

AgriKids, making moves to end health disparities among rural-dwelling children

Katherine Bell BS, Anna Jackson MS, RDN, LDN, & Wade Seifert BA



Abstract

community assessment was conducted in a rural geographic area, Hardeman County, Tennessee. The community assessment showed high rates of poverty and food insecurity, especially among children residing in the county. Children from rural areas with high rates of poverty are more susceptible to sociodemographic health disparities. This includes increased rates of childhood obesity and other chronic health conditions. Graduate students from the University of Tennessee (UT)-Knoxville worked in coordination with a UT extension program assistant to develop a program focused on school-aged children in Hardeman county. This program, agriKIDS, aims to expand on current participation in the Power of Produce club in Hardeman county, Tennessee by using child-friendly materials to enhance nutrition knowledge and increase acceptance of fruits and vegetables. An online domain was created during the COVID-19 to make all components of agriKids accessible to students. The short-term goal of this project is to increase participation in the POP club with the long-term goal of decreasing health disparities in the county. Program planners developed pretest and posttest evaluation tools for student participants and farmer's market vendors to complete to evaluate results of the primary objective. Implementation of the program has been delayed due to COVID-19 with the projected start in June 2021. This program was developed in coordination with UT extension, funds are available through the United States Department of Agriculture.

Hardeman County, Tennessee Demographics¹

Characteristic Description		Characteristic Data	
Race Subcategories (% of population)			
White, Non-Hispanic origin		55.2%	
African American		42.2%	
Income & Poverty			
Median Household Income (2014-2018)		\$38,651	
Persons in Poverty (%)		23.5%	
Education			
High school Diploma or greater (% of persons 25+)	79.1%		
Bachelor's Degree or greater (% of persons 25+)	11.4%		

Table 1. 2019, Hardeman County, Tennessee Demographics

Statement of the Problem among Priority Population

Children residing in rural counties with high rates of poverty are exposed to a plethora of health disparities. For example, childhood obesity is most prevalent among this subgroup which can increase the susceptibility to a wide range of chronic diseases.²

Hardeman County, Tennessee Childhood FI (%)	State of Tennessee, Childhood FI (%)
20.7%	16.3%

Table 2. 2018 Hardeman County, Tennessee Childhood Food Insecurity (FI) Data Compared to the State³

Problem Statement: There is a critical need to develop an intervention that increases awareness and perceptions of the health benefits of consuming fresh produce and provide reliable access to these healthful foods specifically among rural-dwelling children.

Goals & Objectives

Developing Project Goals: The Power of Produce (POP) Club increases healthy food access, decreases barriers to fresh fruits and vegetables affordability, and is currently underutilized by the priority population.

Primary Goal of agriKids: Increase awareness and participation in POP Club among local Hardeman County elementary school children.

Objectives: Create and disseminate pre and post-evaluations to elicit feedback from participating local elementary school children residing in Hardeman County

Process Objective

Create and disseminate surveys to elicit feedback from farmers by the end of the project

Impact Objective

Compare and contrast POP coin usage data in order to determine an increase in student participation before and after the intervention

Outcome Objective

The use of a validated survey to measure participant knowledge before and after program implementation

Implementation Methods & Materials

Implementation Methods:

- Agrikids Website, on online platform that virtual students may access
- Cooking demonstration Videos
- Monthly recipe cards highlighting seasonal fruits
 & vegetables from the Farmer's Market



Home Cooking Demos Recipe Cards Nutrition Education Resources Food & Event Resources



