# Salud America! The Robert Wood Johnson Foundation Research Network to Prevent Obesity Among Latino Children

**RESEARCH BRIEF** December 2011

# Body Image and Childhood Obesity in Mexican-Americans

### Introduction

Rates of overweight and obesity in the United States have more than tripled in the last three decades, and rates for lower-income communities and certain racial/ethnic minority groups—including Latinos—are higher than for the general population.<sup>1</sup> Thirty-eight percent of Latino youth aged 2 to19 years are overweight or obese, compared with 32 percent of all children in this age group.<sup>1</sup> Insufficient physical activity is associated with the development of obesity.<sup>2</sup> Mexican-American children tend to have lower-than-average levels of physical activity, with most not meeting the federal government's 2008 Physical Activity Guidelines for Americans of 60 minutes a day of moderate-to-vigorous physical activity.<sup>3,4,5</sup> In addition, Latinos' cultural perceptions of ideal body size,<sup>6</sup> and of what is considered overweight,<sup>7</sup> may contribute to their higher rates of overweight/obesity and physical inactivity.

#### PRELIMINARY RESEARCH RESULTS

Our *Salud America!* pilot research project, "Body Image Perceptions Among Latinos," has two primary aims: to examine body image perceptions across three generations of low-income Latinos, and to study the association between body image and physical activity in the same population. The subjects of our study are residents

<sup>1</sup> Ogden CL, Carroll MD, Curtin LR, et al. "Prevalence of high body mass index in U.S. children and adolescents, 2007-2008." *Journal of the American Medical Association*, 303(3): 242–249, 2010.

<sup>4</sup> Whitt-Glover MC, Taylor WC, Floyd MF, et al. "Disparities in physical activity and sedentary behaviors among US children and adolescents: prevalence, correlates, and intervention implications." *Journal of Public Health Policy*, 30(SI): S309–S334, 2009.

<sup>5</sup> Troiano RP, Berrigan D, Dodd KW, et al. "Physical activity in the United States measured by accelerometer." *Medicine & Science in Sports & Exercise*, 40(1): 181–188, 2008.

<sup>6</sup> Powell TM, de Lemos JA, Banks K, et al. "Body size misperceptions: a novel determinant in the obesity epidemic." *Archives of Internal Medicine*, 170(18): 1695–1697, 2010.

<sup>7</sup> Ceballos N & Czyzewski M. "Body image in Hispanic/Latino vs. European American Adolescents: implications for treatment and prevention of obesity in underserved populations." *Journal of Health Care for the Poor and Underserved*, 21(3): 181–188, 2010.

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#### PEER REVIEW

Peer review for this research brief was conducted by *Salud America!* National Advisory Committee Member Laura Brennan, Ph.D., president and CEO of Transtria, LLC.

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<sup>&</sup>lt;sup>2</sup> U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services. Center for Disease Control and Prevention, National Center for Chronic Disease and Prevention and Health Promotion, 1996.

<sup>&</sup>lt;sup>3</sup> U.S. Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans*. Washington, DC: U.S. Department of Health and Human Services, 2008.

of *colonias* in Texas' Lower Rio Grande Valley on the U.S.-Mexico border, a region that faces high rates of obesity as well as other health problems.<sup>8</sup> *Colonias* are unincorporated settlements where Latinos live in impoverished conditions: 56 percent live below the federal poverty line and lack basic services (including potable water, sewer systems, and/or paved roads).<sup>9</sup>

For our project, we ask members of *colonia* familes (including the child, parent, and, if possible, grandparent) to view sketches of body shapes and body sizes and to select images they perceive as healthy, as well as the image that most resembles their own body.<sup>10 11</sup>Parents and grandparents also select the image that resembles their child/grandchild. All participants also complete a brief survey on demographics, acculturation, and health behaviors. Additionally, height, sitting height, weight, and percent body fat measurements are obtained for all child participants. Grandparent results are not reported here because very few grandparents have participated thus far in the study. Through grassroots community groups and churches, we have recruited 85 families (81 child-parent pairs and 4 sets including a child, parent, and grandparent) of our goal of 210 families, as of this writing. The children are mostly girls (57 %) with an average age of 11. The parents are mostly mothers (83%) with an average age of 39. Preliminary results from the body image portion of the study are below:

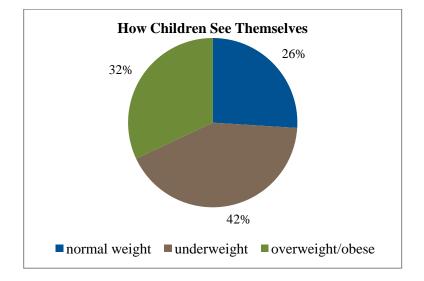
Most youth in this group believe they have a weight problem: that they are either underweight or overweight. About 26 percent of the children we surveyed see themselves as having a normal weight, 42 percent see themselves as being underweight, and 32 percent see themselves as overweight or obese. However, most view smaller body shape and body size as ideal. About 82 percent of children selected an underweight image as their preferred body shape and body size. No differences were observed between boys' and girls' perceptions of their own wieght, or of the ideal body shape and size.

