

**Title:** Maternal Attitude Toward Weight Gain During Pregnancy as a Predictor of Gestational Weight Gain, Energy Intake, and Infant Birth Weight.

**Authors:** Christy Turner, MS Candidate\*, Kelley Martin, MPH, RD<sup>‡</sup>, Patricia Wolman, Ed.D, RD<sup>^</sup>, William Goodnight, MD<sup>#</sup>, Sheila Smith, PhD, RN<sup>§</sup>, Medical University of South Carolina, \*Dietetic Internship, <sup>‡</sup>General Clinical Research Center, <sup>^</sup>Winthrop University, <sup>#</sup> Department of Obstetrics and Gynecology, <sup>§</sup>College of Nursing

The purpose of this study is to examine the relationship between maternal attitude toward weight gain during pregnancy and gestational weight gain, energy intake, and infant birth weight. Gestational weight gain within the Institute of Medicine (IOM) recommended ranges is associated with better maternal and infant outcomes. Despite these recommendations, it is estimated that only 30-40% of women actually gain weight within these ranges during their pregnancy. Inadequate gestational weight gain is associated with pre-term birth, low birth weight infants, and perinatal mortality. It has been suggested that a negative maternal attitude toward weight gain may result in inadequate weight gain during pregnancy; however, studies examining this have shown conflicting results. This study will prospectively examine a cohort of 60 singleton gestation pregnant women receiving prenatal care by the Department of OB/GYN at the Medical University of South Carolina (MUSC) from early pregnancy through childbirth. Analysis of maternal attitude toward weight gain will be obtained from the Pregnancy & Weight Gain Attitude Scale (PWGAS) and compared to the IOM guidelines for BMI specific weight gain during pregnancy. The PWGAS creates an overall score from 1-5, based on 18 questions, for which lower scores suggest a negative attitude towards weight gain. Correlations between overall score and energy intake, maternal weight gain, and neonatal birth weight will be used to determine relationships between attitude toward weight gain and weight gain outcomes. This research could potentially predict early maternal misbehaviors that, with appropriate nutrition intervention, could improve perinatal outcomes.