School Physical Activity and Nutrition (SPAN) Survey 2008

Results for McLennan County
What is SPAN?

- SPAN is the School Physical Activity and Nutrition Project.
- The goal of SPAN is to monitor the prevalence of overweight/obesity in school-aged children in Texas.
- In addition, SPAN identifies behavioral factors in Texas students that may underlie obesity.
Who Conducted SPAN?

- The project was coordinated and supported by the Waco-McLennan County Public Health District.

- Volunteers were utilized from various organizations within and outside of McLennan County.
Who Conducted SPAN?

- Volunteers included:
  - Texas Department of State Health Services (DSHS)
  - Americorps
  - Master Wellness, Texas AgriLife Extention

- All persons collecting data were trained by WMCPHD staff.
Some questions in the survey ask the students questions about “yesterday.” These questions cannot provide information about “typical” individual behaviors, since it is only 1 day of data. However, if we look at the aggregate results of a group of students, we can get a reasonable idea of what the group is doing overall.
Data Analysis

- These results are a snapshot of the 4th grade population in McLennan County, in the state of Texas during the 2008-09 academic school year.

- *The results are statistically weighted and can be used as representative data for the county.*
Why is SPAN important?

- According to NHANES 2003-04, 18.8% of children and adolescents ages 6-11 years are obese.
- SPAN provides objectively measured height and weights at the local level.
- SPAN will also allow local organizations the ability to demonstrate a need when competing for grant funding or intervention opportunities.
McLennan County Participation

- **District(s) Participating:**
  - Connally ISD, Lorena ISD, Midway ISD, Robinson ISD, Waco ISD, and West ISD

- **Students Participating:**
  - 4th Grade: 647

- **Gender Distribution:**
  - 50% Female
  - 50% Male

- **Mean Age = 9.8 years**
Racial/Ethnic Distribution (%)

Racial/Ethnic Composition of SPAN participants, 2008

- White: 35.9%
- African-American: 16.4%
- Hispanic: 29%
- Other: 18.7%
Definitions

- **Obese** for children and adolescents is defined as $\geq 95^{th}$ percentile based on body mass index (BMI) 2000 CDC Growth Charts. [http://www.cdc.gov/growthcharts/](http://www.cdc.gov/growthcharts/)
  - Charts were developed based on cross-sectional nationally representative data from previous surveys

- **Overweight** is defined as $\geq 85^{th}$ but $< 95^{th}$ percentile based on BMI charts
Body Mass Index (%) by Grade

*Overweight is >= 85th Percentile for BMI by Age/Sex

**Obese is >= 95th Percentile for BMI by Age/Sex
How Do We Compare(%)?

Overweight is $\geq 95^{\text{th}}$ Percentile by Age/Sex
McLennan – SPAN 2008
Texas – SPAN 2004
United States – NHANES 2003-04, children aged 6-11 years
Fourth Grade - Results

- Hispanic students were 2.8 times more likely to be overweight or obese when compared to non-Hispanic students.

- Female students were 1.3 times more likely to be overweight or obese when compared to male students.
Body Mass Index by Gender (%)

- Normal:
  - Male: 60.5%
  - Female: 53.6%

- Overweight:
  - Male: 14.9%
  - Female: 22.4%

- Obese:
  - Male: 24.6%
  - Female: 24%
Fourth Grade - Results

- Only 16% of 4th graders were eating 3 or more servings of fruit/day and only 11% are eating 3 or more vegetables/day.
- The Dietary Guidelines for Americans 2005, based on a daily intake of 2,000 calories, children should consume:
  - 4-5 Servings of Vegetables per day
  - 4-5 Servings of Fruit per day (not including fruit juices)
- 35.2% of children ate at a restaurant (sit down or fast food) at least once per day.
Fourth Grade – Results

- In 2005, 51% of 4th graders drink at least one non-diet soda per day, 6% of those are consuming 3 or more sodas per day.
- In 2008, 45.6% of 4th graders drank at least one non-diet soda per day, 7.4% of those are consuming 3 or more sodas per day.
- Although this does show a reduction in the percent of students drinking non-diet soda, it still represents a large issue.
Fourth Grade – Results

- In 2005, 29% of 4th graders are viewing more than 3 hours of TV per night.
- In 2008, 34.9% of 4th graders were viewing more than 3 hours of TV per night.
- According to the Texas YRBSS, in 2007 39% of children in Texas were viewing 3 or more hours of TV per night.
Fourth Grade – Results

- 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
- Children who participated in less than 5 days per week of vigorous exercise were 1.3 times more likely to be overweight and/or obese.
Fourth Grade - Results

- Decrease in the percentage of students who are participating in physical activity from 2005 to 2008.
  - In 2005, 72.4% of children were participating in at least one team sport within the last year. In 2008, only 70.4%.
  - In 2005, 42.5% of children were currently taking part in other organized physical activities or taking lessons, such as martial arts, dance, or gymnastics. In 2008, only 35.7%.
  - In 2005, both of these activities were associated with a lower risk for overweight or obesity.
Fourth Grade – Results

- Children were asked questions about how they perceived health and diet and its effects.
- What you eat can make a difference in your chances of getting heart disease or cancer?
  - 31.2% answered “Yes”
- People who weigh much more than they should have more health problems than other people?
  - 43.7% answered “Yes”
- Skipping meals such as breakfast or lunch makes it hard for me to do well in my classes
  - 21.9% answered “Yes”
Summary

- These results confirm the high prevalence of overweight children in our community.
- Hispanic students were more likely to be overweight or obese.
  - However, all races/ethnicity had a high percentage of overweight or obese children
- Females were more likely to be overweight or obese.
- 45% of Hispanic females who participated in the survey were obese.
- At the school district level, two districts reduced their percent of overweight and obese children.
Suggested Interventions

- Programming and interventions should, when possible, be directed towards the Hispanic Community.
- Community partnerships should be created to increase the number of after-school programs and to increase participation in these events.
- More education provided for children on the effects of overweight and obesity and poor nutritional choices (or positive effects of healthy eating)
Questions?