Regardless of where your interest lies, investing in your own health is the first step to strengthening the health of the masses, both now and in the future. In order to maximize health, we must stand behind and advocate for the best wellness programs and initiatives. Through our actions, partnerships, coalitions, communication, and sustained commitment to positive and sustained successful health programming, we can continue to work towards reducing the burden of disease, the negative outcomes, disparities, and threats to health.

Going forward, use the programs in this report as an example of how to build effective coalitions and partnerships that support and lead individuals and groups within and outside of your community or organization. Look to the program leaders in this report to guide the implementation of a new alliance, finding power to think creatively in developing a relevant, adoptable, acceptable, and sustainable path to improved health.

