

Disclaimer

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Ovulation Induction

[What is ovulation induction?](#)

Ovulation induction is the name given to medical therapy which helps a woman ripen and release a mature egg. It is done with the intention of achieving a pregnancy only. There are a number of methods available.

[Who needs ovulation induction?](#)

Failure of ovulation is a common and usually treatable cause of reduced fertility in women. There are 3 main causes of ovulatory failure.

1. The first is called hypogonadotrophic hypogonadism and refers to a low signal from the pituitary gland (a pea-shaped gland located behind the eyes) which normally works to stimulate egg production in the ovaries. Causes for this include low body weight, severe psychological stress, pituitary disease including high levels of prolactin. This is frequently called central hypogonadism. Low or inappropriately low levels of FSH (follicle stimulating hormone) characterise this condition.
2. The second cause of failing to ovulate is polycystic ovarian syndrome and this is very common. It is frequently associated with high male hormone levels, being overweight or obese and excess body hair. There is a predisposition to diabetes.
3. The third cause of failing to ovulate is impending or completed ovarian failure and this relates to reduced numbers of eggs in the ovary. Very high levels of FSH characterise this condition. Unfortunately this type is the least responsive to ovulation induction.

Therefore women who have central hypogonadism or polycystic ovarian syndrome (groups 1 & 2) and who desire a pregnancy are most likely to benefit from ovulation induction.

[What methods are used?](#)

1. Clomiphene is frequently used in all of cases of ovulation induction (see separate information sheet).
2. FSH (follicle stimulating hormone) is frequently used for ovulation induction (see separate information sheet).
3. Lifestyle adjustments. Weight loss is very important in polycystic ovarian syndrome and actually losing weight can make clomiphene and FSH therapy more likely to be associated with success. Weight gain is also important where low body weight is contributing to ovulation failure. Sometimes in hypogonadotrophic hypogonadism reduction of intensive exercise regimes is important.

4. Use of metformin in ovulation induction in polycystic ovarian syndrome is helpful.
5. Bromocriptine or cabergoline is used when a woman has very high levels of prolactin.

What preparation is required?

1. It is advisable for a woman to check immunity to rubella (german measles) before ovulation induction.
 2. It is advisable that the woman takes folic acid 500µg daily prior to, during and after conception to reduce the risk of neural tube defects e.g. spina bifida in the baby.
 3. It is desirable that the quality of the male partner's semen be checked before ovulation.
 4. Before FSH is used, it is required that the fallopian tubes be confirmed as open. This can be done by laparoscopy or hysterosalpingography and your doctor can discuss these with you. Tubal evaluation is not required before using clomiphene but in some cases it may be desirable e.g. past pelvic surgery, past pelvic inflammatory disease.
 5. Having a healthy lifestyle with reduction of alcohol consumption, cessation of cigarette smoking and illicit drug use is desirable during and between treatment cycles. Eating a healthy diet, partaking in moderate exercise and using stress management strategies are also important. Reduction of caffeine intake may be desirable but is of unproven benefit.
- A formal ultrasound scan of the pelvis is generally recommended prior to commencing FSH to make sure that there are no ovarian cysts.