# School Physical Activity and Nutrition Survey (SPAN) 2008 Results for McLennan County

# Introduction

According to the National Health and Nutrition Examination Survey (NHANES) 2003-2003-2004, 18.8% of children ages 6-11 years were overweight. Between 1988 – 94 and 2003-04 children who were classified as overweight increased from 11% to 19% in 6-11 year olds.

In 2004-05, the Waco-McLennan County Public Health District was funded through the Texas Department of State Health Services (DSHS) to conduct our initial SPAN assessment in McLennan County. During this assessment the Health District, in partnership with the Texas AgriLife Extension Office, collected data on over 2,000 students in the 4<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grades. In 2008, data collection on childhood obesity was needed to assess the effectiveness of interventions and current programming aimed at reduction in childhood obesity.

As in 2004, a survey assessed food choices, behaviors, nutrition knowledge, and physical activity levels. Trained SPAN staff took height and weight measurements. These measurements were taken from six school districts within McLennan County. Those participating school districts were Connally, Robinson, Waco, Midway, Lorena, and West. These school districts and the campuses were chosen based on demographics and student population. A total of 647 surveys were completed for 4<sup>th</sup> grade students in McLennan County. The demographics of the students participating are represented in Table 1.

Table 1: Demographic Characteristics of McLennan County Students in SPAN 2008

	4 <sup>th</sup> Grade		
Age in Years (Mean)	9.8		
Gender (%)			
Males	50		
Females	50		
Race/Ethnicity (%)			
African American	16.4		
Hispanic	29		
White/Other	54.6		

## Results:

Table 2: Body Mass Index Comparison, 4<sup>th</sup> grade students, 2005 and 2008\*

	Normal	Overweight	Obese
2004-05	61	17	22
2008-09	57.1	18.8	24.1

\*In 2005, the terminology for children between the 85<sup>th</sup> and 95<sup>th</sup> percentile for weight was "At risk for overweight". In 2008, the terminology for children meeting those same criteria is "Overweight". In 2005, the terminology for children over the 95<sup>th</sup> percentile for weight was "Overweight". In 2008, the terminology for those children meeting those same criteria is "Obese". Although the terminology changed the criteria did not.

Chart 1: Body Mass Index Comparison, 4<sup>th</sup> grade students, 2005 and 2008

# Body Mass Index Comparison 2005 and 2008

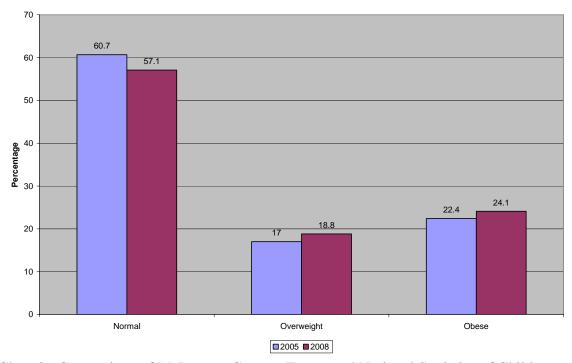
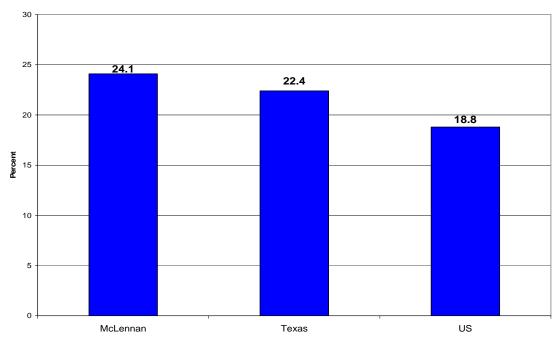


Chart 2: Comparison of McLennan County, Texas, and National Statistics of Children who are Obese (>= 95<sup>th</sup> percentile for weight)\*



\*McLennan County statistics – SPAN 2008, Texas Statistics – SPAN 2004, and US statistics – NHANES 2003-04, children aged 6-11.

