

Local efforts toward addressing health disparities in DeKalb County, Georgia

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ABSTRACT

Background: In underserved African American communities throughout DeKalb County, the DeKalb County Board of Health (DCBOH) is implementing community-based initiatives using policy, systems, and environmental improvement approaches to reduce racial and ethnic health disparities by increasing opportunities for nutrition and physical activity.

Methods: The initiatives are being implemented in priority census tracts where the population is at least 40% African American, 30% live below federal poverty level, and 25% did not graduate from high school. Communications promote awareness of the programs, and evaluation activities document processes and outcomes.

Results: To date, implementation of five interventions has affected approximately 276,000 DeKalb residents.

Conclusions: By implementing strategies for community-based policy, systems, and environmental improvement, DCBOH is increasing access to nutrition and physical activity opportunities for underserved African American communities in DeKalb County.

Keywords: Health disparities, nutrition, physical activity, community-based programs, African Americans

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INTRODUCTION

In DeKalb County, African Americans, a majority of the population, bear a disproportionate burden of chronic conditions (DeKalb County Board of Health, 2015). To prevent chronic diseases, implementation of policy, systems, and environmental (PSE) improvements has potential for greater reach than programs related to behavior change of individuals (Centers for Disease Control and Prevention [CDC], 2013; Frieden, 2010). The DeKalb County Board of Health (DCBOH) seeks to reduce racial/ethnic health disparities in the county by implementing, in African American communities, community-based PSE nutrition and physical activity initiatives, including farmers and mobile markets, shared-use agreements, Safe Routes to School, and a parent ambassador program.

METHODS

DCBOH has partnered with community members and groups to implement five community-based initiatives that use PSE improvement strategies to increase access to nutrition and physical activity opportunities. Details about

each initiative, including their purpose, program activities, communications activities, evaluation indicators, and implementation partners are included in Table 1. Priority areas for the program are census tracts where the population is at least 40% African American, 30% live below federal poverty level, and 25% did not graduate from high school. The overall goal is to affect 75% of the priority population in the county by the end of the 3-year grant period. Figure 1 shows a map of all initiative sites to date and the distribution of the African American population.

A community-wide media campaign was developed to promote the initiatives, using health communication and social marketing strategies to create social change and affect the attitudes and behaviors of the priority population. The campaign uses traditional media outlets and outdoor media advertisements to promote initiative activities and events. Campaign messages are posted on DCBOH and partner social media and websites. To reach younger audiences within the priority population, communications efforts include creation of a coloring/activity book and comic book (Appendix).

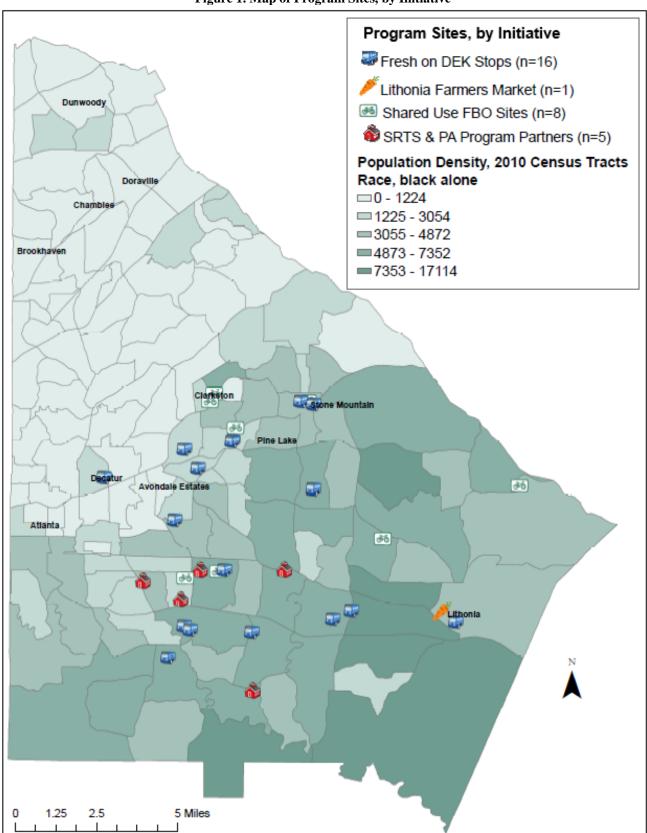
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Table 1. Program Interventions and Activities

