

# Salud America!

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

### RESEARCH BRIEF

December 2011

# Improving Food Purchasing Selection among Low-Income Spanish-Speaking Latinos

## Introduction

Half of Latino children born in or after 2000 are projected to develop diabetes in their lifetime, and overweight and obesity have been prominently implicated as contributing factors.<sup>1</sup> Over the last 10 years, the percentage of overweight Latino youth in the U.S. has approximately doubled, and 38.2 percent of Latino children ages 2 to 19 are now overweight or obese.<sup>2</sup> Genetic predisposition and environmental, economic, cultural and community factors that impact diet all may contribute to Latinos' heightened risk for obesity and type 2 diabetes.<sup>3</sup> These can include poor access to healthy food, limited family budgets, cultural food preferences, and fewer opportunities for physical activity. Obesity and diabetes together are associated with cardiovascular disease and orthopedic problems, among other conditions.<sup>4</sup>

National data also suggest a correlation between poverty and obesity. About 27 percent of children from families with incomes below the federal poverty level are obese, compared to about 10 percent of children in households with incomes at or above 400 percent of the poverty level.<sup>5</sup> Individuals on poverty's borderline tend to buy low-cost food that is more calorie-dense and filling.<sup>6</sup> However, purchase power is not the only factor contributing to purchasing this kind of food—individuals'

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### PEER REVIEW

Peer review for this research brief was conducted by *Salud America!* National Advisory Committee Member Amy Yaroch, Ph.D., executive director of the Center for Human Nutrition and professor in the Department of Health Promotion, Social & Behavioral Health at the University of Nebraska Medical Center.

For more information about *Salud America!*, visit

[www.salud-america.org](http://www.salud-america.org)

<sup>1</sup> Narayan KM, Boyle JP, Thompson TJ, et al. "Lifetime Risk for Diabetes Mellitus in the United States." *Journal of the American Medical Association*, 290,1884–1890, 2003.

<sup>2</sup> Ogden CL, Carroll MD, Curtin LR, Lamb MM and Flegal KM. "Prevalence of High Body Mass Index in US Children and Adolescents, 2007–2008." *Journal of the American Medical Association*, 303(3): 242–249, 2010.

<sup>3</sup> Caballero AE. "Diabetes in Hispanics/Latinos: Challenges and Opportunities." *Current Opinion in Endocrinology, Diabetes, and Obesity*, 14, 151–155, 2007.

<sup>4</sup> Perrin JM, Bloom SR and Gortmaker SL. "The Increase of Childhood Chronic Conditions in the United States." *Journal of the American Medical Association*, 297(24): 2755-2759, 2007.

<sup>5</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2010*. Rockville, Maryland: U.S. Department of Health and Human Services, 2010.

<sup>6</sup> Hofferth SL, Curtin SC. "Poverty, Food Programs, and Childhood Obesity." *Journal of Policy and Management*, 24(4): 703-726, 2005.



access to food also influences what they consume. Low-income neighborhoods tend to offer limited choices of both food outlets and of healthy food.<sup>7</sup>

Changing the community-level food environment requires formidable efforts featuring long-term structural changes. However, research focused on patient activation suggests that individuals can be taught to become agents of change in their own families and communities.<sup>8</sup> For example, participants can learn how to identify healthier choices that are readily available within their community food stores.

