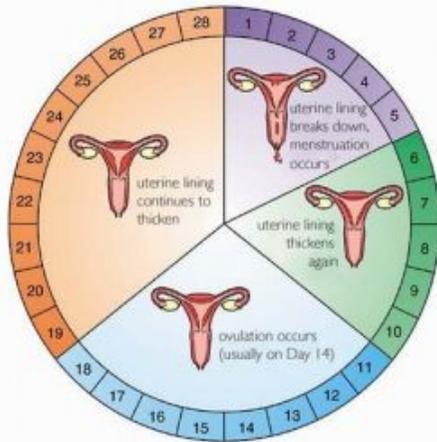


Ovulation and pregnancy testing is something we are questioned about every day in the pharmacy. A major health problem increasing in Australia is that of "age related infertility." Fertility is usually at its peak in a woman's 20s and starts a slow decline as she reaches 30. By age 35, fertility starts to decline at a much faster rate. Although we do not wish to encourage women to have babies before they are ready both emotionally and financially, it is important to be aware of this change in the body as we age. This information leaflet will cover the basics of a woman's menstrual cycle and how this relates to her fertility, as well as explaining what we have in the pharmacy to help with conception, test for pregnancy and then support mother and baby throughout the process.

Understanding the Menstrual Cycle

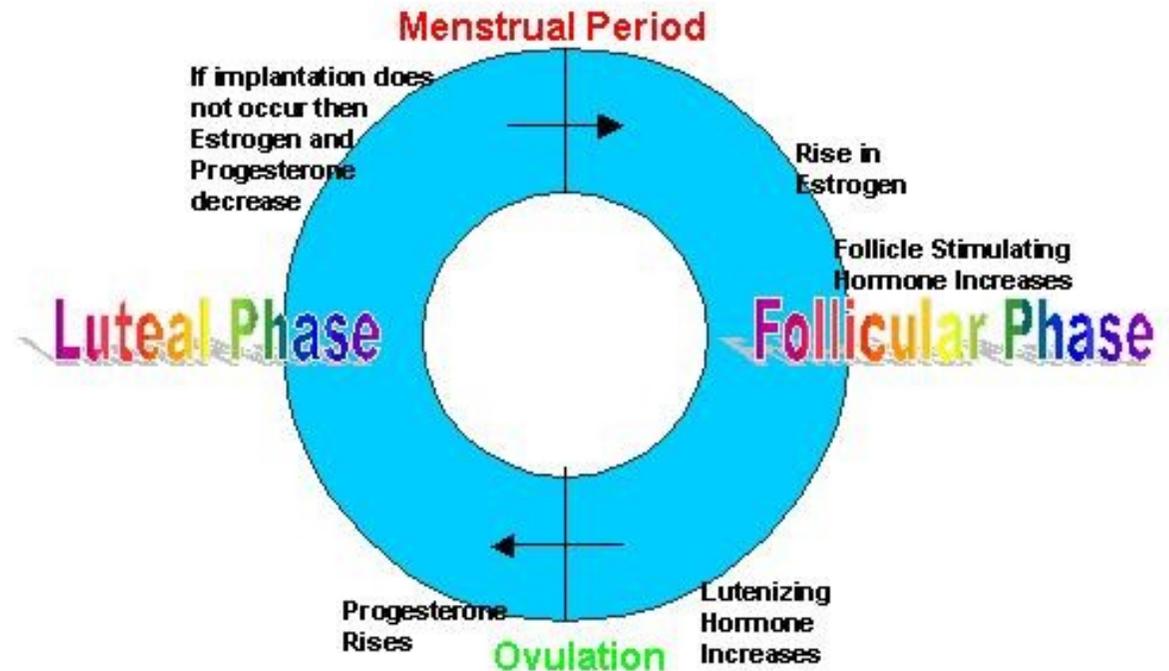


What IS the menstrual cycle?

This is the correct term for the monthly cycles in which a woman's body releases an egg, prepares itself for fertilisation of this egg by sperm and creates an environment in the womb in which the fertilised egg could implant and start developing into a baby. If this egg is not fertilised, the lining of the womb is shed from the body in what are commonly known as a woman's "periods."

The diagram right shows how this process occurs in some more detail:

- **Menses Phase** – this is when the period/bleeding occurs due to the elimination of the thickened lining of the uterus from the body through the vagina.
- **Follicular Phase** – this is so named because it is when follicles are grown in the ovary and form an egg.
- **Ovulation** – there is a surge of a hormone known as LH, stimulating the mature follicle in one of the ovaries to release its egg (other follicles "over-ripen" and break down).
- **Luteal Phase** – this is also known as the "secretory phase" and follows ovulation. After the follicle ruptures and release its egg, it closes and forms a corpus luteum which secretes more and more progesterone (a hormone), which acts on glands in the endometrium and causes them to make a secretion. This secretion will feed the embryo for a few days until a placenta has formed. If the woman has not become pregnant, the corpus luteum lasts for 2 weeks and then starts to break down, thus bringing us back to the start of menses again.



