

LINKING NUTRITION WITH HEALTH CARE

Marion County Creating Healthy Food Environments (CHFE) Project, Marion County, SC



POWERED BY

The
**BUILD
HEALTH**
Challenge®



BOLD

Develop linkages between the medical network, food safety network, and other community partners



UPSTREAM

Address issues related to poverty—including educational gaps and nutrition literacy—that contribute to poor health outcomes and health inequities



INTEGRATED

Leverage resources and unique strengths of partners to work with priority audiences and make a collective impact



LOCAL

Build the Marion County Coordinating Council with majority Marion County residents



DATA-DRIVEN

Use countywide data on child and adult obesity and CHFE child patient data to measure progress

IN PARTNERSHIP WITH



COMMUNITY IMPACT



1,141 citizens transported by Pee Dee Regional Transportation Authority to access groceries, health checkups, and more



100% of participants who screened positive for food insecurity actively referred to community resources to address their food needs



54,600 pounds of produce distributed

A grandmother who is in the position to be the sole provider for her family is a prime example of why the CHFE Project is in such high demand today. These situations are increasing throughout the country and not just in rural areas.

—Wanda Vandroff, Clemson Cooperative Extension

INTRODUCTION

Melinda Reaves, a resident of South Carolina's rural Marion County, was facing several health problems exacerbated by poor nutrition and lack of access to fresh foods. A “perennially positive” and curious person, Reaves participated in the Marion County Creating Healthy Food Environments Project (CHFE Project) in order to, as she puts it, “stay alive.” Motivated to change her eating habits to improve her health and feel better, she took nutrition education classes, found new recipes, and received fresh produce in Food Share boxes, all through CHFE. Importantly, Reaves was also able to make nourishing meals when she was low on money, rather than rely on fast food. “She brought positivity, a life lesson, and a recipe every time we saw her. She prided

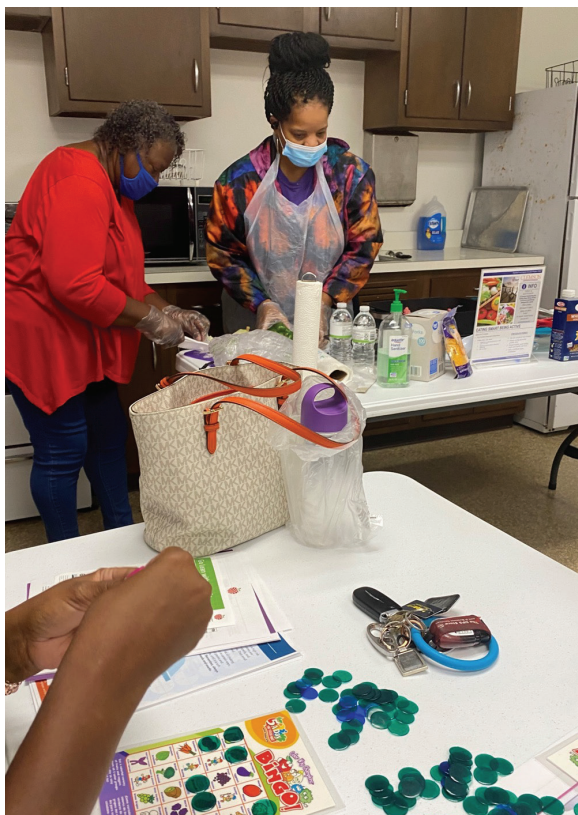
herself in reporting back that her assigned dietitian was happy about her nutrition literacy,” shared CHFE’s Danyell Rogers.

The CHFE Project worked to create and sustain linkages between the county’s health care safety net and the nutrition safety net. With a vision that families experiencing food insecurity would be provided with fresh food, nutrition education, and access to other health care services, a team of collaborators came together to reduce food insecurity and prevent childhood obesity. This community-driven partnership was led by Pee Dee Community Action Partnership and comprised of a diverse network of county and regional stakeholders, including MUSC Health (Medical University of South Carolina) - Marion Medical Center, South Carolina Department of Health and Environmental Control - Pee Dee Region, Marion County Coordinating Council (MCCC), Health Care Partners of South Carolina, and Clemson University Cooperative Extension. Together, this partnership represented a systemwide commitment to improving access to food, nutritional guidance, and health care. Health outcomes became a priority, both for individuals and across the community.

The CHFE Project is one of 18 such community-driven partnerships supported by an innovative funding collaborative



and award program, The BUILD Health Challenge® (BUILD), that is contributing to the creation of new norms in the United States. BUILD is putting multi-sector, community-driven partnerships at the center of health to reduce health disparities caused by system-based or social inequity. An intentional commitment to advancing equitable systems-level changes in their community distinguishes BUILD partners from other health-focused efforts. Over the course of BUILD’s three cohorts, both the collaborating funders and the 55 participating communities have evolved in their understanding and pursuit of health equity.