Table 3: Body Mass Index by Gender for 4<sup>th</sup> Grade (Mean and Percent)

,	Mean BMI	Normal	Overweight	Obese
Total	21.7	57.1	18.8	24.1
Males	20.1	60.5	14.9	24.6
Females	23.4	53.6	22.4	24.0

Chart 3: Body Mass Index by Gender

### **Body Mass Index Gender Comparison**

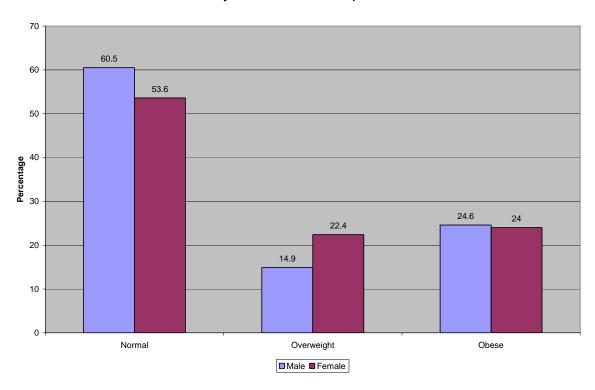


Table 4: Body Mass Index by Race/Ethnicity

	Normal	Overweight	Obese
White, non-	62.5	21.3	16.1
Hispanic			
African-American	71.4	14.3	14.3
Hispanic	39.3	19.6	41.1
Other	61	17	22

Chart 4: Body Mass Index by Race/Ethnicity

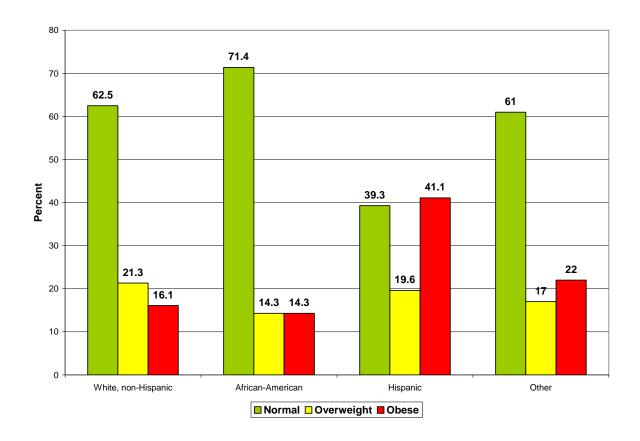


Chart 5: Body Mass Index by Race/Ethnicity and Gender, Males

## Body Mass Index for Males by Race/Ethnicity

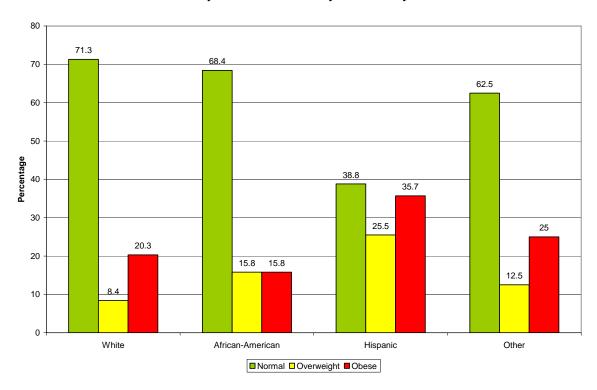
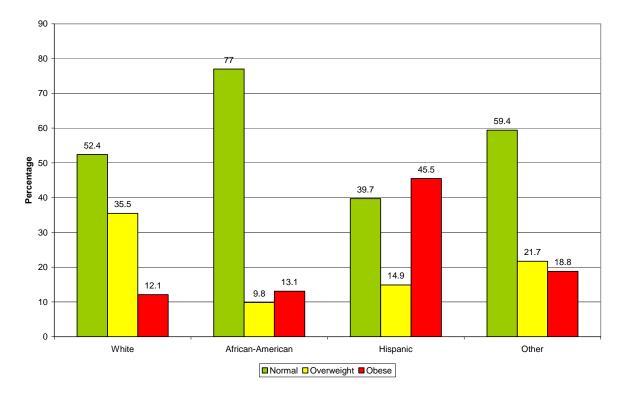


Chart 6: Body Mass Index by Race/Ethnicity and Gender, Females

#### **Body Mass Index for Females by Race/Ethnicity**



- Hispanic students were 2.8 times more likely to be overweight or obese when compared to non-Hispanic students.
- Hispanic females (45.5% obese) are at a higher risk than Hispanic males (35.7% obese).
- Males are 24.2% less likely to be overweight or obese in comparison to females. This is a difference from data collected in 2004-05, in which males were 1.3 times more likely to be overweight or obese in comparison to females.
- Only 11% of 4<sup>th</sup> graders are eating three or more servings of vegetables per day and only 15.9% are eating three or more servings of fruit per day.
- 45.6% drank at least one non-diet soda per day. In comparison, 38% of Texas children in 2007 stated that they drank at least one non-diet soda per day. This is a reduction from 2004-05, in which 51% of 4<sup>th</sup> graders were consuming at least one non-diet soda per day.
- 56.4% of the students did not meet the recommended levels of physical activity (Doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of 30 minutes for 5 or more days in a week)
- 34.9% watched television 3 or more hours per day on an average school day. In comparison, 39% of Texas children watched 3 or more hours.