# **Texas Obesity Research Brief**

#### University of Houston

### Childhood Poverty and Young Adult Overweight/Obesity Status: Race/ Ethnicity and Gender Disparities

#### Daphne C. Hernandez, PhD

While previous research has found a positive association between childhood poverty and overweight status in childhood, adolescence and adulthood, the current study proposed that *repeated* exposure to poverty can lead to race/ethnicity and gender disparities in weight status. Data from the National Longitudinal Survey of Youth 1979 and the Young Adult file were used to examine the accumulating effects of childhood poverty from the prenatal period to age 18 on overweight/obesity (OV/OB) status in young adulthood. Close attention was given to race/ethnicity and gender differences.

### Data and Methods

Data from 3,901 young adults (21 years of age) who were born between 1980 and 1990 were analyzed. Poverty was measured based on annual household income, family size, and yearly poverty guidelines from the US Department of Health and Human Services.

To capture repeated exposures of childhood poverty, the number of years children experienced poverty as a child were summed. Young adults self-reported their height and weight. This information was used to calculate and categorize body mass index into the reference criteria for adults outlined by the Center for Disease Control.

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# What we know

The association between low SES and obesity has weakened as the national prevalence of obesity has increased across all income

classes.

Yet, a disproportionate number of minorities and low-income individuals continue to be overweight.

# What we found

Reoccurring exposure to childhood poverty was positively related to overweight/obesity status for white, black, and Hispanic young adult women.

## About the Author

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Daphne Hernandez is Assistant Professor of Nutrition & Obesity Studies at the University of Houston. Her research focus is on health disparities.

# Findings

### For women

White, black, and Hispanic women that are exposed to persistent poverty during their childhood have a greater chance of becoming OV/OB later on in adulthood.

Some possible explanations: Women can experience increased weight gain when living in a stressful environment as a result of changes in behavior and physiology.

### For men

The probability for men becoming OV/OB tends to decrease as poverty exposure increases. This is especially true for white men, but not black and Hispanic men.

Some possible explanations: Engagement in manual labor at a young age, such as construction, increases physical activity and potentially could provide a "protective barrier" to weight gain among white men. A reason for the lack of significant findings among black and Hispanic men could be that this study did not take into account transitions into and out of poverty or employment. Minority families are more likely to have a harder time recovering from job loss as quickly compared to white families.

## Application

Overall, white, black, and Hispanic women have the

greatest risk for becoming OV/OB in young adulthood as their exposure to childhood poverty increases. Living in a persistently stressful environment reinforces these health outcomes for many women.

Community based interventions designed to change the environment and assist low-income families reduce the negative factors associated with poverty may help to reduce the weight disparities observed in young adulthood.

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Texas Obesity Research Center University of Houston 3855 Holman Street Houston, Texas 77204 torc@uh.edu Hernandez, D. & Pressler, E. (2014). Accumulation of childhood poverty on young adult overweight or obese status: Race/ ethnicity and gender disparities. *J Epidemiol Community Health.* 68:4, 478-484

# Our Mission

The mission of the Texas *Obesity Research Center is* to conduct basic and applied research in obesity prevention, treatment and control. TORC will educate students in an *interdisciplinary approach* to topics related to obesity and its comorbidities. TORC will enhance collaborations within and among the University community, health professionals, and social agencies on projects related to obesity and centralize efforts to obtain funding from foundations, industry, and the federal government.