BUILD projects demonstrate how the pursuit of health equity can vary from community to community, from rural to urban, from family to family; so, too, do BUILD projects reveal how certain success factors are consistent. These include upstream and integrated approaches, local representation using local data, and resilience when facing the unexpected—in this case, the COVID-19 pandemic.

In Marion County, South Carolina, the CHFE Project offers a model for embracing both the unique and the universal when advancing health equity.

BACKGROUND

Over 40 percent of children in rural Marion County live in poverty and face associated risks of food insecurity and negative health outcomes. Located in the eastern third of South Carolina (just west of high-amenity coastal communities like Myrtle Beach), Marion County has a Health Ranking of 43rd out of the state's 46 counties. A majority-minority county covering 494 square miles with a population of just 31,293, the 2010 Census recorded 67 residents per square mile, down from 72 in 2000. Its namesake town is also its largest, with about 7,000 residents (2010 Census). First cotton, then tobacco and timber farming once drove the county's economy. Today, the leading industry in Marion County is retail, followed by health and social services. Limited access to food, high levels of food insecurity, and sedentary lifestyles contribute to an unhealthy food environment, especially for children. Improved nutrition, exercise, and more fresh vegetables would be the obvious remedies—and this was often the advice given by harried health providers.

In reality, particularly in rural counties like Marion, where food systems consist of mostly fast food and convenience stores, applying these remedies was much more complicated. The decline of resource-based industries, alongside systemic and reinforcing racial and income disparities, paint a more nuanced picture of Marion County. The lack of public infrastructure, especially public transportation, isolates rural residents by further limiting access to everything—from medical care to fresh vegetables. In this context, the prevalence of adult and child obesity, diabetes, and other poor health outcomes in the county seems less surprising and more nearly inevitable.

This complicated backdrop called for a bold, clear-eyed, and collaborative approach to linking—and improving access to—food, nutrition, and medical care. The CHFE Project made medical practitioners and practices aware of available nutrition resources. Through nutrition education and doctor's referrals, partners actively recommended resources to residents and families. Working through practical and respectful tactics, CHFE changed both the experience of food as a contributor to good health and the cultural mindset that residents have little control over their health outcomes.

APPROACH

The Marion County CHFE Project began as an effort to link the health care safety net and the nutrition safety net, with children as its primary focus. The MUSC Health (Medical University of South Carolina) - Marion Hospital contributed to the salary of a staff member focused on food insecurity who worked with a community coalition of local residents to guide the project. Two anchor health care organizations, MUSC Health - Marion Hospital and Health Care Partners of South Carolina, screened families with preschool-aged children for food insecurity and referred eligible families to a Produce Rx (Prescription) program. Partnering with providers, both retail and nonprofit, CHFE matched produce boxes and nutrition education twice a month to low income families in Marion County. Calling the produce package a prescription helped recipients make the connection between good food and good health.



A network of sustainable, accessible sources of produce included a Food Share program, farmers market, food pantries, and retailers who allowed the produce boxes to be purchased by participants using their Healthy Bucks benefit through SNAP. CHFE increased the number of community gardens and local convenience stores to increase the availability of healthy fruits and vegetables. CHFE then coordinated nutrition education and cooking lessons with local pickup.

As the program launched, the need to address transportation—or its lack—became obvious. The project’s community-centered vision helped make the case for creating a community in which residents could access healthy foods and reach medical appointments where referrals to CHFE were made. Mobilizing the representatives from the MCCC, CHFE helped to jumpstart the return of Pee Dee Regional Transportation Authority’s (PDRTA) bus lines to Marion County.¹ By partnering with PDRTA, CHFE helped prioritize free bus routes running three days a week to pharmacies, health care facilities, shopping centers, and grocery stores.

Partners like PDRTA have shared both data-collection responsibilities and the resulting data. Together, the collaboration created a well-rounded picture of the community’s needs and gaps and the partnership’s impact in addressing both. Indicators of success

like the number of participants in CHFE’s Produce Rx program and the percentage of those participants reporting improved diet and reduced food insecurity increased. A majority of Produce Rx program participants also increased their daily servings of fruits and vegetables—52 percent of a 2021 program cohort and 63 percent of a 2020 cohort. Harvest Hope Food Bank provided over 200,000 pounds of food for the CHFE Program, delivering produce boxes to Marion County Youth Day and Marion County NAACP. Before COVID-19 struck, the CHFE Farm to Retail program also had been making efforts to track purchases of fresh produce from convenience stores and other retail providers.

