

LATINO OBESITY CRISIS:

An equity perspective in school prevention efforts



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LATINO OBESITY CRISIS: EQUITY PERSPECTIVE IN SCHOOL PREVENTION EFFORTS

I. INTRODUCTION

Across the country obesity is recognized as a problem of epidemic proportion. Rich Hamburg, Deputy Director of Trust for America's Health, describes it as a problem 30 years in the making.¹ Trust for America's Health has also found that "Adult obesity rates increased in 16 states in the past year and did not decline in any state. Twelve states now have obesity rates above 30 percent.² Four years ago, only one state was above 30 percent. In essence obesity rates are skyrocketing. If you are obese, you are more likely to develop type 2 diabetes, high blood pressure, high cholesterol and triglycerides, coronary artery disease, stroke, and sleep apnea, among other conditions."³

McKinsey & Company, a global management consulting firm, estimates U.S. obesity costs at \$450 billion annually – individuals \$140 billion, health care payer's (public and private) \$160 billion, and employer costs \$120 billion, respectively.⁴ McKinsey argues that locally led social movements are required to reverse the epidemic, and that governments are in the best position to catalyze these movements.⁵

Indeed, there is an increasing demand for action to address the epidemic by all levels of governments, private and non-profit service sectors, public schools, and the research community. First Lady Michelle Obama's call for local and national initiatives and partnerships that target major risk factors for obesity and being overweight resulted in the White House Task Force on Childhood Obesity categorizing major risk factors:⁶

- **Material incentives**, such as the cost of food or the desire to avoid poor health;
- **Social norms**, such as the nutritional and physical activity habits of friends and family, which influence us greatly; and
- **The broader environment**, such as whether grocery stores and playgrounds are nearby or far away.

The White House Task Force urges that policy recommendations must address these broad contributors with changes in nutrition and physical activity and suggests that schools may provide the natural focal point to lead such changes for children.

¹ Makris, Ioanna, Texas 12 Most Obese State, Study Find, Texas Tribune July 7, 2011 available at <http://www.texastribune.org/texas-health-resources/health-reform-and-texas/texas-12th-most-obese-state-study-finds/print/>

² Trust in America's Health, F as in Fat: How Obesity Threatens Americas Future, Available at <http://healthyamericans.org/report/88/>

³ See <http://www.cdc.gov/obesity/causes/health.html>

⁴ Why governments must lead the fight against obesity, McKinsey Quarterly, McKinsey & Company, October 2010.

⁵ See Id.

⁶ Let's Move, White House Task Force on Childhood Obesity, Report to the President, May 2010 (8).

Obesity in children, if not significantly reduced or eliminated, will result in long-term chronic health problems into adulthood, a shortened life-span, and the exponentially worsening negative consequences of reduced economic productivity at the local and national levels. For some racial and ethnic groups and economically disadvantaged populations, the epidemic has even greater disproportionate impacts.⁷

This policy paper discusses obesity among Latinos from a civil rights equity perspective and frames it within emerging policy and environmental strategies for preventing childhood obesity.⁸ Public schools are a vital component to providing solutions to childhood obesity; especially the schools where low-income students that receive free or reduced lunch are most prevalent. See appendix 1. The equity frame, which includes public national, state, and local policies, as well as organizational and household policies, can influence both changing social norms and behaviors. Increasing equitable access to resources and support for maintaining a healthy and active lifestyle are vital tools in addressing childhood obesity in the Latino community. Under this frame, policies target some of the social determinants or factors impacting obesity and poor health - the situational environments of schools and the surrounding communities that include the:

- **Physical Environment:** e.g., Healthy School Lunch Options, Limits To Competitive Healthy Food Options in and near Schools, and Available Well-Stocked Affordable Healthy Foods Grocery Stores, Local Ordinances that Prohibit Unhealthy Marketing Near Schools
- **Economic Environment:** e.g., Reduce Pricing for Healthy Snacks, Effective Enrollment and Access To Healthy Foods Through WIC
- **Social Environments:** e.g., Parent and Teacher Health Promotion and Policy Advocacy, and Access to Community Support Resources that Facilitates Healthy Behaviors
- **Communications Environments:** e.g., School Decision-Makers Encouraging Effective Prevention Messaging, and Countering and Challenging Unhealthy Fast Food Marketing and Advertising

Environmental factors are targets for change because of ever-increasing research demonstrating how they contribute to the obesity epidemic. Factors include increased attention to nutrition and physical exercise in school policies and curriculums; the surrounding neighborhood economic and built environments that perpetuate unhealthy behaviors; and the lack of infrastructure needed to support good health and lasting changes.⁹

From an equity perspective it is critical to know what opportunities and capacities exist for schools and families among each of these environments to address obesity. Given recent funding

⁷ National, State, and Local Disparities In Childhood Obesity, Health Affairs, March 2010, 29.3.

⁸ Accelerating Evidence Reviews and Broadening Evidence Standards to Identify Effective, Promising, and Emerging Policy and Environmental Strategies for Prevention of Childhood Obesity. Annual Review, Public Health 2011, 32:199–223.

