

Ovulation and conception



Misconceptions about conception

Many people plan their families in the same way they plan every other aspect of their lives. So it can prove to be quite a shock when things do not go according to plan. While some people will fall pregnant naturally as soon as they start trying, for others it will take a little longer. Your chances of falling pregnant within a year of trying is linked to your age.

A young, healthy couple has about a one-in-four chance (25 per cent) of conceiving each month. This equates to an 85 per cent chance of falling pregnant naturally within a year. (Source: American College of Obstetricians and Gynaecologists).

However, as a woman, and a man, ages, these rates drop off quite significantly.

While a woman in her early to mid-20s has a 25-30 per cent chance of getting pregnant each month, this starts to slowly decline from her early 30s, then more rapidly from the age of 35. By the time a woman is 40, the chance of getting pregnant each month is about 5 per cent.

For women and couples who do not fall pregnant straight away, this can feel like a failure, and can also cause you to feel alone. But it is in fact very common.

The World Health Organisation (WHO) says at least one-in-six couples will experience some degree of infertility during their reproductive lifetime.

While this information relates to a man and a woman trying to conceive, there are many other circumstances whereby people can't get pregnant without assistance. Please talk to your Fertility Specialist or a Genea team member about your circumstances.

What is infertility?

Infertility is defined as the inability to conceive after one year of regular unprotected sexual intercourse.

Fertility Specialists recommend seeking expert advice if you have been unable to conceive after 12 months so that investigations can start early to find out if there is a cause. If you are aged 35 or over, it is recommended you reduce the time you spend trying to conceive to six months before seeking help.

Genea is here to help.

Visit **genea.com.au** and request your free information pack or speak to our fertility concierge about taking the first step.

What is ovulation?

For a man and woman to conceive naturally, two important things need to happen. A woman needs to have ovulated (the release of an egg from the ovary) and the egg needs to be fertilised by sperm from the man. Ovulation typically occurs every month of a woman's reproductive life and happens 14 days into the menstrual cycle. If you have a regular 28-day menstrual cycle, this means ovulation will take place halfway through your cycle.

After ovulation, the egg lives for just 12 to 24 hours and must be fertilised in that time for conception to occur. Some women believe they know when ovulation is approaching because of changes to their body. The most noticeable is changes to vaginal discharge, which becomes clear and slippery.

Knowing exactly when you are ovulating is a great first step in falling pregnant naturally. There are a number of ways you can do this, including Genea's free ovulation tracking service.

Basal Body Temperature (BBT)

One way to find out when you are ovulating is to track your Basal Body Temperature (BBT).

The BBT is the body's natural baseline temperature. Hormonal changes in the body around the time of ovulation make it increase slightly, by about 0.5 degrees Celsius.

Taking your temperature at the same time each day, before getting out of bed, will allow you to track this subtle change and may, over time, help you predict the best time to conceive.

Ovulation tracking kits

Hormones play a huge role in ovulation and conception, and are secreted by two areas of the female brain.

Every month, the pituitary gland releases Follicle Stimulating Hormone (FSH) to tell the ovaries to produce follicles. On day 12 of a woman's cycle, the mature follicle releases oestrogen into the bloodstream, which in turn prompts the pituitary gland to release Luteinising Hormone (LH).

Urine-based ovulation kits can detect this increase, or 'LH surge', which occurs in a woman's body about 24 to 48 hours before ovulation.

These kits can be purchased over-the-counter from pharmacies and are a relatively inexpensive way to track your ovulation.

Genea's free ovulation tracking service

Genea offers a free ovulation tracking service to accurately predict when ovulation will occur using simple blood tests to check your hormone levels.

The blood tests measure levels of FSH, LH and oestrogen in your blood, as well as progesterone, which confirms when ovulation has occurred. The tests help accurately pinpoint the timing of ovulation.

Genea offers three ovulation tracking cycles at no out-of-pocket cost* at all Genea clinics.

*no out-of-pocket for Medicare-eligible patients when blood tests are conducted at Genea monitoring clinics.

Timing is everything

To increase your chances of conceiving naturally, it is recommended that you time sexual intercourse to take place when you are most fertile, i.e. around the time of ovulation.

While an egg will only survive for 12 to 24 hours after ovulation, sperm can survive for up to five days in the female reproductive tract. This means women are most fertile in the five days leading up to ovulation and the day of ovulation.

Regular intercourse

Knowing that sperm can survive inside a woman for up to five days means having sex on these days will give you the best chance of becoming pregnant.

If a couple is having regular sex (two to three times a week), there is a good chance there will be sperm waiting to meet the egg when it makes its way down the fallopian tube towards the uterus.

It is a myth that men should 'store' their sperm by abstaining from sex in the days leading up to a woman's fertile window. Long periods of abstinence can actually lead to a decrease in sperm production. Instead, the best advice is to have sex two or three times a week, no matter where a woman is in her cycle, to increase your chances of conceiving.

Falling into place

Getting pregnant is a complicated process that depends on many factors, including:

- The production of healthy sperm by the man and healthy eggs by the woman:
- · Unblocked fallopian tubes that allow the sperm to reach the egg;
- The sperm's ability to fertilise the egg when they meet;
- · A genetically healthy embryo; and
- \cdot The ability of the embryo to implant in the uterus.

Repeatedly encountering difficulty at any of these steps can lead to infertility. The reality is that human reproduction is a fairly inefficient process. Various clinical studies have calculated the chance of pregnancy among population groups that do not use contraception. These indicate the probability of a live birth is about one-in-five per menstrual cycle.

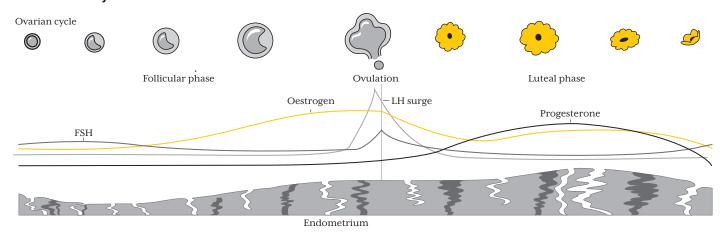
Even if you do fall pregnant, about half of all very early embryos fail to develop or implant in the uterus wall. Other embryos will implant but will not survive due to some sort of abnormality. In many cases, a very early pregnancy is lost before a woman even knows she is pregnant.

For those embryos that do survive past the first missed period, one-in-five pregnancies will end in miscarriage before 20 weeks. The majority of these miscarriages will occur in the first 12 weeks.

So, as you can see, there are a lot of factors that come into play before conception occurs, resulting in a healthy pregnancy.

While the majority of younger women and couples will conceive within a year, others may need a little help, and Fertility Specialists recommend you wait no more than a year, or six months if you are over 35, before seeking help.

The menstrual cycle



The age factor

As you can see from the graph below, by the age of 36, a woman's chance of conceiving each month has dropped by almost half. This downward slope continues until the age of 45, by which time the average natural fertility rate per month is approximately 1 per cent.