PDRTA tracks not only passenger trips but also who the passengers are, where we pick them up, and where they’re going. A wide variety of destinations have emerged ... We know the passengers who need dialysis treatments or have regularly scheduled physician visits and we work to ensure they arrive on time and make the ride and the visit as comfortable and successful as we can.

—Jessica James, Pee Dee Regional Transportation Authority

¹ <https://pdrta.org/about-us>

UPSTREAM IMPACTS

A range of mitigating factors influence health outcomes, including low incomes, education attainment, lack of nutrition literacy, busy single-parent households, and isolation among the elderly. As in most rural communities, Marion County residents either must have access to a reliable car or rely on limited public transportation. Few of these challenges can be solved by telling local residents to eat more vegetables. Since systemwide and individual conditions contribute to health inequities, systemwide and individual interventions are needed to work toward health equity.

If residents need transportation to pick up their produce boxes, go to the grocery store, or to see a doctor, they can now call PDRTA for a ride at no cost to them.—Angela Rogers, South Carolina Department of Health and Environmental Control

Between 2019 and 2021, Marion County's *Food Environment Index*² improved from a rating of 6.2 to 7.2. While a modest improvement, the trend is upward, in a county where positive trends have been rare. CHFE's intentionally systemic—or

upstream—strategy increased providers' understanding of the unique barriers facing local residents. This strategy also increased residents' understanding of and ability to improve the health and well-being of their children, and themselves, through food and nutrition. Uniting transportation with food accessibility and medical care, while also mobilizing health care practitioners, has made affordable produce and nutrition education more accessible to low-income residents, particularly SNAP recipients.

Since CHFE was launched in 2019:

- 100 percent of residents who screened positive for food insecurity have been actively referred to community resources to address their food needs
- 54,600 pounds of produce have been distributed, and
- 1,141 citizens have been transported by PDRTA to access groceries, medical checkups, and more.



Marion County resident Melinda Reeves brings these numbers to life. Reeves's positive experiences led her to refer neighbors and friends to CHFE. Also, she is just one of hundreds of local residents receiving referrals to the program designed to connect fresh produce in Food Share boxes, group cooking activities focused on healthy recipes, and reliable transportation to doctor's appointments. All of these measures help give Reeves confidence that even when funds run very low, she will be able to eat, and eat well.

² Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best), <https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model/health-factors/health-behaviors/diet-and-exercise/food-environment-index?year=2022>

THE PANDEMIC: RISK & RESILIENCE

Hitting its stride in early 2020, the CHFE Project could not have anticipated that a pandemic would soon usher Marion County and the rest of the world into lockdown. Hospitals and health care providers once stood at the center of the CHFE strategy—identifying food insecurity and making referrals. The pandemic left hospitals and other clinical partnerships overwhelmed with COVID-19 patients, as well as with policy and procedural changes to mitigate the highly contagious, deadly virus.

When it became clear that hospitals and health care providers had to focus on COVID, and could not do the routine screenings we had relied upon, we launched the “Hit the Pavement” initiative, which got us into the communities, speaking with residents, businesses, and like-minded organizations about CHFE’s services to identify potential participants and encourage referrals.

—Danyell Rogers, Creating Healthy Food Environments

Of course, CHFE also had to adjust its strategy. Pivoting to what the project team

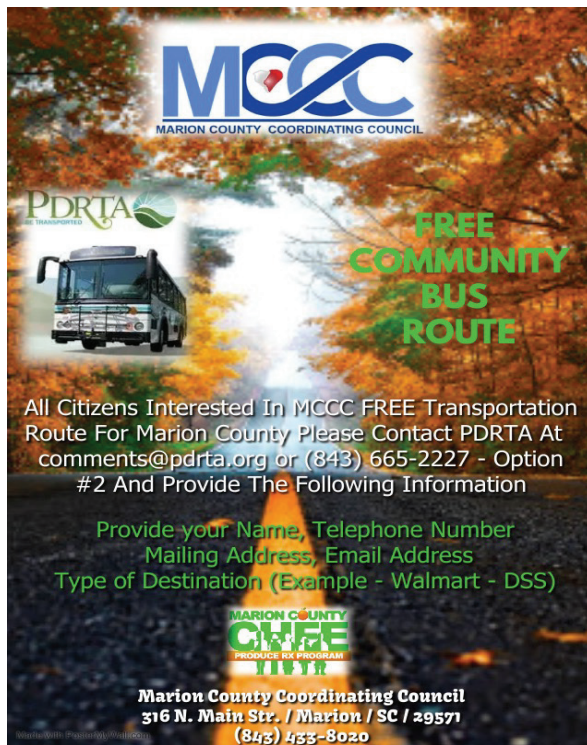


called our “Hit the Pavement” initiative, CHFE representatives traveled throughout Marion County, speaking with anyone and everyone about the project and its services. At the same time, COVID-19 increased levels of food insecurity and the barriers families faced in accessing food, medicine, and medical care. During this time of crisis, it became difficult to convince community members to take advantage of resources beyond the food boxes. Some residents wondered, “Why not go ahead and get the free boxes, why sit in nutrition classes?” These and other health-focused services of CHFE went dormant.

