

# Obesity

August 08-10, 2016 Toronto, Canada

## Contribution of prepregnancy weight and gestational weight gain to adverse pregnancy outcomes in Canada

G gJY'8nU\_dUg

Prepregnancy body mass index (BMI) and gestational weight gain (GWG) are associated with adverse pregnancy outcomes such as caesarean birth, preterm birth (PTB), small-for-gestational age (SGA) and large-for-gestational age (LGA) birth. Overweight and obese women, in particular, are known to be at increased risk of adverse pregnancy outcomes. Data from the Canadian Maternity Experiences Survey – a nationally representative sample of women who had a singleton live birth in 2005-2006 were used to estimate the contribution of prepregnancy BMI and GWG to selected adverse pregnancy outcomes in Canada. From adjusted odds ratios, we calculated population attributable fractions to estimate the contribution of BMI and GWG to caesarean birth, PTB, SGA and LGA births. Prior to pregnancy, 5.9%, 20.9% and 13.3% of women were underweight, overweight and obese respectively; and during pregnancy 18.1% gained below the recommended weight while almost one-half (48.8%) gained above the recommended weight. Among women, overweight or obese BMI or excess GWG contributed to one in five (20.2%) caesarean births. Among newborns, above recommended GWG contributed to 18.2% of PTB, while underweight BMI and below recommended GWG each contributed to less than 5% of PTB. Below recommended GWG contributed more (9.2%) to SGA births than underweight BMI (5.3%). And, above recommended GWG contributed more (15.9%) to LGA births than being overweight (6.5%) or obese (8.9%). In conclusion, maternal weight contributes significantly to the occurrence of adverse pregnancy outcomes in Canada. Strategies aimed at reducing adverse pregnancy outcomes must include promoting healthy BMI prior to conception and recommended weight gain throughout pregnancy.