⁹ See Why Place and Race Matter, Policy Link, 2011; School Policies and Practices to Improve Health and Prevent Obesity: National Secondary School Survey, Volume 1, April, 2011; Fast Food FACTS: Evaluating Fast Food Nutrition and Marketing to Youth, Yale Rudd Center for Food Policy and Obesity, November, 2010; Neighborhoods and Health, Annals New York Academy of Science, 1186: 125 -145; F as in Fat: How Obesity Threatens America Future, June 2011, Trust for America’s Health and the Robert Wood Johnson Foundation.

cuts in education, are schools able and willing to take on obesity-related education and prevention mandates? Questions such as the following are important given historical and continued inequities in public education funding, heavily segregated schools, public school challenges to reduce the high drop-out rates, and economically disadvantaged neighborhoods.

- Specifically, do Latino minority-majority enrolled school districts have sufficient resources to support their nutritional, physical exercise or health education curricular activities?
- Are local governments and the private-sector partnering at the neighborhood level with schools, community organizations, and parents targeting investments in the built-environment (e.g., parks, walking and biking trails, healthy food stores, and safety)?
- Does the leadership support empowerment and policy involvement by community residents and parents?
- What metrics are we going to use that will help us determine success in reducing obesity in school children from the primary to secondary levels?
- What criteria will be utilized to identify evidence-based programs demonstrating effective obesity reduction results among children, especially Latino children, in which language, culture, and family differences are important considerations?

Policymakers must engage in these discussions, contribute ideas, and be vigilant in monitoring and assessing policies aimed at reducing obesity in children, especially those coming from economically disadvantaged homes. Through equitable policies and allocation of resources, Texas should aim for an actual reduction in obesity rates, a decrease in the number of health at-risk children, and document continuing health improvements over the next decade. In addition, success should be measured by increases in student academic performance, school retention, and higher graduation rates along with reductions in the childhood obesity rates.

II. LATINO HEALTH DISPARITIES AND ENVIRONMENTAL FACTORS IN OBESITY

A. Texas Obesity Crisis

Texas has the 12th highest rate of adult obesity in the nation at 30.1 percent and the 7th highest rate of overweight youths (ages 10-17) at 20.4 percent, according to a report by Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF).¹⁰ In 2008, 30 percent of low-income children (ages 2-5) enrolled in Texas' Women Infants and Children (WIC) Program were already overweight or obese.¹¹ In 2009, almost two-thirds (66.7%) of Texas adults were classified as overweight or obese.¹²

¹⁰ *F as in Fat: How Obesity Threatens America Future*, June 2011, Trust for America's Health and the Robert Wood Johnson Foundation.

¹¹ *A Report to the Texas Legislature from the Interagency Obesity Council*, 2010 (Update of the 2009 Report to the Legislature from the Interagency Obesity Council, as mandated by Chapter 114 of the Health and Safety Code (Senate Bill 556, 80th Regular Session of the Texas Legislature) and revised per Senate Bill 870 passed during the 81st Regular Session.)

¹² *2009 Texas Behavioral Risk Factors Surveillance System*, Center for Health Statistics, Department of State Health Services. Available online at: http://www.dshs.state.tx.us/chs/brfss/query/brfss_form.shtm

These statistics, while alarming do not adequately convey the negative health and economic costs at the individual, family, and community levels as recently reported by the Texas State Comptroller.¹³ It cites that in two decades, the prevalence of obese Texas adults doubled from 12.3 percent in 1990 to 29.5 percent in 2009, and that 20.4 percent of Texas children aged 10 to 17 were obese, compared to 16.4 percent of U.S. children. According to the U.S. Surgeon General, overweight children have a 70 percent chance of becoming overweight or obese as adults. That number jumps to 80% if they have a parent who is overweight or obese.¹⁴ It's estimated that by 2040 the number of overweight Texas adults will increase by 94 percent and the number of obese adults will increase by 174 percent, suggesting that nearly 75 percent of Texas adults will be overweight or obese in 2040 — about 20 million people.¹⁵

Obesity is burdening Texas with enormous health and economic costs which will continue to increase if effective policy and program actions are not implemented to reverse current trends. The State Comptroller's 2007 study estimated the costs to Texas businesses associated with obesity-related health care, absenteeism, disability and decreased productivity at \$3.3 billion annually.¹⁶ In 2009, the estimate increased to \$9.5 billion annually and the State Comptroller now projects costs of \$32.5 billion annually by 2030.¹⁷

As noted, obesity brings exorbitant health care costs and health implications. Among children, the health and education related impacts begin before children enter their primary school education. According to an Institute of Medicine study, almost 10 percent of infants and toddlers carry excess weight for their length, and slightly more than 20 percent of children between the ages of two and five already are overweight or obese.¹⁸ In schools, obesity affects many areas of academic development, including attendance, behavior, and grades.¹⁹

B. Latino Health Disparities and Obesity

State demographic trends impacted by Latino population growth, particularly children, have current and growing implications for efforts to reverse the Texas obesity epidemic. Unfortunately, obesity among Latino children, while acute, is not a singular health issue. Obesity is situated in the documented health disparities and inequities experienced by many

¹³ Gaining Costs, Losing Time: The Obesity Crisis in Texas, Texas Comptroller of Public Accounts, February, 2011.

