



# LIFESTYLE FACTORS AND FERTILITY

**A number of studies have shown conclusively that lifestyle can affect infertility including age, being excessively underweight or overweight, or smoking.**

These five lifestyle factors are discussed below.

## INFERTILITY AND AGE.

It has been well known for some time that women over 37 years of age have dramatically decreased fertility; however new studies have shown that males after 40 years old have a 50% decrease in fertility rates. Modern lifestyle trends of delaying parenthood therefore have a significant effect on infertility.

## WOMEN WHO ARE EXCESSIVELY UNDERWEIGHT.

Excessively thin patients have greatly increased irregularity of menstrual cycles, and consequently reduced conception and birthing rates than women in the normal weight range. Furthermore, if an underweight woman conceives, there may be adverse effects during pregnancy on the foetus. For instance, mothers who hunger or are underweight during:

- the 1st trimester of pregnancy have a higher risk of delivering offspring who show the effects of obesity;
- the 2nd trimester of pregnancy are more likely to deliver prematurely; and
- the 3rd trimester of pregnancy have a higher risk of producing offspring who develop insulin resistance and diabetes.

## WOMEN WHO ARE EXCESSIVELY OVERWEIGHT.

Excessively overweight women also have greatly increased irregularity of menstrual cycles, and consequently reduced conception and birthing rates than women in the normal weight range. Studies have shown that even being 10kg overweight can result in a 10% loss of fertility. Obese patients have a 4 fold risk of foetal death and 27% increased chance of miscarriage. Increased risk of complications to the mother during pregnancy related to being overweight include an increased chance of post date deliveries resulting in an increased rate of labour inductions and Caesarian births. Overweight mothers are also at greater risk of high blood pressure and venous thrombosis during pregnancy and of haemorrhage during birth. Furthermore, babies born to overweight mothers have shown to have a significantly increased risk of developing diabetes in infancy.

However, the good news is that the chance of fertility recovery is 8% in overweight patients after three months of slight but continual weight loss. For obese patients, the chance of fertility recovery is 18% after continual slight weight loss; however it will usually take 9 months longer to conceive than women in the average weight range.

## SMOKING, INFERTILITY AND HEALTH CONCERNS.

It has been shown that parents' smoking causes infertility and health problems for up to four future generations. For instance, it is thought to have an impact on endometriosis over generations of women. Smoking has also been shown to be the primary cause of tubal damage in both males and females thereby resulting in infertility. Also, if a non-smoking female has a child with a smoking-male, that child has a five fold increased chance of developing childhood cancer or leukemia.



## ALCOHOL AS A LIFESTYLE FACTOR.

While there is no clear evidence that moderate alcohol consumption (up to 10 standard drinks per week – not all at once!) has any adverse effect on fertility, heavy alcohol use probably reduces female fertility and certainly reduces sperm count and quality with an increase in sperm abnormalities and reduction in fertilizing ability.

## ALCOHOL IN PREGNANCY.

Until recently it was considered that only the chronic heavy drinker or the patient who got seriously drunk on one or more occasions in early pregnancy put their baby at risk of alcohol induced damage.

This is no longer so and evidence is emerging to suggest that any alcohol consumed in pregnancy may adversely affect the foetus. In many cases the level of the damage is related to the amount of alcohol consumed but not certainly in all.

The defects range from mild intellectual impairment, through to behavioural problems often misdiagnosed as attention deficit disorder or schizophrenia, to major physical abnormality and severe mental defect.

We must recommend, therefore, that women do not drink any alcohol in pregnancy.

## RECOVERY OF FERTILITY BY ADDRESSING LIFESTYLE FACTORS.

It has been shown that where both diet and lifestyle factors (such as age and smoking) were addressed, there is a 61% increase in both spontaneous and ART (Assisted Reproductive Technology) pregnancies achieved.

If diet and weight alone are addressed, there is a 21% increase in both spontaneous and ART (Assisted Reproductive Technology) pregnancies.