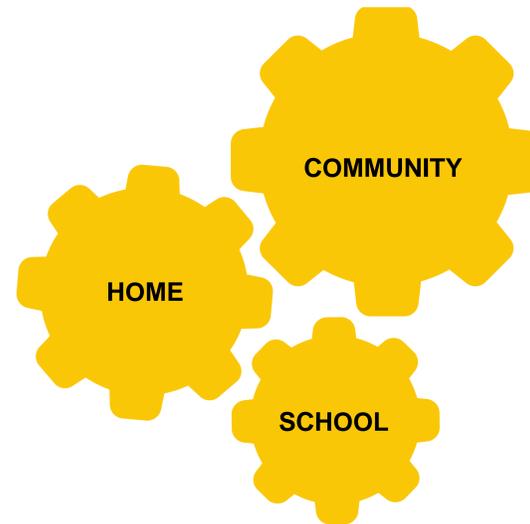




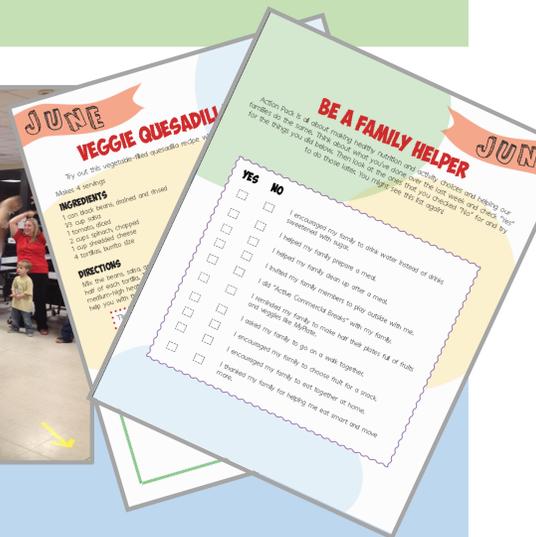
Using the Child as Change Agent for Preventing Childhood Obesity in Rural Georgia: Home Environment Results

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Objectives:

The Action Pack Families Program is a nutrition and physical activity intervention that was implemented in South Georgia during 2013 - 2016 that utilized the child as a change agent to prevent the development of obesity in children and families through school-based and family oriented components. The intervention was guided by social cognitive theory and an ecological framework within the school and home context. This multi-component intervention aimed to reach students, families, schools, and the community. The objective of this study was to determine if the Action Pack Families child as change agent intervention resulted in changes in the home food and physical activity environment of children over the course of a 3-year intervention.



Description:

This study was a group-randomized intervention that included all 10 elementary schools in a county in rural Georgia. Action Pack Families was a child as change agent nutrition and physical activity intervention with school, home, and community based components. The intervention was delivered by trained family nutrition educators in partnership with University of Georgia Extension. The school curriculum was designed to be physically active and experiential. Students were taught strategies for sharing what they learned with their families. In addition to the school-to-home activities that engaged families in intervention activities at home, the family component of the intervention included community events, family fun nights, and communication via Facebook. Community recognition and support of the program was enhanced by participation in local events.

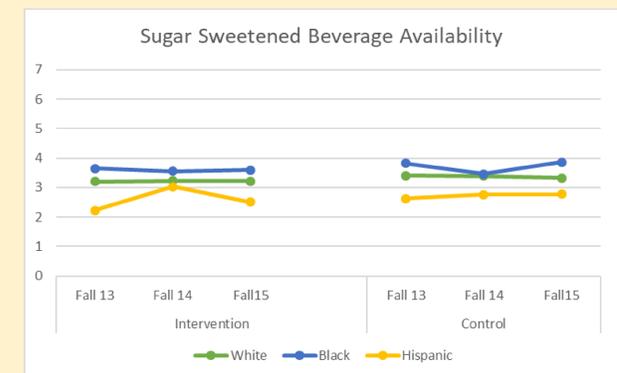
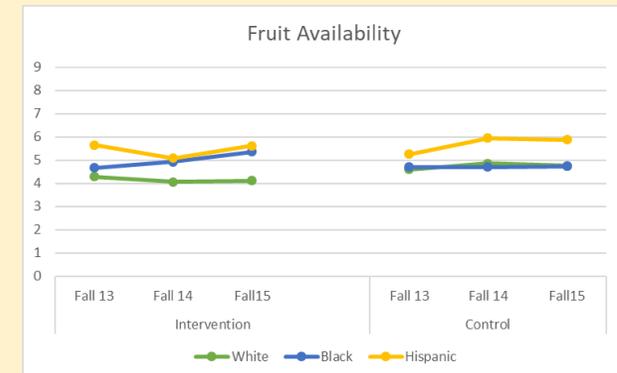
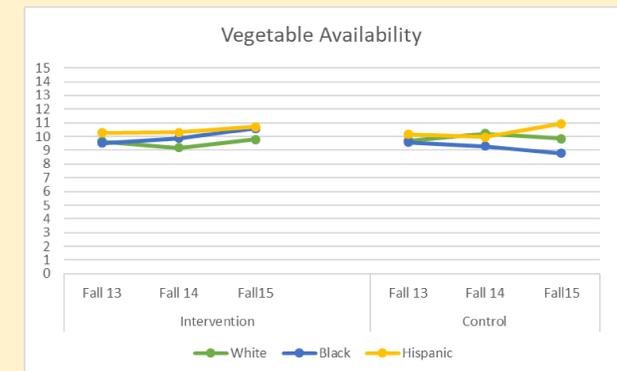
Evaluation:

Child height and weight were collected at school by the research team; diet, physical activity, and home environment factors were self-reported by parents using a paper-pencil survey. Anthropometric data were collected at the beginning and end of each school year from 3rd through 5th grade. Parent survey data were collected at the beginning of each school year as well as at the end of 5th grade.

Demographic Characteristics of Baseline Study Sample

	Total	Intervention	Control
Children			
n	527		
%	100		
Weight Status (n, (%))			
Under/Normal Weight	275 (52.2)	148 (54.6)	127 (49.6)
Overweight	118 (22.4)	60 (22.1)	58 (22.7)
Obese	134 (25.4)	63 (23.3)	71 (27.73)
Race/Ethnicity (n, (%))			
White	293 (55.6)	138 (50.9)	155 (60.6)
Black	123 (23.3)	86 (31.7)	37 (14.5)
Hispanic	111 (21.1)	47 (17.3)	64 (25.0)
$\chi^2(2)=22.70, p < 0.001$			
Sex (n, (%))			
Male	288 (54.7)	146 (53.9)	142 (55.5)
Female	239 (45.4)	125 (46.1)	114 (44.5)
Parents or Guardians			
n	527		
%	100		
Education (n, (%))			
Some High School or Less	129 (24.5)	64 (23.6)	65 (25.4)
High School Graduate/GED	119 (22.6)	65 (24.0)	54 (21.1)
Technical School or Some College	148 (28.1)	81 (29.9)	67 (26.2)
College Graduate	105 (19.9)	52 (19.2)	53 (20.7)
Missing	26 (4.9)	9 (3.3)	17 (6.6)
Family Income (n, (%))			
Under \$15,000	161 (30.6)	83 (32.0)	78 (30.5)
\$15,000 - \$34,999	184 (34.9)	102 (37.6)	82 (32.0)
\$35,000 - \$54,999	61 (11.6)	31 (11.4)	30 (11.7)
\$55,000 and above	124 (23.7)	43 (15.9)	48 (18.8)
Missing	30 (5.7)	12 (4.4)	18 (7.0)
Weight Status (n, (%))			
Under/Normal Weight	128 (24.5)	62 (22.9)	67 (26.2)
Overweight	125 (23.7)	64 (23.6)	61 (23.8)
Obese	196 (37.2)	106 (39.1)	90 (35.2)
Missing	77 (14.6)	39 (14.4)	38 (14.8)
Race/Ethnicity (n, (%))			
White	257 (48.8)	130 (48.0)	127 (49.6)
Black	132 (25.1)	92 (34.0)	40 (15.6)
Hispanic	138 (26.2)	49 (18.1)	89 (34.8)
$\chi^2(2)=31.7, p < .0001$			

Home Environment Outcomes



Conclusions and Implications:

Previous cross-sectional analyses of baseline data from this study suggested that the home environment does not necessarily influence the dietary behavior of children in the same way across all racial/ethnic groups. An analysis of intervention effects on home environment, dietary, and activity variables showed that the intervention had small effects on variables for changes in the home environment with the effect varying across racial/ethnic groups. Using children as change agents might be effective in altering some home environment variables that could aid in preventing childhood obesity.



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