Figure 1. AgriKids Website

Tagline

agriKIDS, making moves to end health disparities among rural-dwelling children

Slogan

From plant to plate, educate to increase intake

Positioning

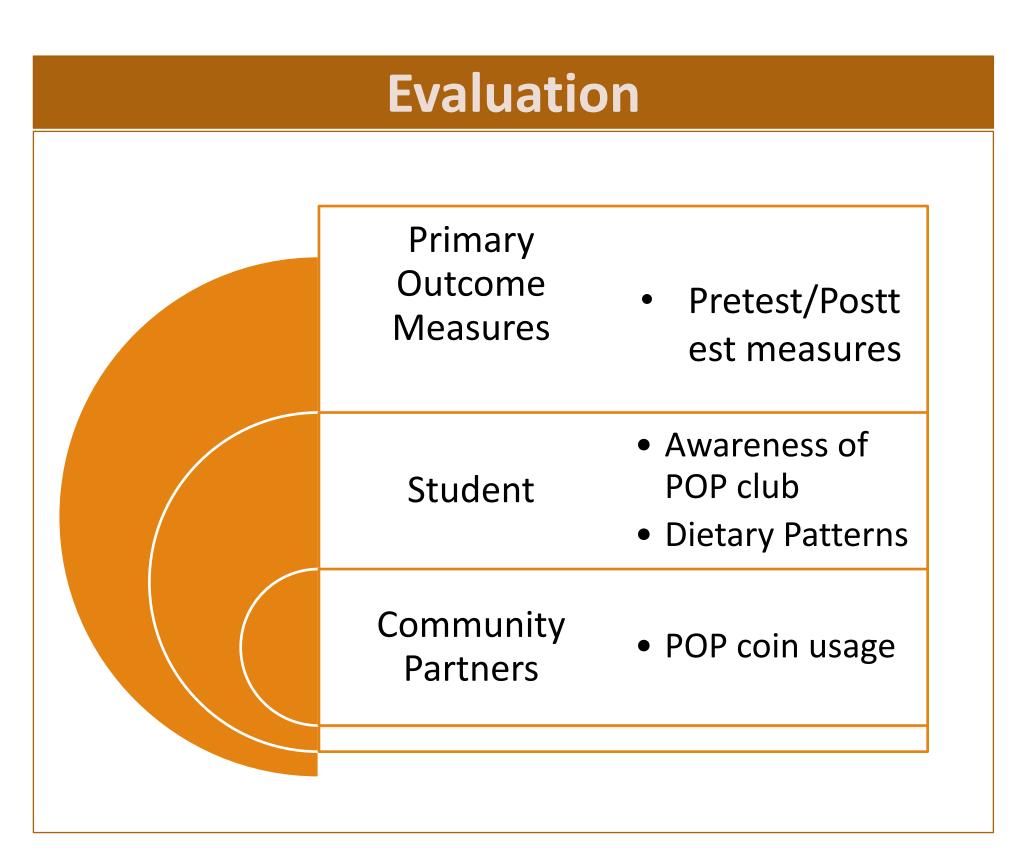
Statement

agriKIDS, connecting

communities to resources

that will enhance health

equity



Results

Due to COVID-19, implementation of this project has been delayed. AgriKids has a projected start date in June 2021.

Discussion & Conclusion

Agrikids was developed due to the increased prevalence of health disparities among rural-dwelling children, specifically in Hardeman County, Tennessee. Agrikids aims to increase access and consumption of healthy foods such as fresh fruits and vegetables for elementary school students in Hardeman County through the POP Club and with collaboration from the Hardeman County Farmer's Market.

There were a few barriers to project implementation identified for this project including participants facing technical difficulties, lack of caregiver supervision in the kitchen, or limited access to recipe items.

Contact Information

Katherine Bell
University of Tennessee, Knoxville
kbell41@vols.utk.edu
https://agrikids1.wixsite.com/website

References

- U.S. Census Bureau QuickFacts: Hardeman County, Tennessee. (n.d.). Retrieved September 13, 2020, from https://www.census.gov/quickfacts/hardemancountytennessee
 Bauer UE, Briss PA, Goodman RA, Bowman BA. Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the
- USA. Lancet. 2014;384(9937):45-52.

 3. Map the Meal Gap. (n.d.). Retrieved August 29, 2020, from https://map.feedingamerica.org/county/2018/child/tennessee/county/hardeman

Acknowledgements

UT Extension Field Preceptor, Mrs. Stephanie Middleton.