

Development and Implementation of a Summer Youth Nutrition Education and Physical Activity Intervention in a Rural Mississippi Delta Community

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Abstract

Purpose: To implement a sustainable community based intervention that encourages healthy eating and physical activity with potential for preventing obesity among children ages 4-12 years. Presented is descriptive information of the development of a summer nutrition and physical activity program for youth enrolled in Sanders Elementary School. The program explored the acceptance of a non-traditional and unfamiliar sport by rural African American children and their willingness to engage in nutrition related activities and try new foods. **Methods:** Children were recruited from K-6 grades at their rural school with parental consent. Local adults and college students were trained as soccer coaches. Six soccer teams were organized and a series of nutrition and cooking activities were begun. A questionnaire was used to assess the children's willingness to try new foods followed by offering these. **Results:** Ninety students and parents were willing to participate in this unfamiliar sport during which American television first broadcast the World Cup in prime time. Attendance at the nutrition lessons averaged only about 30-40 students due to lack of transportation to the education site. **Conclusions:** This community-based program served as a model for developing nutrition and physical activity interventions in rural communities; encouraged participation of children, parents, and other community residents; increased physical activity and healthy eating among rural African American children. The community became engaged in this non-traditional but effective program that promises to be a sustainable tool in prevention of obesity among these high-risk rural youth.

Introduction

In order to engage a community in research interventions that are acceptable and meet the community's particular needs, a community resource assessment was conducted by the Delta Nutrition Intervention Research Initiative (Delta NIRI) consortium. This inventory examined nutrition and physical activity programs provided by agencies and organizations in three rural communities in the Lower Mississippi Delta in the States of Arkansas, Louisiana, and Mississippi, USA. The focus was on 1) types of nutrition and physical activity services and programs available; 2) unique strengths within these communities that could be mobilized to plan, implement, and sustain interventions; 3) gaps and barriers to nutrition and physical activity that interventions could address; and 4) resources to implement the interventions. Only minimum nutrition education and physical activity programs and services were found to be available for children and youth when not in school. Neighborhood facilities, resources, and access to transportation for after school or summer programs were missing.



Objective

Describe the implementation of a sustainable community-based sports and nutrition program that would encourage physical activity and healthy eating with the potential for preventing future obesity among Mississippi children whose families are among the most obese in the United States. The program explored the acceptance of a non-traditional and unfamiliar sport by rural and largely African-American children and their willingness to engage in nutrition-related activities including trying new foods.



Methods

The intervention consisted of two components: physical activity (soccer) and nutrition education classes that promoted knowledge of and exposure to unfamiliar fruits and vegetables. Children were recruited from Grades K-6 at Sanders Elementary School. The physical education teacher distributed applications and parental consent forms to students at school and forwarded the completed forms to Hollandale Nutrition Intervention Research Initiative program coordinator. Approximately 120 completed applications were received, and 90 children participated in the eight-week program learning the basics of the sport. Six teams were organized and grouped by ages: 4-6 years, 7-9 years, and 10-12 years. The size of the teams varied by age group. Each team was designated by names of fruits and vegetables: "Mighty Orange", "Rolling Corn", "Strong Squash", "Amazing Apples", "Powerful Peas", and "Blasting Berries." Each team's color was designed by the color of the fruit or vegetable. Each team was trained and coordinated by a coach and an assistant coach. Playing jersey, socks, and shin guards were provided to the players.

A soccer field was developed in a park area donated by the City of Hollandale. Games were held weekly on Wednesday and Friday evenings and Saturday mornings. Nutrition education activities were conducted on Tuesday and Thursday mornings for eight weeks by the Mississippi State Cooperative Extension partner. These sessions focused on healthy food choices and gave the children the opportunity to have hand-on-experience in preparing and tasting unfamiliar healthy snacks. Each child received a trophy for participating in the program.

Conclusions

The greatest barrier was getting the African-American community to accept an unfamiliar sport as a viable means of physical activity. This community-based program served as a model for developing nutrition and physical activity interventions in rural African-American communities; encouraged participation of children, parents, and other community residents; and increased physical activity and healthy eating among rural children. The community became engaged in this non-traditional but effective intervention that promises to be a sustainable tool in the prevention of obesity among these high-risk rural youth.

References

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