Intervention	Purpose	Activities	Communications Activities	Evaluation Indicators	Implementation Partners
Establish Lithonia FM & help existing FMs to accept SNAP Fresh on DEK Mobile FM	To increase access, affordability, and availability of fresh and locally grown produce in food deserts.	 Educate farmers about SNAP at FMs Assist vendors with applications to become SNAP approved Provide TA to FMs on recordkeeping practices Provide nutrition and SNAP education to residents Develop and implement sustainability plans 	All interventions (or address general behavior): Flyers/tip sheets/posters Social ambassadors Press releases/newspaper Coloring/activity book Animations and comics Mobile market only: Transit system ads Jingle & video contest Map of stops	# TA/Ed sessions # Partner TA/Ed providers # People receiving TA/Ed # FMs accepting SNAP SNAP sales at FMs Food sales, type/amount # SNAP customers Customer demographics Customer satisfaction Sustainability resources	■ Local city government ■ 2 DeKalb FMs ■ County extension office
Shared Use Agreements	To reduce barriers to physical activity by providing safe places to be active.	 Work with FBOs to implement SUAs Open outdoor and indoor facilities to the public Develop and implement sustainability plans 	 Website TV and radio PSAs Magnets Reusable bags T-shirts FMs only: TV PSAs 	 # Executed agreements Types of SUAs # Facility users Frequency of use Facilities being used Types of activities User demographics User satisfaction 	■ 8 faith-based organizations
Safe Routes to School	To make bicycling and walking to school a safe and appealing transportation option for K-8 school students.	 Promote walk/bike to school events Support and engage parent champions Provide pedestrian and bicycle safety education to parents and children Develop and implement sustainability plan 	 DeKalb FMs flyer Family & Friends Day (to attract African American shoppers) Physical activity (general): Parks & Rec Center flyers Map of recreational areas PSAs 	 # Partner TA/Ed providers # Training sessions # Children/parents trained # SRTS events # students walking/biking # Partner schools Program participation Demographic data Participant satisfaction 	SRTS staff 4 elementary schools 1 middle school
Parent Ambassador Program	To create a network of well-informed, engaged parents who employ evidence- based school health solutions.	 Curriculum development Master trainer trainings/TA Parent trainings/TA Develop and implement sustainability plan 	SRTS only: Walk to school campaign	 # Training sessions # Master trainers # Parents trained Training curriculum fidelity Parent accomplishments Sustainability resources 	■ Local university

Acronyms: FM=Farmers Market; SNAP=Supplemental Nutrition Assistance Program; TA/Ed=Technical Assistance/Education; FBOs=Faith-Based Organizations; SUAs=Shared Use Agreements; SRTS=Safe Routes to School; PSA=Public Service Announcement

Figure 1. Map of Program Sites, by Initiative



The program evaluation aims to understand and document program activities and outcomes and to support program improvement and sustainability. Process evaluation data that implementation address program and challenges/facilitators are collected primarily through key informant interviews and review of program documents. Outcome evaluation data, derived from community member surveys and observations, inform program outputs, reach, and impact. Findings of evaluations will be shared as stakeholder reports, conference presentations, publications, and community newsletters. Although the evaluation was exempt from review/approval by the Georgia Department of Public Health Institutional Review Board, standard ethical procedures including informed consent of participants are

RESULTS

DeKalb's "Fresh on DEK" mobile market, established in 2015, operates for a minimum of 16 weeks per year with 6-11 weekly stops. The weekly Lithonia Farmers Market (established in 2016) will operate for at least 12 weeks per year. Supplemental Nutrition Assistance Program (SNAP) benefits are accepted at all mobile market stops and at the Lithonia Farmers Market. Six of eight existing DeKalb County farmers markets presently accept SNAP; DCBOH continues to work with the two markets that do not. In 2015, shared-use agreements were established in three churches, and five additional agreements will be implemented in 2016. DCBOH supports five local schools participating in the Safe Routes to School Program. With support from a contractor, a Parent Ambassador Program curriculum has been developed. Parents are expected to be trained in late summer, 2016. To date, these interventions have reached approximately 276,000 DeKalb residents.