Some Useful Information on Ovulation

So the timing of ovulation has something to do with falling pregnant – is that right?

Yes, as ovulation is the development and release of an egg from the ovaries, it is the “fertile” period of a woman’s menstrual cycle. So if you are trying to fall pregnant, it is important to have a full understanding of when ovulation occurs in order to ensure intercourse is “timed correctly” in the fertile period.

So how do I know when this ovulation will occur?

A woman’s cycle is approximately 28 days in length. However, regardless of the length of the cycle, ovulation occurs about 14 days before the end of the cycle.

Well that sounds complicated – how does that work?

Count back 12-16 days from the date that your next period is due to give you an approximate ovulation period. E.g for a 28 day cycle, it will occur at around day 14 of the cycle, and for a 35 day cycle, ovulation will most likely occur around day 21 of the cycle, and so on... However, not everyone will have a perfectly regular cycle, or they might want something additional to “double check” for ovulation, and this is where ovulation testing methods are very useful....

Testing Methods for Ovulation

Method 1: Measuring the amount of luteinising hormone (LH) in the urine. This hormone controls the release of eggs from the ovaries and noticeably rises in concentration about 24-36 hours pre-ovulation time. There are many different home ovulation tests that measure this hormone in the urine, making a woman’s most fertile days of their menstrual cycle more “predictable.” These tests are generally “disposable” and suitable for 1 test only.

E.g.
ClearBlue digital 7pack
Ovuplan dipstick

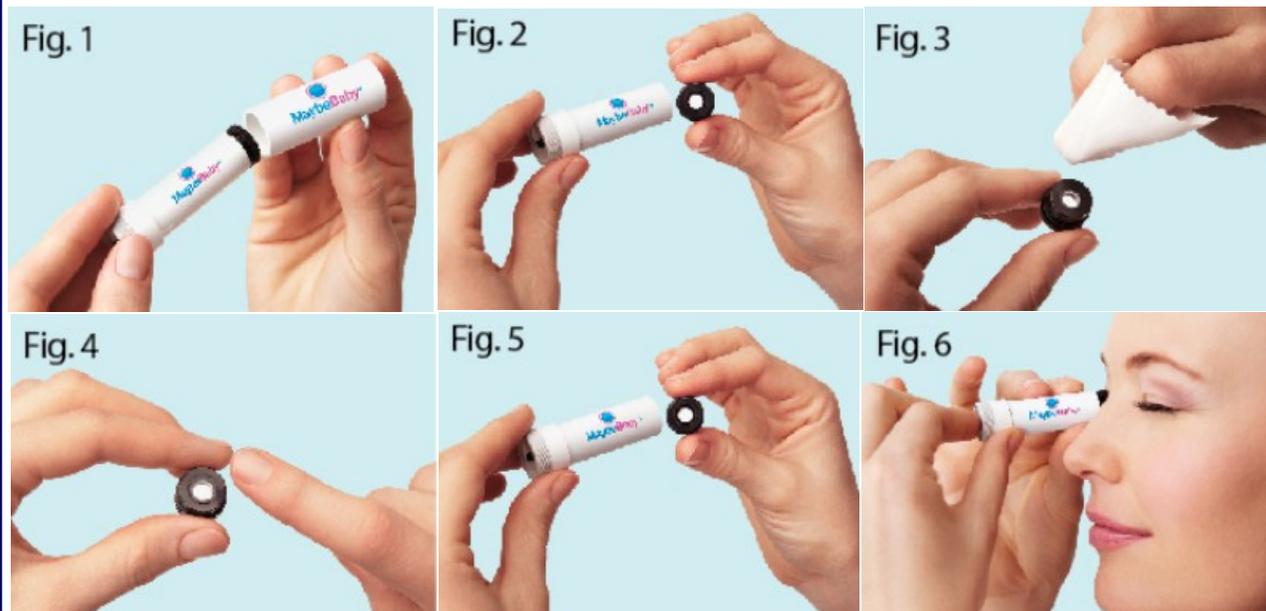


Method 2: Another way to test for ovulation involves testing LH saliva under a microscope for changes in crystallised patterns that occur throughout the cycle. This kit contains a magnifying lens that is used to examine the saliva sample, which changes appearance when the oestrogen level rises in the body at ovulation time. This testing method, although initially expensive, is reusable as often as the patient requires and may work out to be a more cost effective option if needed over an extended period of time. NB. This method is affected by anything that alters oestrogen levels in the body. E.g. if the mother was using clomiphene (a medicine prescribed by specialists to help induce ovulation), this will affect oestrogen levels and thus may cause results to be unreliable. Please consult the pharmacist if you are unsure of the suitability of this product.

E.g. Maybe Baby

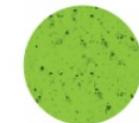


Using the "Maybe Baby" Ovulation Tester



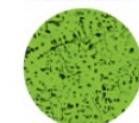
RESULTS

Pebbles



A random pattern of spots and dots
This indicates you are in the non-fertile phase.
Conception is not likely.