¹⁴ The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, January 11, 2007, Office of the Surgeon General.

¹⁵ A Battle We Can't Afford to Lose: The Burden of Overweight and Obesity in Texas - The Costs in Dollars and Lives, Texas Department of State Health Services, 2011.

¹⁶ Counting Costs and Calories: Measuring the Costs of Obesity to Texas Employers, Texas Comptroller of Public Accounts, March 2007.

¹⁷ Gaining Costs, Losing Time: The Obesity Crisis in Texas, Texas Comptroller of Public Accounts, February, 2011.

¹⁸ Early Childhood Prevention Policies, Institute of Medicine, Report Brief, 2011.

¹⁹ See The Relationship between Relative Weight and School Attendance among Elementary Schoolchildren, Obesity Vol. 15 No. 8 August 2007, 2157–2161; Childhood behavioral problems predict young adults' BMI and obesity: evidence from a birth cohort study, Obesity, Vol. 17, No. 4, April 2009; Healthy Steps Toward Student Achievement, Research-Based Recommendations for Policy and Practice, The California Health Student Research Project, May 2011.

Latino children.²⁰ Research and policy reports are increasingly underscoring the correlations between a child's home and neighborhood environmental conditions, poverty, education, health care access, and food insecurity to health disparity outcomes – e.g., obesity, pre-diabetes risk, asthma, ear infections, cognitive growth, ADHD, too little Vitamin D, and depression.

First, national data indicate significant racial and ethnic disparities in obesity prevalence rates among U.S. children and adolescents. It's notable that the National HANES study for the period 1988-1994 showed no significant difference in prevalence between Hispanic and non-Hispanic white adolescent boys. Yet, the 2007-2008 National HANES study resulted in an obesity prevalence rate that was significantly higher among Hispanic adolescent boys (26.8%) than among non-Hispanic white adolescent boys (16.7%).²¹ Moreover, a Robert Wood Johnson Foundation report notes:

- Among Latino children, 38.2% ages 2 to 19 are overweight or obese, compared to 31.7% of all children in those ages.
- Hispanic boys of the same age have an overweight and obese prevalence rate of 39.9% compared to 29.5% for White boys.
- Among Hispanic children age 2 to 5, 14.2% are obese, and 25.1% ages 6 to 11 are obese compared to 9.1% and 19% of White children respectively.²²

As such, population growth particularly among children has direct implications for Latino health disparities, of which obesity has become quite significant. The 2010 U.S. Census indicates the Texas population grew to 25,145,561, reflecting a 20.6% increase from the 2000 census. The growth was fueled by increased births to Latinos and immigration trends.²³ More specifically, 65% of the Texas growth is attributed to Latinos. Among the Latino population, 88% is of Mexican origin.²⁴ Among all Texas children, Latinos account for the majority of the increase in children across the State, a 39% increase from 2,386,765 to 3,317,777.²⁵

Today, one-in-three Texans are Latino (37.6%). Latinos comprise 51% of children enrolled in public schools, and are projected to be the majority of the states' population by 2040 or sooner. Finally, the majority (96 percent) of children living in Texas are citizens. Of the total growth that occurred in Texas during the last decade, three-fourths was the result of more births than deaths (54 percent) and people moving from other states (22 percent), with only 24 percent

²⁰ See Confronting Inequities in Latino Health Care, Journal General Internal Medicine, 24/Supplement 3):505-7, 2009; Where We Live Matters for Our Health: Neighborhoods and Health, Robert Wood Johnson Foundation, Commission on Building a Healthier America, Issue Brief 3: Neighborhoods and Health, September 2008; America's Future: Latino Child Well-Being in Numbers and Trends, National Council de la Raza, 20010; Racial and Ethnic Disparities in the Health and Health Care of Children, Pediatrics, The Committee on Pediatric Research, 2010; 125:e97-e1020.

²¹ Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963–1965 Through 2007–2008, CDC, National Center for Health Statistics, June 2010.

²² Overweight and Obesity Among Latino Youths, Robert Wood Johnson Foundation, Fact Sheet, May 2010

²³ 2010 Census Counts, U.S. Census Bureau.

²⁴ Demographic Profile of Hispanics in Texas, Pew Hispanic Research Center 2010, <http://pewhispanic.org/states/?stateid=TX>.

