

Childhood Obesity

Greening L, Harrell KT, Low AK, et al. **Efficacy of a School-Based Childhood Obesity Intervention Program in a Rural Southern Community: TEAM Mississippi Project.** *Obesity (Silver Spring)*. 2011 Jun;19(6):1213-9.

A healthy lifestyle school-based obesity intervention was evaluated in a rural southern community where the rate of obesity ranks as the highest.

School-age children (N = 450) ranging from 6 to 10 years of age (M(age) = 8.34) participated in monthly physical activity and nutritional events during a 9-month academic year. The children's nutritional knowledge, number of different physical activities, fitness level, dietary habits, waist circumference, BMI percentile, and percentage body fat were measured pre- and postintervention. Changes on these measures were compared to students in a school employing the school system's standard health curriculum.

Regression analyses with residualized change scores revealed that the intervention school showed statistically significant improvement in percentage body fat, physical activity, performance on fitness tests, and dietary habits compared to the control school. There was no evidence of differences in outcomes based on gender or ethnicity/race.

With rates of obesity and overweight reaching 50% in southern rural communities, intervening early in development may offer the best outcome because of the difficulties with changing lifestyle behaviors later in adulthood. A population-based approach is recommended over a targeted approach to cultivate a culture of healthy lifestyle behaviors when children are developing their health-care habits.

Evidence suggests that both boys and girls, and African-American and white children can benefit equally from such interventions.