### PRELIMINARY RESEARCH RESULTS

Our *Salud America!* pilot research project, “*Esto es Mejor: Improving Food Purchasing Selection Among Low-Income, Spanish-Speaking Latinos Through Social Marketing Messages*,” examines how an educational intervention informed by low-literacy principles (i.e., guidelines geared to ease understanding of complex themes such as nutrition) could be used to increase food literacy and change consumer behavior to increase healthy eating among low-income Spanish-speaking Latinos. Some of these principles focus on limiting the scope of the topic of interest, use of visuals to convey information, and responding to the individual’s specific learning experiences and needs. We are evaluating specific consumer behaviors—food purchasing and consumption—among 20 low-income, Spanish-speaking Latino families with children under age 18. Baseline data on food purchasing, food consumption patterns, and healthy eating first were collected using various qualitative and quantitative research methods, including participant observations of families’ grocery shopping, nutritional analysis of families’ grocery store receipts, interviews, and photographs by children of families’ food environments. Home visits and educational sessions were conducted to teach families strategies to buy healthier food with a limited budget. More than half (75%) of the families reported receiving Supplemental Nutrition Assistance Program benefits (food stamps). Preliminary results and observations include:

- **Low-income Latino families spent one-third of their income on food.** Latino families (2-9 members) spend an average of \$547.50 per month (33% of their income) on food. This amount is consistent with national data, which have shown that low-income families’ share of annual household income spent on food is greater than that of high-income families.<sup>9</sup>
- **Much of the food purchased by Latino families was calorie-dense, low in fiber and high in fat, sodium and carbohydrates.** Many families’ purchases included

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<sup>7</sup> Wang Y, Beydoun MA. “The Obesity Epidemic in the United States –Gender, Age, Socioeconomic, Racial/Ethnic, and Demographic Characteristics: A Systematic Review and Meta-Regression Analysis.” *Epidemiological Review*, 29, 6-28, 2007.

<sup>8</sup> Cortés DE, Mulvaney-Day N, Fortuna L, et al. “Patient/Provider Communication: Understanding the Role of Patient Activation for Latinos in Mental Health Treatment.” *Health Education & Behavior*, 36(1), 138-154, 2009.

<sup>9</sup> Consumer Expenditure Survey, Bureau of Labor Statistics, 2004-05.

malt beverages, cold cereals high in sugar, sugary drinks, fruit drinks, instant ramen noodles, salami and other less healthy food items, according to preliminary nutritional analyses of food receipts.

- **Giving feedback to families about their food receipts' nutritional analyses provided an opportunity for researchers to recommend changes in purchasing patterns.** Family members who purchased food for the family were often surprised to learn the low nutritional value of many foods purchased, and many asked for recommendations to make appropriate changes within budget constraints. Many parents also expressed great need for help developing and implementing effective strategies to make changes in their children's food preferences.
- **Many families adopted instructions on buying budget-friendly, healthier alternative foods.** Many participants applied lessons (e.g., spending less money on sugary fruit drinks, buying more fruits and vegetables) from the educational sessions delivered during the study, according to preliminary nutritional analyses of food receipts collected after teaching participants about low-budget healthier alternatives.

## Conclusion and Policy Implications

Our preliminary findings and observations suggest the need to develop tailored social marketing messages and other communication strategies to promote healthy food purchasing and consumption practices among Latinos. Specifically, we have observed a need to deliver messages that are developed with an understanding of Latino food preferences and the challenges that low-income families face when shopping for healthier food. We also think Latinos' food literacy could be improved with the use of visual multimedia materials such as photographs or videos. Families could use these products as quick-reference guides to buy food with more nutritional value per dollar. Our research team is currently developing drafts of messages and educational materials, and is seeking external funding to fully develop and pilot-test them with low-income Latino families.

In addition to focusing on consumers, our work has been influential at the community level. For example, we are collaborating with a local grocery store in Lynn, Mass., that mostly serves the local Latino population (including those involved in our current study). In response to our researcher input, the store is beginning to carry food that is healthier *and* favored by Latino consumers such as canned beans with low sodium content, and whole grain bread, among others. We are also partnering with our local Latino-serving community health center to share messages and educational materials generated for our study so that providers can spread them to patients. Finally, we have communicated our early findings to the Commissioner of the Department of Public Health of Massachusetts, who has expressed interest to using study data to inform the state's comprehensive effort to address obesity ("Mass

in Motion”). We hope that our study findings will be used to inform local and state policy efforts aimed at the distinct health needs of low-income Latinos.