²⁵ Texas' Child Population: More Kids, More Diversity, More Responsibility, Center for Public Policy Priorities, May 2011

from international migration, which includes both documented and undocumented child and adult immigrants.²⁶

This population growth impacts obesity trends and projections. The most recent state and county-level data demonstrates that the areas with the largest Latino population have the highest rates of obesity in both children and adults.²⁷ For example, South Texas and the border counties have obesity rates from 27% to nearly 40% compared to fewer than 27% for most counties. Concurrently, demographic projections indicate that if current trends continue unabated, nearly every county in the State will have obesity rates in excess of 33%.²⁸

Based on the most recent projections, the prevalence of obesity among Texas adults will increase from 24.0% among men and 23.1% among women in 2000 to 34.6% among men and 35.7% among women in 2040. These changes reflect the increasing number of obese adults and increases in the proportion of Latino adults, among whom the prevalence of obesity is substantially higher compared with Anglo adults. The number of obese adults is expected to reach 9.6 million by the year 2040, almost three times the number of obese adults in the state during 2000. Latinos will experience the greatest increases in the number of obese adults with an almost five-fold increase in the number of obese Latino Hispanic males and females in 2040 compared with 2000.²⁹

C. Obesity and Environmental Nexus

Various studies demonstrate the relationship between low physical activity and socioeconomic status.³⁰ The 1996 National Longitudinal Study of Adolescent Health assessed over 17,000 seventh- to twelfth-grade students, and found that low-income students showed low physical activity and high levels of inactivity. The study attributed these levels to the tendency of such children to live in neighborhoods with high crime rates and attend schools with reduced time for physical activity.³¹

Obesity and overweight rates are high among welfare recipients. A study of almost 23,000 preschoolers enrolled in the Texas WIC program, 84% of whom were Hispanic, indicated the need for interventions for young children as well as pregnant woman and mothers.³² Sedentary

²⁶See Id, at 2.

²⁷ See Findings about the Obesity Epidemic in Texas, Texas State Demographer, January 2009, Detailed report and data available <http://txsdc.utsa.edu/>; See also, Student Body Mass Index by Texas House District, <http://www.statesman.com/news/local/student-body-mass-index-by-texas-house-district-1355022.html>, Original Source: Michael & Susan Dell Center for Healthy Living, 2011.

²⁸ A Battle We Can't Afford to Lose: The Burden of Overweight and Obesity in Texas - The Costs in Dollars and Lives, Texas Department of State Health Services, 2010.

²⁹ See Id.

³⁰ Diabetes Risk, Low-Fitness, and Energy Insufficiency Level among children from Poor Families, 2008, available at <http://www.sahrc.org/JournalArticles/DiabetesRiskJADA.pdf>.

³¹ Determinants of Adolescent Physical Activity and Inactivity Patterns, Pediatrics 2000 at 105:6 available at <http://www.pediatricsdigest.mobi/content/105/6/e83.full>.

³² Overweight among low-income Texas preschoolers aged 2 to 4 years, Journal of Nutrition Education and Behavior, 2010, 42(3), at 178-184.

lifestyles are often cited as factors for high rates of obesity and overweight across populations. However, decreased physical activity is especially problematic for low-income children.³³ Parents may fear children walking home from school or playing outside in their neighborhoods because of high crime rates or fear of crime. Low-income neighborhoods may lack spaces to play that are attractive or safe. They often lack open space and recreational facilities. Further, opportunities for recreational activities after school and during summers are often lacking for low-income children. Underfunded schools often reduce physical education and sports in order to focus funds on academic areas.

School-based assessments of students from poor South Texas families found high levels of blood glucose, obesity, and energy insufficiency, and low levels of fitness, indicating the need for education and early intervention for children living in poverty who already demonstrate high prevalence of childhood obesity and high-risk factors for diabetes.³⁴

A study conducted over 8 years measuring rates of type-2 diabetes in adults indicated that living in poor neighborhoods was a significant predictor of diabetes.³⁵ Behaviorally, lack of physical activity is a risk factor for diabetes, and often associated with high rates of obesity, and children living in poverty are more likely to be inactive compared to more affluent peers. Additionally, food insufficiency, defined as an inadequate amount of food intake due to lack of money or resources, is associated with living in poverty and high rates of diabetes.³⁶ In Texas, 1 in 4 children are at the highest risk of hunger, with 1 in 4 children living in a home without enough food. Texas ranks eighth-worst in the nation with 15.8% (3.7 million) living in poverty (2008).³⁷

Prevalence rates for food insecurity and low food security were at the highest levels ever recorded in 2009 according to the Census Current Population Surveys (CPS). In 2009, the 17.4 million houses that were food insecure included 4.2 million households with children, which represented 10% of all households with children in the country.³⁸ The CPS measures food insecurity with regard to resources, asking questions that indicate whether families have enough money for food or if anyone in the family has skipped or reduced meals because they did not have enough money for food. Similarly, though not to the same extent, overall rates of obesity

³³ Environmental Barriers and Solutions to Gaining Access to the Essentials of Nutritional Health in Low-Income Communities, Proceedings of the Roundtable on Understanding The Paradox of Hunger And Obesity. FRAC, November 22, 2004, 91-101 <http://frac.org/wp-content/uploads/2009/09/proceedings05.pdf>.

³⁴ Diabetes Risk, Low-Fitness, and Energy Insufficiency Level among children from Poor Families, 2008, available at <http://www.sahrc.org/JournalArticles/DiabetesRiskJADA.pdf>.

³⁵ See Id.

