

The primary objectives of this study were to: 1) adapt and validate the U.S. Household Food Security Scale among pregnant Latinas; 2) describe nutrient intake patterns among Latina subgroups; and 3) document household food insecurity before as well as during pregnancy and examine its influence on pregnancy weight gain and infant birth weight among pregnant Latina women living in Hartford, Connecticut. Two phases were carried out to complete these objectives. Both qualitative and quantitative methods were used during phase I. First, three focus groups were conducted among pregnant Latina women to adapt the U.S. Household Food Security Scale (FSS) for use among this population. Then, 103 pregnant Latina women participated in a baseline survey which was conducted during pregnancy. A subsample of 62 participated in the postpartum survey. Phase II was a longitudinal study, 138 pregnant Latina women participated in the baseline survey, of these 93 completed the second prenatal survey, and 70 completed the one-month postpartum survey. Data from the 241 participants who participated in the baseline survey for phase I and phase II were combined. This sample was used to assess the performance of the FSS among this population of pregnant Latina women. Rasch model analyses were used to evaluate the psychometric properties of the FSS. The adapted FSS was used to assess household food insecurity before and during pregnancy. Maternal nutritional status during pregnancy was assessed using a 24-hour recalls and a meal skipping questionnaire. Pregnancy and infant outcomes were obtained at the postpartum visit and through medical records. Univariate and bivariate analyses were used to evaluate the relationship between (1) nutrient intakes and ethnicity and (2) household food security (independent variables) and dependent variables (gestational weight gain and birthweight). Multivariate logistic regression analyses was used to assess the associations between (1) ethnicity, frequency of fast food restaurant use, and nutrient intakes, and (2) household food insecurity, gestational weight gain and infant birthweight. Results indicate that (1) the adapted household food security scale is valid in our target population, (2) nutrient intake patterns vary between Puerto Rican and non-Puerto Rican Latinas, and (3) household food security status is associated with gestational weight gain and low birth weight. Findings have important implications for food security policies and nutrition education, as well as monitoring risk of adverse pregnancy and birth outcomes among Latinas.

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