

## Obesity before, during and after pregnancy

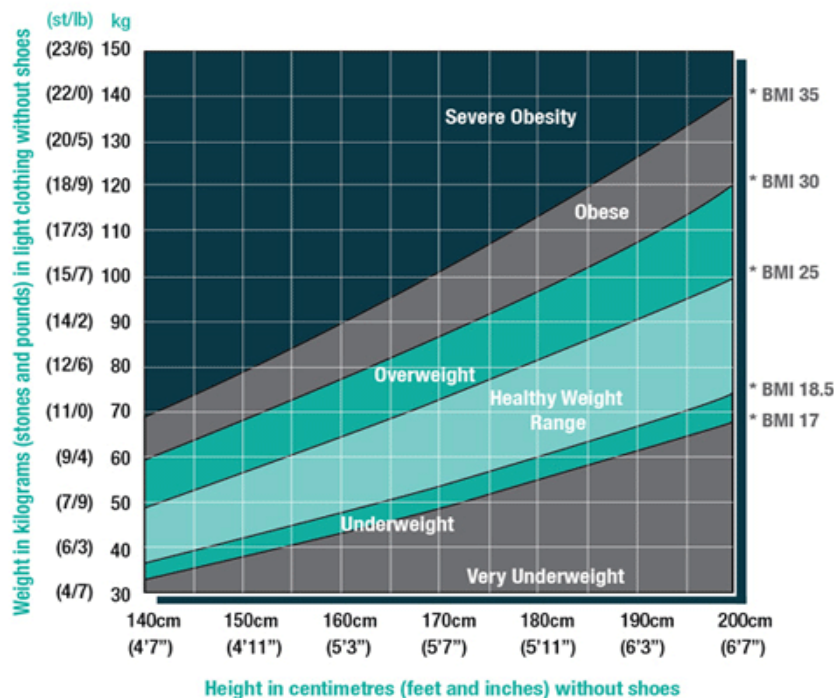
Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect.

Obesity and being overweight has become a much more common occurrence in Australia and indeed worldwide in the last 30 years. This is largely because the society and environment we live in has changed such that the foods readily available to us tend to have more calories and portions are larger in size. At the same time for many of us, our lifestyles mean that we are less active in general and have less time for regular exercise. Because of these and many other issues, about half of women becoming pregnant are now overweight or obese.

### What is overweight and obesity?

Because many people are now overweight, it may be harder to recognise when we are actually overweight or obese. Health workers often use a measurement called the BMI to ascertain whether a person is overweight or obese. The BMI is pre-pregnancy weight (in kg) divided by the height (in metres) squared. Normal range is 18.5-25, overweight is 25-30, obesity is greater than 30.

This measure has some limitations but none the less is a reasonable indicator of obesity. It is important for you to know if you are obese because it can help you to manage your pregnancy from the planning stages to after birth in order to reduce risks for you and your baby.



$$* \text{Body Mass Index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height}^2 (\text{metres})}$$

For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday -Friday 9am-5pm (excluding public holidays)



### What are the risks?

Being obese while planning pregnancy may make it more difficult to fall pregnant. Losing even a few kilograms of weight has been shown to increase a woman's chance of getting pregnant.

All pregnancies have some risks of pregnancy complications but most often pregnancy proceeds normally. However being obese does increase the risks of some of the complications of pregnancy. During pregnancy, there are increased risks of complications such as miscarriage, high blood pressure, a disease of pregnancy called preeclampsia, diabetes and developing clots. As well, there are increased anaesthetic risks during childbirth (such as difficulties with epidurals) and more likelihood of infections and haemorrhages (excessive bleeding) associated with delivery.

There are also increased risks for the baby of an obese mother. The baby has an increased likelihood of having congenital abnormalities such as spina bifida and some heart defects. Furthermore it is harder to monitor the baby while pregnant even by ultrasound so that problems during the pregnancy may be harder to detect. At birth, the baby is also likely to be larger and subsequently there is increased risk of birth trauma, instrumental delivery (eg forceps) or caesarean section and intensive care admission. When growing up, babies born to obese mothers are at increased risk themselves of being obese and developing diabetes.

### What weight should I aim for?

Ideally, if obesity is a problem for you, losing some weight **before** pregnancy is the best option. However, it is important to not start a restrictive diet while attempting to become pregnant as this can also increase risks for your baby.

However, if like many women, you are already pregnant when starting to deal with your obesity, it is important to be aware of weight targets for your pregnancy (see below). Particularly, if you are obese (BMI greater than 30) your weight gain should be 4-11kg and sometimes less depending on the degree of obesity. This should be discussed with your midwife, dietitian or doctor.