³⁶ See Id.; See also Profiles of Latino Health: A Closer Look at Latino Child Nutrition, Issues 1 and 3 -6, National Council de la Raza.

³⁷ The Nutritional State of Texas: Family Food Security, Texas Food Policy Roundtable, July 2010.

³⁸ Household Food Security in the United States, 2009, U.S. Department of Agriculture, available at <http://www.ers.usda.gov/Publications/ERR108/ERR108.pdf>.

and overweight are highest for low-income people.³⁹ Various studies have demonstrated a strong association between food insecurity and obesity among women living in poverty.⁴⁰

Contrary to some assumptions, children with reduced energy intake are not necessarily less likely to be overweight and more likely to have reduced body fat.⁴¹ The National Longitudinal Study reported that 44% of children “consumed below minimum energy requirements, and many were still overweight.”⁴² This was attributed to low intake of most dietary minerals, which play important roles in metabolism. Other studies have confirmed this data. One successful intervention program attributed such success to its approach that targeted energy balance specifically rather than nutritional quality alone, which combined improved nutrition habits with increased physical activity.⁴³

Low-income neighborhoods are often referred to as “food deserts.”⁴⁴ They often lack full-service grocery stores and stores that stock healthy foods. Choices are often limited to convenience stores, liquor stores, or fast food outlets. This results in easy access to high-fat, high-calorie foods, and limited access to fruits, vegetables, low-fat milk, and low-fat snacks. Additionally, even when available, healthy foods are significantly more expensive than less-healthy alternatives.⁴⁵

In schools, cafeterias in low-income neighborhoods are often overcrowded, making them unpleasant places to eat. This may discourage participation in nutrition programs, increased lines for food, reduce time for eating, and result in very early or late meal times.⁴⁶ Further, in order to raise funds, many districts have contracted with companies for food and beverage vending machines and other types of competitive foods. These bring money into the schools, but often at the expense of nutritional values. Vending machines, and other unhealthy “a la carte” options compete with school lunch and other meal programs, and children often choose unhealthy vending machine snacks over more nutritious school offerings.

³⁹ A Snapshot of the Obesity Problem in the U.S., with a Focus on Low-Income and Minority Populations Proceedings of the Roundtable on Understanding The Paradox of Hunger And Obesity. FRAC, November 22, 2004, 56-73 available at <http://frac.org/wp-content/uploads/2009/09/proceedings05.pdf>.

⁴⁰ The Relationship Between Hunger and Obesity: What Do We Know and What Are the Implications For Public Policy. Proceedings of the Roundtable on Understanding The Paradox of Hunger And Obesity. FRAC, November 22, 2004, 74-82 available at <http://frac.org/wp-content/uploads/2009/09/proceedings05.pdf>.

⁴¹ See Diabetes Risk, Low-Fitness, and Energy Insufficiency Level among Children from Poor Families, Journal of the American Dietetic Association, 2008.

⁴² See Id.

⁴³ Id.

⁴⁴ Food Deserts, Centers for Disease Control and Prevention Accessed June 10, 2011 available at <http://owl.english.purdue.edu/owl/resource/747/08/>.

⁴⁵ Environmental Barriers and Solutions to Gaining Access to the Essentials of Nutritional Health in Low-Income Communities, Proceedings of the Roundtable on Understanding The Paradox of Hunger And Obesity. FRAC, November 22, 2004, 91-101 available at <http://frac.org/wp-content/uploads/2009/09/proceedings05.pdf>.

⁴⁶ See Id.

Substantial documentation shows that Latinos live in poor neighborhoods in large numbers where weak infrastructures and poorly built environments exist. For schools serving these communities parent and broad-based action-partnerships are necessary for transforming neighborhoods into more livable and health supporting environments. Empowered residents are integral partners who support strong nutritional, physical and health education standards in schools. Modeling healthy eating and behaviors at home are imperative to improving the health of children and the beginning to reversing the current obesity crisis.

III. Federal and State Standards for Nutrition and Physical Activity in Schools

A. Federal Standards and Initiatives

Preventing and combating childhood obesity is a top priority of the Obama administration.⁴⁷ The United States Congress recently passed The Healthy, Hunger-Free Kids Act of 2010, establishing more stringent federal requirements for nutritious food served in schools participating in federal school lunch, breakfast, and after-school snack programs, currently serving over 31 million students in the U.S.⁴⁸ The federal government's priorities are that children's diets include: less added sugar, more fruits and vegetables, and an increase in the number of children meeting current physical activity guidelines.⁴⁹

Federal mandates have huge implications on school nutrition nationwide. Of the over 55 million children enrolled in public elementary or secondary schools, over 90% attend schools that offer one or more Federal Food Assistance Programs.⁵⁰ Federal funding for these programs mandate state and school compliance with the federal standards for nutritional content of the food and drinks served.⁵¹ Schools are reimbursed for each meal served, depending on whether the meal was free, reduced price, or paid for by students.⁵² Texas, like many states, has nutritional standards for its school lunch program that meet and exceed the federal guidelines.⁵³ Data from the US Department of Agriculture indicate that children who participate in the National School Lunch Program have superior nutritional intake compared to students who bring lunches from home or otherwise do not participate.⁵⁴

⁴⁷ Let's Move, White House Task Force on childhood Obesity, Report to the President, May 2010.

