



A simple guide to IVF

If you've been told you may need IVF, it will help to learn as much as you can about what is involved in the process. This will enable you to feel more confident and more in control as you go through treatment.

What is IVF?

In-vitro fertilisation (IVF) was first developed as a treatment for fertility problems in 1978. During IVF treatment, a woman's ovaries are usually stimulated with drugs to encourage her body to produce more than one egg at a time. The eggs are then collected and fertilised with her partner's or a donor's sperm in the laboratory before being replaced in her womb.

Who needs IVF?

The treatment was originally developed to help women who had problems with their fallopian tubes, which run from the ovaries, where eggs are produced, down to the womb. IVF by-passes the tubes as eggs are collected direct from the ovary and replaced into the womb. Now, IVF is used far more widely for many different kinds of fertility problems.

What does treatment involve?

IVF treatment involves a number of visits to the clinic and a variety of drugs. Individual fertility clinics use different treatment regimes depending on the couple's circumstances, but a treatment cycle often starts with some drugs to dampen down the woman's normal hormone cycle (known as **down-regulation**). This is followed by some injectable drugs which **stimulate the ovaries** to produce a number of eggs.

During this stage of treatment there will be regular visits to the clinic to monitor how the ovaries are responding to the drugs. Once the follicles which contain the eggs have reached the right size, another drug will be given to ripen the eggs so that they are ready to be harvested.

The eggs will now be ready for collection. The male partner gives a semen sample, which is prepared by getting rid of any debris and separating the sperm from the semen to ensure that the best quality sperm are used.

Egg collection is carried out under sedation in an operating theatre. A thin needle is inserted through the vaginal wall into the ovaries and ultrasound is used so that the follicles can be seen. The fluid in the follicles is sucked out and taken to the laboratory where any eggs can be identified.

The eggs are mixed with the sperm in a test tube and left in an incubator. It is hoped that the sperm will break through the outer shell of the eggs and fertilise them. Fertilised eggs are kept in the incubator for up to five days before one or two are returned to the womb. This is known as **embryo transfer** and involves a thin tube being passed through the vagina and cervix into the womb. This process is a bit like a smear test and is not usually painful.

If there are any additional embryos remaining after embryo transfer, it will usually be possible to have these frozen. They can then be transferred at a later date if your treatment cycle is not successful, or if you want to try for another child.

Once the embryos have been transferred, there is a **two week wait** to find out whether the treatment has been successful. This is often said to be the most difficult part of IVF treatment. You will be advised not to smoke or drink alcohol at this time, and it is sensible to try to adopt a healthy lifestyle.

If you want to know more about IVF, you may want to read 'The Complete Guide to IVF' - see the books page (<http://fertilitymatters.org.uk/books/>).