#### **Institute of Medicine (2010) recommendations for total and rate of weight gain during pregnancy, by pre-pregnancy BMI**

Pre-pregnancy BMI	Total weight gain in kg
Underweight (< 18.5 kg/m <sup>2</sup> )	12.5 – 18.0
Normal weight (18.5 – 24.9 kg/m <sup>2</sup> )	11.5 – 16.0
Overweight (25.0 – 29.9 kg/m <sup>2</sup> )	7.0 – 11.5
Obese (≥ 30.0 kg/m <sup>2</sup> )	5.0 – 9.0

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### Weight gain during pregnancy: recommendations for Asian women, by pre-pregnancy BMI

Pre-pregnancy BMI	Total weight gain in kg (during pregnancy)
<18.5	12.5-18.0
18.5-22.9	11.5-16.0
23-27.5	7.0-11.5
>27.5	≤ 7.0

#### **I am not pregnant yet. What should I do?**

Looking at a healthy lifestyle is very important. Addressing food issues will help to reduce weight. The aim is to eat as healthily as possible. It may be worthwhile consulting with a dietitian for further support and advice. It is also important to address your levels of physical activity. Being as active as possible and using every opportunity to move is helpful. Incorporate a regular exercise routine into your life.

Another issue if you are planning pregnancy is commencing folic acid tablets at least 1 month before pregnancy. Folic acid helps reduce the risk of some congenital birth defects such as spina bifida. If you have a BMI greater than 30, it is recommended that you take folic acid 5mg every day. This is a higher dose than is routinely recommended for women planning pregnancy, so be sure to get the correct strength tablet from the pharmacy.

More and more obese women who are planning pregnancy have now had bariatric surgery. This is an evolving area so information is somewhat limited but it does appear to reduce some of the obesity risks in pregnancy. If you have had surgery, it is important to speak to a dietitian experienced in this area as you may require extra nutritional supplements in pregnancy.

#### **What should I consider if I am obese and pregnant?**

It is important to look at maintaining a healthy diet while pregnant. See the Mothersafe factsheet- Diet and Exercise in Pregnancy. It is worthwhile considering seeing a dietitian if you would like further support.

Being as active as possible in your regular day is a priority. This means taking as many opportunities to walk around and to spend less time sitting. It is generally safe to continue exercising at pre-pregnancy levels but this should be verified for you personally with your doctor, as you may have specific issues such as bleeding. However, it is best to avoid strenuous exercise and overheating in the first trimester of pregnancy.



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It is also important to continue taking regular folic acid tablets for the 1<sup>st</sup> trimester of pregnancy to prevent spina bifida and other birth defects. The dose of folic acid should be 5mg daily if your BMI is greater than 30. Other supplements such as vitamin D may be necessary if your weight is an issue, and also if you have had previous bariatric surgery.

Being overweight or obese also means there is an increased risk of having diabetes or developing gestational diabetes. All pregnant women have a check for this at 28 weeks but if you are overweight or obese it is important to consider an earlier check during pregnancy or even prior to pregnancy.

Flu (Influenza A- H1N1) is a particular risk for all pregnant women, but more so when a pregnant woman is obese. If you are pregnant, vaccination against the flu is safe and is recommended at any stage of pregnancy or if you are planning a pregnancy.

Consider early referral to an anaesthetist to discuss potential issues associated with delivery, and referral back to your surgeon if you have a gastric band that requires adjustment. Careful monitoring of your blood pressure is also important throughout your pregnancy.

It is important to discuss all these concerns with your midwife or doctor who is helping to care for your pregnancy.

### **After pregnancy**

After your pregnancy, it may be difficult to achieve a healthy weight range. Again healthy diet, an active lifestyle and regular specific exercise are very important. However, highly restrictive dieting is not advisable, particularly while breastfeeding.

Getting to a healthy weight range after pregnancy reduces your risks for further pregnancies as well as improves your long term health. It is worthwhile discussing weight management with your doctor or dietitian. For some women where lifestyle measures alone have been unhelpful, bariatric surgery may be considered.

**Further information regarding diet and exercise relating to pregnancy can be viewed in the following MotherSafe link- Diet and exercise in pregnancy**

### **References**

Institute of Medicine, National Research Council.. Weight gain during pregnancy; reexamining the guidelines. Washington DC: The National Academy Press; 2009.  
RANZCOG. C-Obs 49, Management of Obesity in Pregnancy, March 2013

### **Additional Information**

Australia Healthy Weight Week <http://www.healthyweightweek.com.au/>  
University of Sydney- Glycaemic index <http://www.glycemicindex.com/>  
Better Health Channel- exercise and pregnancy-  
[http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Pregnancy\\_and\\_exercise](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Pregnancy_and_exercise)

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