⁴⁸ Child Nutrition Reauthorization Healthy, Hunger-Free Kids Act of 2010, White House, Fact Sheet: available at http://www.whitehouse.gov/sites/default/files/Child_Nutrition_Fact_Sheet_12_10_10.pdf.

⁴⁹ Let's Move, White House Task Force on childhood Obesity, Report to the President, May 2010, (10).

⁵⁰ Id.

⁵¹ National School Lunch Program, Child Nutrition Fact Sheet available at <http://frac.org/newsite/wp-content/uploads/2009/09/cnslp.pdf>.

⁵² Id.

⁵³ Texas Department of Agriculture Promotes Benefits of Healthy, Nutritious School Meals During National School Lunch Week, Press Release", October. 13, 2010, Texas Department of Agriculture, available at http://www.agr.state.tx.us/agr/media/media_render/0,1460,1848_17053_40891_0,00.html

⁵⁴ National School Lunch Program, Child Nutrition Fact Sheet available at <http://frac.org/newsite/wp-content/uploads/2009/09/cnslp.pdf>.

Since almost all children eat at least one meal a day at school, and many children eat most of their meals at school, the government is encouraging that other steps be taken to promote healthy eating in schools. This includes forbidding the sale in schools of foods and beverages that do not meet nutrition standards.⁵⁵ While states have made some progress, gaps between the requirements and standards and actual implementation and compliance within schools continue.

The Healthy, Hunger-Free Kids Act of 2010, added \$4.5 billion in federal funding for child nutrition programs over 10 years. The law authorizes the U.S. Department of Agriculture to set standards for all foods regularly sold in schools during the school day, including vending machines, the “a la carte” lunch lines, and school stores, and provides incentive funding for schools in compliance with federal nutrition standards, expands funding for innovative projects designed to improve school nutrition, and sets standards for school wellness policies.

The Act will require more stringent monitoring for compliance, such as requiring district audits every three years and requiring that more information be available to parents regarding school nutrition. The U.S. Department of Agriculture has already published its proposed rule changes, which include updates to the federal nutrition lunch and breakfast meal patterns with specific nutritional requirements, such as increased fruits and non-starchy vegetables, and mandating that at least half of grains be whole-grains.

A major concern to the federal government is the demonstrated lack of compliance with federal food-based and nutrient-based standards. The President’s Task Force on Childhood Obesity recently stated that, “In the 2004-05 school year, although most school meals were consistent with meal pattern requirements and provided most key nutrients, 93-94% of meals failed to meet all nutritional standards, primarily due to not meeting standards for fat, saturated fat, or calories.”⁵⁶

Equally important are the choices students are making about what foods they actually consume. A school simply offering balanced meals does not mean students are eating them. The same federal report stated, “in about 90% of all schools nationwide, a student had opportunities to select low-fat lunch options, but in only about 20% of all schools did the average lunch actually selected by students meet the standards for fat.” Thus, the government recommends improvements not just in the quality of food, but also to the quality of education about healthy eating.

Participation in federal nutrition programs and childhood obesity (impact) – study on (700) 3-5 year-olds indicated “subsidized meals at school or day care are beneficial for children’s weight status, and...expanding access to subsidized meals may be the most effective tool to use in combating obesity in poor children.”⁵⁷

The federal government exercises considerable sway over school nutrition across the country because federal funding is contingent upon state and district compliance with federal

⁵⁵ See <http://www.fns.usda.gov/cnd/governance/regulations/2011-01-13.pdf> (See USDA proposed rule change).

⁵⁶ See Let’s Move at 38.

⁵⁷ *Obesity and Poverty*, Food Research and Action Center, Oct 2010, Issue 2 available at http://frac.org/wp-content/uploads/2010/09/frac_focus_obesityandpoverty_issue2_oct2010.pdf.

standards. Physical activity, on the contrary, has no such contingent funding attached. The states, therefore, set the requirements and standards for physical activity in schools. The federal government suggests that states adopt various reforms and standards to increase physical activity and physical education in schools, in response to documented evidence that, nationwide, physical activity is an area of weakness in schools.⁵⁸ Mandated local wellness policies on districts participating in federal child nutrition programs generally do not address physical education, and only 18% address recess time.⁵⁹ It is evident that the Healthy, Hunger-Free Kids Act of 2010 is early in its implementation, and will require on-going monitoring, assessment, and attention to compliance at the state and local level.