Even more challenging, COVID-19 brought about the closing of four of CHFE’s partner food pantries. Other sources of food were identified and other distribution locations

were identified. Local community members did what they could to fill in, picking up and distributing boxes in their towns. Nevertheless, the sudden loss of significant partners was a serious blow to the collaboration and to the project. Ultimately, the closing of the four food pantries and the switch to drive-through distributions in others diverted CHFE time and capacity. Instead of the partner pantries distributing food, CHFE and MCCC staff had to organize and work at the drive-throughs at various locations in the county.

Deliveries of food and produce from Harvest Hope Food Bank (HHFB) stopped, so CHFE had to rent a truck from another partner to pick up the grant-funded produce from HHFB in a neighboring town. As CHFE-dedicated sources of donated food



decreased, the CHFE team volunteered with other organizations throughout the county to meet the community's needs in any way possible. Safety precautions resulted in MCCC not holding partner meetings for months at a time, which weakened the collaboration and partner relations. Virtual meetings were launched in June 2020, but the open dialogue and full partner involvement suffered as a result of both the virtual setting and the stress under which everyone was working. It will take time and effort to reinvigorate the partnership to pre-pandemic levels.

Fortunately, COVID-19 has not limited the impact and growth of PDRTA, an essential systemic component of local food security. In fact, ridership has increased. PDRTA illustrates how systemic capacity—in this case, access to free or low-cost, reliable transportation—increases a community's resilience during a time of crisis. Marion County ridership continues to grow, proving its importance and value to the community.

THE FUTURE

Today, the Marion County Creating Healthy Food Environments Project is looking for grant support to build upon its early successes and reinvigorate the partnership. Several positive signs can be seen on the horizon as the county—and the rest of the world—steps into a time with few to no pandemic-related restrictions. The engagement of Marion County School District 1 and South Carolina's WIC Program have given CHFE hope of further reach and impact. Schools and social service organizations cater to the exact audience for which CHFE was designed. The "Hit the Pavement" initiative forced by COVID-19 has persisted, with a focus on community engagement as an accelerant for CHFE. A Department of Health and Environmental Control Community Health Educator will continue to offer technical assistance to Marion County Coordinating Council and CHFE in order to continue the CHFE Project or a similar program.

With mutual goals and relationships well established, CHFE remains a community-centered and representative project designed to be responsive, respectful, and integrated. CHFE plans to take all lessons learned, insights, and challenges (including accelerants and impediments) and use that knowledge to make the program better in its entirety. Recently, project partner MUSC Health (Medical University of South Carolina) - Marion Hospital began offering nutrition classes to the citizens of Marion County. CHFE is cooperating to make these classes available online for residents who missed a class during the pandemic, but wish to maintain eligibility in the CHFE Project. Flexibility in requirements, cooperation among community partners, and ever-expanding access to transportation are each a part of CHFE's legacy and future. As one nutrition educator remarked, "In Marion County, the journey to encourage healthy eating does not end, extending learning opportunities is always the goal, and we'll keep moving forward."

Just speaking with individuals in communities we serve has made our efforts more meaningful, both to the team and to community residents who may not have realized help like CHFE was available.—Anita Magwood, Pee Dee Community Action Partnership



The Build Health Challenge® is contributing to the creation of a new norm in the U.S.—one that puts multi-sector, community-driven partnerships at the center of health in order to reduce health disparities caused by systemic or social inequity.

BUILD is a national program designed to support partnerships between community-based organizations, health departments, hospitals/health systems, health plans, and residents that are working to address important health issues in their community. Each community collaborative addresses root causes of chronic disease (also commonly referred to as the social determinants of health) in their local area by moving resources, attention, and action upstream. To date, BUILD has supported 55 projects across the U.S. over the course of three award cycles.

To learn more about BUILD, visit buildhealthchallenge.org.

BUILD's third cohort (2019–2022) was made possible with generous support from:

- BlueCross® BlueShield® of South Carolina Foundation (An independent licensee of the Blue Cross Blue Shield Association)
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