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Effects of pre-pregnancy body mass index and gestational weight gain on neonatal birth weight

Key words: Pre-pregnancy BMI; Gestational weight gain; Neonatal birth weight

Research Summary

- This research manily focused on the effects of pre-pregnancy BMI (pre-BMI) and gestational weight gain (GWG) on neonatal birth weight(NBW), particularly, the population was *3772 Chinese women with uncomplicated full-term pregnancy*.
- After statistical analysis, results were obtained including the following aspects:
  - Neonatal birthweight from women in the different pre-BMI categories
  - Multivariate linear regression analysis of NBW forcused on pre-BMI and GWG
  - The Odd ratios of pe-BMI and GWG on macrosomia, SGA and LGA
  - The discuss of suitability of the 2009 IOM recommendations for Chinese women

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Innovation Points

Several figures and tables were generated to summarize our research of certain population:

- Fig. 1: NBW increased with the increase of maternal pre-BMI level
- Table 2: Both pre-BMI and GWG had positive effects on NBW, and *pre-BMI might modify the effect of weight gain in each trimester on NBW*
- Table 3: Extreme pre-BMI and GWG both meant abnormal NBW
- Fig. 2: Existing recommendations for weight gain during pregnancy seemed not very suitable for the Chinese

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