

## STANDARDIZED WEIGHT GAIN CURVES IN A MEDITERRANEAN POPULATION ACCORDING TO PREGESTATIONAL BMI

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Background: A lot of studies have demonstrated that there are associations between gestational weight gain and both short- and long-term maternal and neonatal outcomes such as large-for-gestational-age (LGA), caesarean section, maternal postpartum weight retention, and childhood obesity. Even though these relations are well known, it is difficult to recommend which is the adequate gestational weight gain according to preconceptional BMI. For these reason, in 2009, the Institute of Medicine (IOM) established new guidelines to fix some ranges between an adequate and inadequate gestational weight gain. Nevertheless, the 2009 IOM concluded that there were too few data to inform weight-gain guidelines according to maternal BMI. Moreover, the scarce published studies that have demonstrated the relation between an inadequate gestational weight gain and adverse perinatal outcomes did not take into account the pregestational BMI. Objective: To create standardized weight gain curves in a Mediterranean population. Methods: Retrospective cohort of singleton pregnancies completely followed-up in our centre. Each pregnancy was included only once. We considered pregestational weight the last recorded weight in the last 6 months before pregnancy. In those cases with more than one determination, an algorithm prevailing the least represented weeks was created. Weeks were truncated to units. For the estimation of the curves, a quantil regression based on LMS methodology (Cole and Green, 1992) has been used. Results: We constructed curves for standardized gestational weight-gain according to pregestational BMI. Conclusion: New curves for normal gestational weight-gain have been created in a Mediterranean population.