<sup>&</sup>lt;sup>8</sup> Fisher-Hoch SP, Rentfro AR, Salinas JJ, et al. "Socioeconomic status and prevalence of obesity and diabetes in a Mexican American community, Cameron County, Texas, 2004-2007." *Preventing Chronic Disease*, 7(3), May 2010, http://www.cdc.gov/pcd/issues/2010/may/09\_0170.htm (accessed November 2010).

<sup>&</sup>lt;sup>9</sup> U.S. Census Bureau. American Fact Finder: Cameron Park, Texas. 2005-2009 American Community Survey. http://factfinder.census.gov/home/saff/main.html?\_lang=en (accessed January 2011).

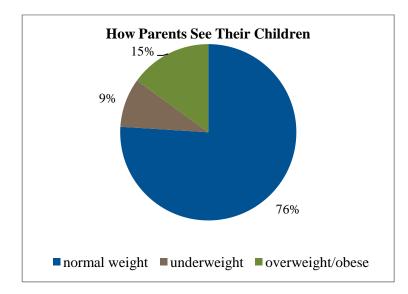
<sup>&</sup>lt;sup>10</sup> Eckstein K, Mikhail L, Azia AJ, et al. "Parents' perceptions of their child's weight and health." *Pediatrics*, 117(3): 681–690. 2006.

<sup>&</sup>lt;sup>11</sup> Stunkard A, Sorensen T, Schulsinger F. Use of the Danish Adoption Register for the study of obesity and thinness. In Key S, Roland I, Sigman R, Matthysse S. (eds). *The genetics of neurological and psychiatric disorders*. Raven Press, New York, 1983.



• Most parents in this group do not believe their children have a weight

**problem.** About 76 percent of parents surveyed reported that their child was underweight, and 9 percent reported that their child was of normal weight. Only 15 percent see their child as overweight or obese. These findings are preliminary, and gender differences in parent/grandparent perceptions will be explored when data collection is complete. Females may be more likely to be concerned about weight than males.<sup>6,7</sup>



## **Conclusion and Policy Implications**

Our preliminary results demonstrate that the Mexican-American youth in our study population have very different perceptions of overweight and obesity than their parents. This finding suggests that there may be generational differences in perceptions of ideal body size, and in what is considered overweight in low-income Latino families.

These results may be partly explained by the a recent study, which found that lowincome adolescent African-Americans and Latinos reported that their elders, parents, and grandparents perceive large body size to be healthy.<sup>12</sup> Low-income communities with a family history of food scarcity and insecurity may be likelier to have health beliefs and behaviors that are contrary to active living and healthy eating.<sup>12</sup> Our results support the finding that children and parents from low-income communities perceive body size differently. However, it is still unknown if or how body image perceptions influence activity and eating behaviors in low-income communities, and this question warrants ongoing research.<sup>6,7</sup>

Once complete, our project has the potential to fuel the development and tailoring of policies and physical activity interventions with an understanding of beliefs and perceived norms regarding body shape and body size in low-income Latinos. For example, our research team is sharing our results with a local church-based grassroots organization to help them modify their health programs and policies to promote active living and healthy eating for the *colonia* population along the Texas-Mexico border. Furthermore, representatives from our team, a local advocacy group, and the church-based grassroots organization have the opportunity to further impact new policy development by participating on a local Community Advisory Board (CAB). The CAB, consisting of city and county public officials as well as community members (school administrators and personnel, local business owners, religious leaders, and others), has been receptive to reviewing our results and has actively solicited our advice in policy development regarding active living and health eating. When our study is completed the results will be shared with community leaders, but at this time our findings are too preliminary to immediately impact local policy.

<sup>12</sup> Barroso CS, Peters RJ, Jones Johnson R. et al. "Beliefs and perceived norms concerning body image among African-American and Latino teenagers." *Journal of Health Psychology*, 15(6): 858–870, 2010.