



Weight and reproductive outcomes

It is estimated that more than half of Australian women and men of reproductive age are overweight or obese. Most people know that being overweight or obese increases the risk of health problems such as heart disease and diabetes. But many are unaware that this also reduces fertility and the chance of having a healthy baby.

Weight and reproductive outcomes

What is obesity?

Body mass index (BMI) is a measure of the relationship between a person's height and weight. You calculate BMI by dividing weight in kilograms by the square of height in metres. A healthy BMI for adults is between 18.5 and 24.9 kg/m². A BMI between 25–29.9 kg/m² is classified as overweight and BMIs of 30 kg/m² and over as obese.

Why are some people obese?

Many factors contribute to obesity including family history, eating habits, and levels of physical activity. Factors in the environmental such as the ready access to processed food, fast food and sugary drinks, and the reliance on cars for transport, also influence obesity rates.

People who are overweight or obese often feel bad about this and in part this is due to the stigma attached to obesity. Feeling judged, stigmatised, discriminated against or pressured by others can cause behavioural change that leads to further weight gain.

How can people lose weight?

There is no silver bullet for weight loss but some of the necessary ingredients for achieving sustained weight loss include: an environment where health professionals and family and friends provide encouragement and support rather than blaming and shaming; achievable weight loss goals and a realistic time frame to reach those goals; knowledge about nutrition and healthy eating; access to fresh food; and means to increase levels of physical activity.

Obesity and fertility

Obesity can cause hormonal changes that interfere with ovulation and reduce a woman's fertility. As a result, obese women:

- take longer, on average, to conceive than women in the healthy weight range and
- are more likely to experience infertility.

In men, obesity can lower fertility. This is likely due to a combination of factors including hormone problems, problems with erection and/or other health conditions linked to obesity.

Among infertile couples who use assisted reproductive technology (ART) to conceive:

- female and male obesity reduce their chance of achieving a pregnancy and
- the risk of miscarriage is higher and the live birth rate is significantly lower for overweight and obese than for normal-weight woman.

Obesity and pregnancy

Being overweight or obese negatively affects a woman's health during pregnancy. Compared with pregnant women in the healthy weight range, overweight and obese women are more likely to:

- experience miscarriage
- develop high blood pressure and diabetes
- have a premature birth
- have induced labour and
- be delivered by caesarean section.

Obesity and the new baby

Maternal obesity increases the risks of adverse outcomes for the baby. Babies born to overweight or obese women are more likely than babies with mothers in the healthy weight range to:

- be stillborn
- have a birth defect
- weigh more than 4.5 kilograms at birth (macrosomia) and
- be at increased risk of future childhood and adult obesity and all its associated health problems.

The good news

While the facts about obesity and reproductive outcomes can seem daunting, there is some good news. In obese women, even a modest weight loss improves fertility and pregnancy health. Also, some dietary and lifestyle interventions that limit pregnancy weight gain can improve outcomes for both mother and baby.

Recommended lifestyle modifications for obese individual include a weight loss of 7% of body weight and at least 150 minutes weekly of moderate activity such as walking. It is estimated that a 500-1000 kcal per day decrease from usual food consumption should lead to 0.5-1 kg weight loss per week. A low-calorie diet of 1000-1200 kcal per day would be expected to achieve a 10% decrease on total body weight over 6 months.

A recent study showed that men and women are twice as likely to make positive health behavior change if their partner does too. For couples trying to get pregnant, working together to increase physical activity and lose weight can improve their chances of having a healthy baby.

For more information about pre-conception health visit