B. Texas Standards and Initiatives

Texas has also established requirements for healthy school lunches, physical education and activity in schools, and programs to combat childhood obesity. Like the federal government, Texas has prioritized the elimination of childhood obesity with The Texas Public School Nutrition Policy.⁶⁰ The Texas Department of Agriculture is proposing rule changes to bring state standards into compliance with the new federal law.⁶¹

Currently, Texas nutritional standards are codified in the Texas Administrative Code under the Department of Agriculture. All schools participating in federal childhood nutrition programs must meet the Texas statutory requirements and mandates issued by the Texas Department of Agriculture.⁶² Nearly 8,000 Texas schools participated in such programs in 2009-2010, serving over 1.6 million Texas school children.⁶³

The Texas nutritional standards vary by student ages, and are thus divided for elementary, middle, and high schools. The statutes focus on the restriction or elimination of ‘Foods of Minimal Nutritional Value’ and ‘Competitive Foods’ (foods and beverages served or sold in schools outside of federally reimbursable meal programs) in Texas.

In elementary schools, Texas forbids the provision, availability, or access to Foods of Minimal Nutritional Value.⁶⁴ There are specific provisions for the portion sizes and amounts of servings students may choose. Elementary schools must eliminate deep-frying as a method of on-site food preparation and reduce, the purchase of products containing trans-fats. Potato products other than chips are restricted unless they are baked, in which case they may be served

⁵⁸ Local Wellness Policies: Assessing School District Strategies for Improving Children’s Health, School Years 2006-07 and 2007-08, Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, 2009, University of Illinois at Chicago available at <http://www.rwjf.org/files/research/20090728bridgingthegapfull.pdf>.

⁵⁹ School Policies and Practices to Improve Health and Prevent Obesity: National Secondary School Survey, Volume 1, April, 2011.

⁶⁰ Tex. Agr. Code § 26.1.

⁶¹ Child Nutrition Reauthorization, Texas Department of Agriculture, available at http://www.squaremeals.org/fn/render/channel/items/0,1249,2348_15606_42866_0.00.html#42866.

⁶² Tex. Agr. Code § 26.1.

⁶³ State of the States 2010: Texas, Food Research and Action Center, available at <http://frac.org/wp-content/uploads/2010/07/tx.pdf>.

⁶⁴ Tex. Agr. Code § 26.3.

at will. Fruits and vegetables must be offered daily, and be fresh whenever possible. Elementary schools may not offer or provide students access to competitive foods during the school day. Similar standards for middle schools are tailored to the different nutritional needs of those age groups.⁶⁵

In high schools, Texas forbade the sale or availability during the school day of Foods of Minimal Nutritional Value for the 2010-2011 school year.⁶⁶ Vending contracts entered into after 2004 must prohibit sugared, carbonated beverages over 12 ounces. Other nutritional standards now apply similarly to elementary and middle schools.

Texas mandates that every school provide “healthy nutrition environments.”⁶⁷ Adequate recommended eating time should be provided to all students without obstacles. Statutes recommend that physical education and recess be scheduled before lunch. Finally, Texas statute expressly allows the availability of bottled water and 100% fruit and vegetable juice at any time.

The statutory requirements against Foods of Minimal Nutritional Value and Competitive Foods seem stringent. However, they also present many concerns, such as the many exceptions.⁶⁸ The Department of Agriculture promises to “enforce and diligently monitor schools to ensure compliance,” and may withhold reimbursement from schools found non-compliant.⁶⁹ This oversight function will be elevated and specified more clearly under the new federal regulations.

Further, the compliance with state and federal mandates that is essential to reducing childhood obesity rates goes beyond simply providing school breakfasts and lunches. Texas statutes ostensibly restrict foods of minimal nutritional value and competitive foods.⁷⁰ However, they still become available to students in Texas schools. Students may bring them from home. They may be given as a reward in direct statutory violation. Often they are sold as fundraisers. Oversight is conducted in school cafeterias, therefore, missing non-compliance outside of meal times.⁷¹ Further, schools may still serve foods with trans-fats, and high schools with vending contracts predating current statutes continue to sell soda.⁷² Heavy consumption of trans-fats and soda are consistently linked with high obesity rates in children.⁷³ Potatoes are frequently served as an inexpensive yet nutritionally vacant vegetable dish.⁷⁴ While Texas mandates healthy

⁶⁵ Tex. Agr. Code § 26.4.

⁶⁶ Tex. Agr. Code §26.5.

⁶⁷ Texas Agr. Code § 26.8.

⁶⁸ Tex. Ag. Code § 26.1.

⁶⁹ Tex. Agr. Code § 26.9.

⁷⁰ Tex. Agr. Code § 26.3, 26.4, 26.5.

⁷¹ Tex, Ag. Code § 26.8.

⁷² Tex. Ag. Code § 26.5.

⁷³ Diabetes Risk, Low-Fitness, and Energy Insufficiency Level among children from Poor Families, 2008, available at <http://www.sahrc.org/JournalArticles/DiabetesRiskJADA.pdf>.

