

Background and Significance

- The United States has experienced a continuous increase in the prevalence of childhood obesity. In Texas, more than of 40% of middle school students are above a healthy weight, ranking third among the states with the highest prevalence of childhood obesity.¹
- The prevalence of childhood obesity during 2004 and 2005 was higher than of the national average in according to the National Health and Nutrition Examination Survey.^{2,3} Children in middle school are particularly faced with developmental issues relating to body image and self-esteem. The alarming prevalence trends in childhood obesity led researchers, practitioners and policymakers to focus attention on the long-term consequences because there are high costs during adulthood obesity-related morbidity and mortality.⁴
- The percentage of obese students in Texas is much higher among minorities. The highest prevalence of obesity is among Hispanic boys at all grade levels, Hispanic girls in fourth-grade and African American girls in the fourth and eleventh-grades.⁵

Purpose

- The purpose of this study was to identify pre-intervention differences on nutrition practices of middle school students by actual, perceived weight status, age, gender and ethnical background.

Methods

Recruitment: Four hundred and sixteen (416) students, males and females, ages 8-12, predominantly underserved, attending selected middle schools in Waller County, Texas. In this county, the proportion of attendants with free and reduced lunch varies from 61% to 71% of all the students.

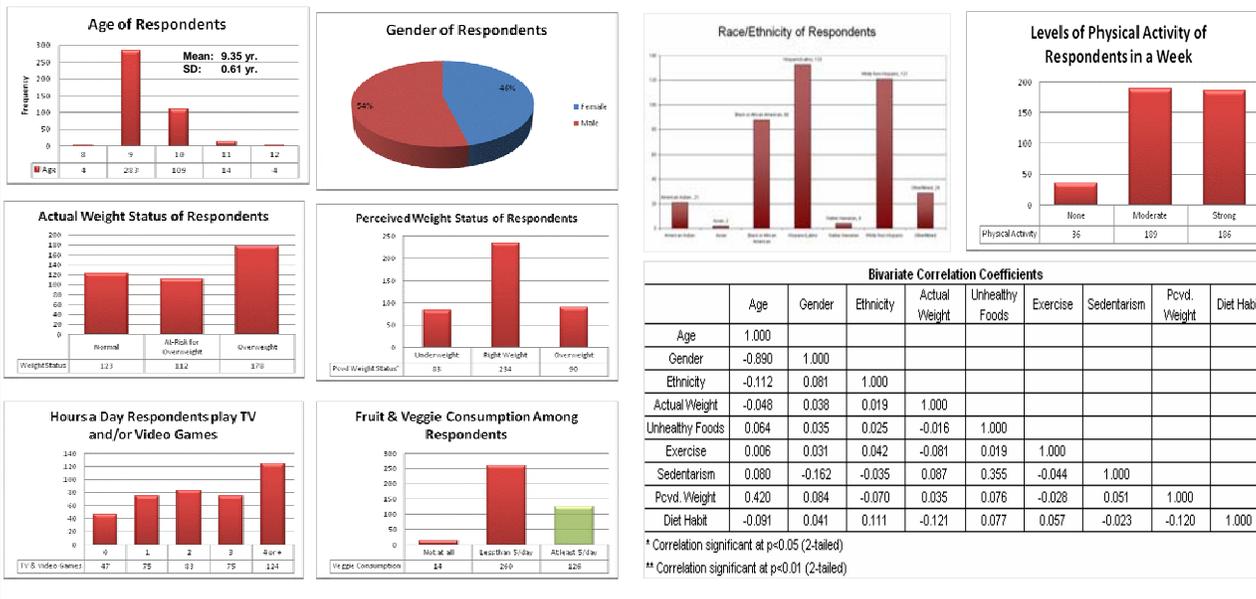
Exclusion Criteria: None.

Data Collection: Voluntarily self-administered survey; pre-tested for reliability and validity.

Measures: Demographic, nutrition variables included in the School Physical Activity and Nutrition Project survey. A total of 74 questions in 2 sections assessing information on perceived weight, nutrition knowledge (NK), nutrition behavior (NB) and physical activity (PA) among participants.

Data analysis procedures: Descriptive statistics, inferential analysis: multiple regression analysis.

Results



Conclusions/Implications

- There were no significant differences on nutrition practices among this group of middle school students by selected predictors.
- Almost 70.2% (n=290) of the respondents were above a healthy weight.
- However, 78% (n=316) perceived themselves to be either in the right weight or to be underweight.
- Even though reported levels of physical activity are acceptable, more than half of respondents spend more than 2 hours a day either watching TV or playing video games.
- Interventions based on these predictors are not likely to be successful.

Limitations

- Convenience sample and cross-sectional study design.
- Robustness of statistical conclusions and external validity reduced.
- Environmental variables were not included to influence behavior.

Key References:
 1. Ogden, C.L., Flegal, K.M., Carroll, M.D., Johnson, C.L. (2002). Prevalence and trends in obesity among US children and adolescents. *Journal of the American Medical Association*, 288, 1728-1732.
 2. Hoelscher, D.M., Perez, A., Lee, E.S., Sanders, J., Kelder, S.H., Day, R.S. & Ward, J. (2006) School Physical Activity and Nutrition (SPAN) III Survey, 2004-2005. UT School of Public Health, Houston.
 3. Ogden, C.L., Carroll, M.D., Curtin, L.R., et al. (2006). Prevalence of obesity and obesity in the United States, 1999-2004. *Journal of the American Medical Association*, 295, 1549-1555.
 4. Must, A. & Strauss, R.S. (1999). Risks and consequences of childhood and adolescent obesity. *International Journal of Obesity* (1999) 23, Suppl 2, S24-S11.
 5. Hoelscher, D.M., Day, R.S., Lee, E.S. et al. (2004). Measuring the prevalence of obesity in Texas schoolchildren. *American Journal of Public Health*, 94:1002-1008.