



WEIGHT GAIN AND LOSS IN PREGNANCY

The mother's pre pregnancy weight, her body mass index (BMI) and weight gain in pregnancy can influence her baby's birth weight and fat distribution. Birth weight and fat distribution impact the risks for the baby's health and we now know birth weight can also affect the individuals adult weight and long-term health. For example, birth weight above or below the normal range may increase the future risk of developing diabetes, high blood pressure, and cardiovascular disease.

Excessive weight gain in pregnancy increases the mothers risk of postpartum weight retention and increases her risk of becoming obese or developing worsening obesity.

CHANGES IN WEIGHT RELATED TO PREGNANCY

Maternal weight gain during pregnancy is from increases in maternal body water and fat.

On average, weight gain at term is distributed as follows:

- Fetus: 3.2 to 3.6 kg
- Fat stores: 2.7 to 3.6 kg
- Increased blood volume 1.4 to 1.8 kg
- Increased fluid volume 0.9 to 1.4 kg
- Amniotic fluid 0.9 kg
- Breast enlargement 0.45 to 1.4 kg
- Uterine hypertrophy 0.9 kg
- Placenta 0.7 kg

Other factors — Women will find they have a small increase in body weight and fat distribution after their first pregnancy. These changes vary between women and are influenced by many factors including race and ethnic background, age, occupation, physical activity, and smoking.

RECOMMENDATIONS FOR WEIGHT GAIN DURING PREGNANCY

Recommendations for weight gain during pregnancy by prepregnancy BMI

Pre pregnancy BMI	total pregnancy weight gain (kg)	Weight gain in second and third trimester (kg/per week)
Underweight BMI <18.5		
Singleton	12.5 - 18.0	0.51 (0.44 - 0.58)
Twins	no recommendation	
Normal weight BMI BMI 18.5 to 24.9		
Singleton	11.5 -16.0	0.42 (0.35 - 0.50)
Twins	16.0 -24.0	
Overweight BMI 25.0 to 29.9		
single	7.0 - 11.5	0.28 (0.23 - 0.33)
twins	14.0 -23.0	
Obese BMI ≥30.0		
single	5.0 - 9.0	0.22 (0.17 - 0.27)
twins	11.0-19.0	

OUTCOMES ACCORDING TO WEIGHT GAIN IN PREGNANCY

Weight gain during pregnancy can effect pregnancy in many ways including:

- a higher than recommended weight gain is associated with a greater risk of a large for gestation baby (macrosomia)
- a low than recommended weight gain is associated with a greater risk of having a small for gestational age infant (growth restricted).
- higher than recommended weight gain may be associated with weight retention later in life. Overweight and obese women retain more weight compared to normal weight women.
- higher than recommended pregnancy weight gain may increase the risk of pregnancy-related hypertension (preeclampsia), caesarean delivery, gestational diabetes, macrosomia, and childhood obesity
- lower than recommended weight gain can be associated with small for gestation birth weight and preterm delivery

Women of normal weight — Women who have a BMI in the normal range do not need to increase their caloric intake in early pregnancy, as weekly weight gain in the first trimester should be minimal. Later in pregnancy, caloric intake needs to increase by only about 300 calories per day to achieve 0.5 kg weight gain per week.

Overweight/obese women — although the recommendations are that women in the overweight /obese pre pregnancy weight range should gain a smaller amount of weight in pregnancy, it is not advised to actively lose weight during pregnancy as this may be associated with increased risk of having a growth restricted baby. Weight reduction to a more healthy level prior to and between pregnancies can improve outcomes for both mothers and babies. This is often difficult to achieve and consulting a dietician may provide support and advice that will help.

Underweight women — women who are below the healthy BMI range are encouraged to reach a normal BMI before pregnancy and to the recommendations for weight gain during pregnancy. This man lower their risk of spontaneous preterm birth and having a growth restricted baby.

Diet and exercise — As in non pregnant individuals, exercise helps to prevent excessive weight gain.