The media campaign, called "Picture Yourself Healthy in DeKalb," was launched in 2015. To date, the campaign has placed 11 newspaper ads (920,000 impressions), displayed 165 posters/wraps on local buses/bus shelters (> 2.5 million impressions), played 86 radio ads (>10,000,000 impressions), had 1,269 social/digital media placements (>50,389,000 impressions), and aired 886 television ads (>136,650,000 impressions). During the 2016 season, a hiphop jingle promoting the mobile market, named "Fresh on DEK," will play on local radio and at market stops.

Evaluation data for the 2015 mobile market season included customer intercept surveys (n=205), key informant interviews with staff and partners (n=15), and review of program documents (e.g., operations logs and sales reports). In winter/spring 2016, baseline data, including facility user surveys (n=116), site coordinator interviews, behavioral and environmental observations, and review of program documents (e.g., sign-in sheets), were collected at each of the first three shared-use agreement sites. Additional evaluation data will be collected as implementation progresses.

DISCUSSION/CONCLUSIONS

This program uses evidence-based PSE improvement approaches to improve community health for DeKalb County residents. Use of farmers markets and similar produce distribution models are associated with increased produce consumption (Jilcott-Pitts, 2013, Jilcott-Pitts, 2014, Woodruff, 2016); access is further improved when markets accept SNAP benefits (CDC, 2014). Shared-use agreements with faith-based organizations are a low-cost way to increase physical activity levels for community members (ChangeLab Solutions, 2014). Safe Routes to School is a national program that has been extensively evaluated; there are positive associations between program participation and active school travel (Staunton, 2003; Stewart, 2014). The Parent Ambassador Program is based on similar programs (California Project LEAN, 2012; University of Arizona, 2012). By implementing these initiatives in underserved African American communities, this program is reducing health disparities.

Several factors are essential to continued implementation and sustainability of these interventions. communication issues between and among partner organizations were typical early in each partnership and/or intervention. Nevertheless, program staff and partners recognized the importance of the initiatives and worked together to identify improved strategies for communicating and working together. Second, finding partner organizations in target areas of the county was a frequent problem. Third, funding is a challenge because these initiatives are resourceintensive, which can prevent meeting ambitious goals and objectives; furthermore, ensuring long-term sustainability requires planning and securing diverse funding sources before the end of the grant period. Finally, strong partnerships have been a factor leading to success of the program. Through these partnerships, the program has facilitated leveraging of resources, collaboration within and across interventions, and an increased impact on the priority population.

By implementing community-based PSE improvement strategies, DCBOH is increasing access to nutrition and physical activity opportunities for underserved African Americans communities in DeKalb County.

Acknowledgment

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References

California Project LEAN. (2008). Parents in action! A guide to engaging parents in local school wellness policy. Retrieved July 10, 2015 from

http://www.californiaprojectlean.org/docuserfiles/file/ParentsIn Action_web.pdf

- Centers for Disease Control and Prevention Division of Community Health. A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease. Atlanta, GA: US Department of Health and Human Services; 2013.
- Centers for Disease Control and Prevention. *Healthier Food Retail: An Action Guide for Public Health Practitioners*.

 Atlanta: U.S. Department of Health and Human Services; 2014.
- ChangeLab Solutions. Congregation to Community: Shared Use by North Carolina Faith-Based Organizations. Retrieved May 31, 2016 from
 - http://www.changelabsolutions.org/publications/congregation-community.
- DeKalb County Board of Health. 2015 DeKalb County Status of Health Report. Decatur, GA; 2015.
- Frieden, T. A Framework for Public Health Action: The Health Impact Pyramid. Am J Public Health, 2010, 100: 590–595.
- 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, U.S.A. Public Health Nutr, 2013, 16(11): 1944-52.

