Objective: Childhood obesity remains a significant health issue, especially in disparate populations and during the summer months, when millions of children lose access to school-based feeding programs and suffer gaps in meals contributing to an obesogenic environment. The objective of this study is to test the efficacy of a garden-based behavioral, social, and environmental summer intervention for children and parent/adult caregiver (PAC) dyads residing in low-resource communities.

Description: We will conduct a 2-arm randomized controlled trial (RCT) with 240 children (ages 8-11 years) and caregiver dyads randomized to the garden-based intervention or an enhanced control group. The intervention consists of a 10-week weekly group education, produce harvesting, remote motivational interviewing, and novel e-technologies. Assessments for both groups will be collected at orientation (week 0) and immediately following the completion of the intervention (week 10) by trained personnel that are blinded to participants’ treatment arm assignment. Data on program satisfaction, quality of life, and family engagement will be collected via surveys; anthropometrics, physical activity, body composition, and skin carotenoids will be measured objectively.

Evaluation: The current project will evaluate the efficacy of a garden-based intervention aimed at promoting modifiable lifestyle behaviors (diet and physical activity) and improving child-PAC interactions to promote an anti-obesogenic environment for low-resource families during the summer months. We anticipate that compared to control, youths receiving the intervention will exhibit greater improvements in: 1) fruit and vegetable intake; 2) dietary patterns, physical activity, and child-PAC engagement. All baseline measures will be taken at the study orientation, one week prior to the start of the 10-week intervention.

Conclusions: The results of this study will inform the feasibility of a theory-driven garden-based education and feeding program for children from low-resource communities in Central Ohio. The information gleaned from this project will be used to inform, educate, and empower families to establish a best practice-based summer obesity prevention model program, built upon replicable criteria that can be implemented on a national scale.

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