⁷⁴ See Id.

nutrition environments, concerns prevail over noisy and unappetizing cafeteria conditions, especially in schools serving low-income students.⁷⁵ Finally, there are concerns that education about healthy nutritional needs and choices are lacking in school curricula.⁷⁶

The Texas Education Code outlines a broad standard for physical activity in Texas schools as part of the mandatory extension curriculum, including health, with emphasis on the importance of proper nutrition and exercise.⁷⁷ Elementary and middle schools are required to provide 30 minutes a day of structured physical activity, which may be altered to 135 minutes per week for elementary and 225 minutes a week for middle schools to meet scheduling or resource needs.⁷⁸ Two full credits, or two full years, of physical activity instruction is required to graduate high school. Fitness assessments using FITNESSGRAM are required for all students in grades 3-12, and will be used to evaluate the effectiveness of school health initiatives and direct resources to areas of need.⁷⁹ It is the only health-related fitness assessment to use criterion-referenced standards, called Healthy Fitness Zones, to determine students' fitness levels based on what is optimal for good health.

As with nutritional standards, Texas physical activity standards are critiqued for failing to address critical needs. Providing opportunities for physical activity through recess or physical education periods do not ensure student participation. Lack of resources and space often result in overcrowded spaces, where oversight is minimal and participation lacking. Students with special needs, including students who are obese or suffer from related illnesses such as diabetes often do not participate or are excused from structured physical activity. FITNESSGRAM, the new assessment tool, will hopefully be used to address some of these glaring shortcomings.

FITNESSGRAM data indicate that 44% of the 2.9 million Texas students who took the assessment in the 2009-2010 school year did not meet the standards for cardiovascular (aerobic) fitness.⁸⁰ Additionally, 29% of students were found to have an unhealthy body mass index, a measure of overweight and obesity. FITNESSGRAM tests measure body composition, cardiovascular fitness, muscular strength, endurance and flexibility. The vast majority of Texas students failed to pass all six tests, with performance getting worse for older students. Only 31% of boys and 37% of third grade girls achieved healthy scores on all six tests, whereas just 8.5% of boys and 8% of girls passed all the tests. Scores are reported directly to the Texas Education Agency. Parents may request their children's scores. The Michael and Susan Dell Center for Healthy Living at the University of Texas, School of Public Health scrutinized the data and found that border communities tend to do worse than other regions. Additionally, the Center's

⁷⁵ School Policies and Practices to Improve Health and Prevent Obesity: National Secondary School Survey, Volume 1, April, 2011.

⁷⁶ Diabetes Risk, Low-Fitness, and Energy Insufficiency Level among children from Poor Families, 2008, available at <http://www.sahrc.org/JournalArticles/DiabetesRiskJADA.pdf>

⁷⁷ Tex. Educ. Code § 28.002(2)(B).

⁷⁸ Tex. Educ. Code § 28.002 (d)(11)(l).

⁷⁹ Tex. Educ. Code §§38.101, §38.103.

⁸⁰ Many Texas schoolchildren fail fitness evaluation, 2010, available at <http://www.statesman.com/news/local/many-texas-schoolchildren-fail-fitness-evaluation-1401471.html>.

director has pointed out that low-income students generally have lower health scores, because socioeconomic status is related to obesity and fitness levels.⁸¹

In summary, state policy standards are interwoven with federal standards. Like other states, Texas has taken legislative policy steps to be in compliance with federal standards, as well as, introduced and passed additional legislation (not shown here) to address the obesity epidemic. Such legislation must be inventoried, monitored, and evaluated regarding its implementation and impact. Nationally, Texas ranks poorly in its investments in education and health such that unfunded legislative mandates are passed and their intended impacts are not realized.⁸² Texas also makes inadequate investments to improve child health, and nationally ranks 48th.⁸³ Will addressing the obesity epidemic suffer the same fate? If so, the health disparities and inequities of Latino children will worsen.

IV. CONCLUSION

The Latino population in Texas continues to encounter significant environmental challenges to their well-being in education, income, and health. Obesity is one of the most salient health issue cross-cutting these challenges, and demands our attention. Public schools are critically important institutions that can have a significant impact in reducing and eliminating the obesity epidemic and its detrimental impact on Latinos. However, public school efforts must be part of a larger comprehensive approach which includes improvements to the neighborhood built environment, eliminating food deserts, protecting children from the marketing of unhealthy foods, and promoting and empowering parents as partners in obesity prevention.

It's generally recognized that improvements in Latino well-being will be significant if we reduce and eliminate the problem of obesity, while also contributing toward the state's future economic growth and healthy living environment. Therefore, exploring opportunities, implementing innovating initiatives, and expecting and monitoring accountability in obesity prevention efforts must be in the forefront to insure 'equity' in policy and program strategies. In public schools, obesity prevention efforts are inherently tied to federal and state standards for nutrition and physical education. We must assist schools in their work including adequately and equitably giving them the resources and tools to succeed.

⁸¹ Stuck in the Middle: The False Choice Between Health and Education in Texas Middle Schools, Michael and Susan Dell Center for Health Living and U.T. School of Public Health, Austin Regional Campus, October 2010.

⁸² Texas on the Brink, A Report from the Texas Legislative Group, 82nd Legislative Session, February 2011.

⁸³ See A Report on The Bottom Line: Conditions for Children And The Texas of Tomorrow, Texas Care for Children, 2011; See also, Securing a Healthy Future, The Commonwealth Fund State Scorecard on Child Health System Performance, February 2011.