- Jilcott-Pitts, S., Gustafson, A., Wu, Q., Leah Mayo, M., Ward, R., McGuirt, J., Rafferty, A., Lancaster, M., Evenson, K., Keyserling, T., & Ammerman, A. Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. Nutr J, 2014, 9;13:1.
- Staunton, C., Hubsmith, D., & Kallins, W. Promoting safe walking and biking to school: the Marin County success story. Am J Public Health, 2003, 93(9): 1431-4.
- Stewart, O., Moudon, A., & Claybrooke, C. Multistate evaluation of safe routes to school programs. Am J Health Promot, 2014, 28(3 Suppl): S89-96.
- University of Arizona Mel and Enid Zuckerman College of Public Health, Western Region Public Health Training Center, and Maricopa County Department of Public Health. (2012). *Parent Ambassador Training*.
- Woodruff, R., Coleman, A., Hermstad, A., Honeycutt, S., Munoz, J., Loh, L., Brown, A., Shipley, R., & Kegler, M. Increasing Community Access to Fresh Fruits and Vegetables: A Case Study of the Farm Fresh Market Pilot Program in Cobb County, Georgia, 2014. Prev Chronic Dis, 2016, 10;13: E36.

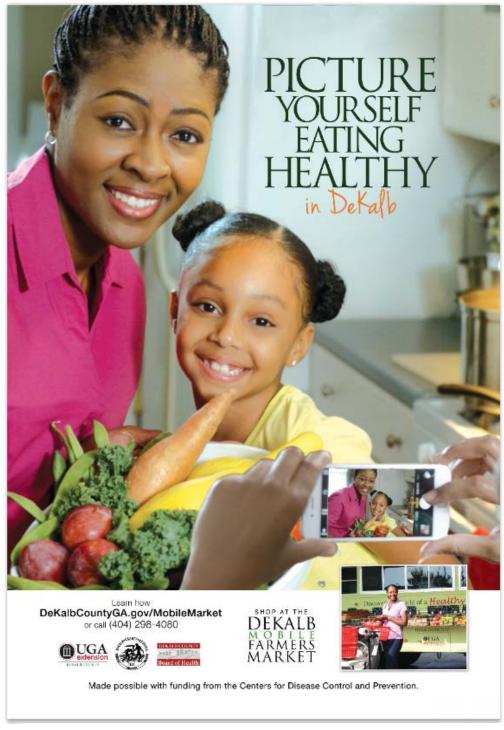
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Appendix

Branding, Marketing, and Other Communications Tools



Above: The "Fresh on DEK" Mobile Market Logo.



Above: Outdoor Media Promoting the Mobile Market (1 of 2). This ad was placed in bus shelters at local transit bus stops.

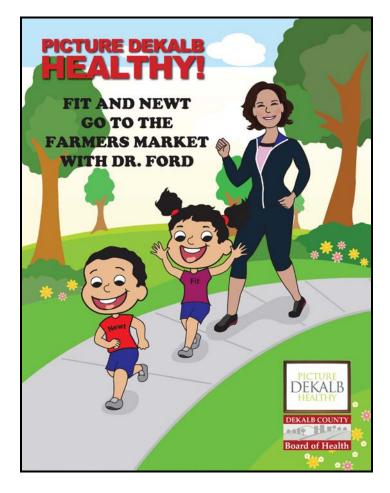
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Above: Outdoor Media Promoting the Mobile Market (2 of 2). These bus kings appeared on the exterior sides of local transit buses.

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Reaching Younger Audiences with Animation:



Above: Cover of Activity/Coloring Book starring Fit, Newt, and DCBOH District Director Dr. Elizabeth Ford. Geared toward preschool age $-4^{\rm th}$ graders.



Above: Sample images from a graphic novel in development, starring villain Baxter Worthington, of Baxter Burgers, and the young heroes who are fighting to protect their garden and take down his corporate empire. Geared toward 5th graders – young adults.