Transitional



A pattern of small fern like branches beginning to form amongst the pebbles
This indicates you are approaching your fertile phase.
Conception is possible.

Ferning



Distinct 'fern' pattern resembling large fern leaves
This indicates you are in your most fertile phase.
Ovulation is occurring, or about to occur, and you are more likely to conceive.

After ovulation

Following ovulation, oestrogen levels begin to decrease and you may see the transitional pattern again. As you return to your non-fertile phase a pattern of pebbles or dots will be visible again.

Everyone is different – monitor your results

The differing levels of oestrogen and cycle length mean that the intensity and duration of ferning will vary between users. The examples shown are a guide only and pattern distribution and intensity may vary.

It is important to chart your results daily as this will help you become more familiar with your individual cycle. Over time, this will help you predict your most fertile period each month.

Trying for a baby

Conception is most likely if you have intercourse when you are approaching your fertile phase, that is, the 3 days before ovulation, the day of ovulation, and up to 1 day after ovulation.



Trying to conceive can be both emotional and stressful. There are some lifestyle hints that may help to increase your chances of falling pregnant.....

- Stop smoking and limit your alcohol intake
- As hard as it may be, try to manage your stress levels, as this may play havoc with your menstrual cycle. Learn ways to better deal with your stress (e.g. relaxation, yoga, meditation)
- Eat a healthy well balanced diet and avoid repeated crash dieting, fasting, skipping meals and other disordered eating habits.
- Try to maintain a healthy weight for your height – women who are a healthy weight often find it easier to conceive and have fewer problems during pregnancy.
- Regular, gentle exercise should be included into your routine. NB. The mother-to-be should not engage in excessive exercise.
- Women’s health – ensure you have regular check-ups, especially Pap smears, sexual health and dental checks
- If there are other underlying medical conditions, your doctor should be consulted. E.g. Those people suffering with diabetes will need to pay special attention to controlling blood sugar levels in order to reduce the risk of harm to the baby.
- If the mother is currently on any regular medications, these should be checked by the doctor/pharmacist, as some can affect fertility and cause problems during pregnancy.

Pregnancy and Breastfeeding Formulas

Does the mother really need them?

- Yes, taking a pregnancy and breastfeeding formula before, during and after pregnancy is an effective way of “topping up” any essential vitamins and minerals that the mother-to-be may require for a healthy baby.

What are some of the key components of a pregnancy and breastfeeding formula?

- Folic Acid - may reduce the risk of brain and/or spinal cord birth defects (such as spina bifida) if taken daily for 1 month prior to conception and during pregnancy.
- Iodine – helps in the development of the baby’s brain, eyesight and hearing.
- Iron—often lacking before pregnancy, and then additional amounts required during pregnancy—the mother should have their levels checked by the doctor to assess their need to supplement
- Fish Oil—may help in the baby’s cognitive development, reduce the risk of eczema for the newborn baby and reduce the risk of depression for the mother.



Examples include:

Blackmores Pregnancy and Breastfeeding formula (NB. Need to take 2 tablets daily and less folic acid and iron than Elevit)
Elevit (NB this formula does not contain fish oils, so the mother may consider additional supplementation; only need to take 1 tablet daily)

Is there anything that the father-to-be should be doing to improve the chances of conception?

Sperm health is obviously very important in helping to increase the chances of conception. Here is some lifestyle advice for those men planning on being a father:

- Avoid contact with chemicals as much as possible at work and in the home
- Sleep well and exercise
- Maintain a healthy weight
- Avoid alcohol and smoking
- Avoid tight-fitting underwear, hot baths and electric blankets
- Try and relax and avoid stress



Testing for pregnancy

What are they testing for?

When you become pregnant, your body starts to produce a "pregnancy hormone" known as human Chorionic Gonadotrophin (hCG). In the body this hormone doubles in strength every 2-3 days, reaching a maximum concentration at around 7-12 weeks into pregnancy.

What are the different types available in the pharmacy?

There are many different "brands" of pregnancy tests available in the pharmacy, but only 2 methods for testing:

- Mid-stream test sticks held in the urine flow
- Urine sample collection method using a dip-and-read stick in a urine collection cup

How long after conceiving can you test?

Most at-home pregnancy tests are able to be used from about the first day of a missed period.

Are they accurate?

If used correctly according to the manufacturer instructions, home pregnancy tests are approximately 99% accurate. However, it is always best to purchase as least 2 tests to ensure the results are correct.

When is the best time of the day to test?

The accuracy of a home pregnancy test may be improved by testing your urine when you first get out of bed. This is because "early morning urine" is often more concentrated and thus contains higher levels of hCG than at later times of the day.

Is the pregnancy test from the doctor different to what I do at home?

Yes, if you receive a positive result on your at-home pregnancy test, or you are unsure of your results at all, it is important to visit the doctor who will conduct a blood test for pregnancy. This test is about 99% accurate and able to detect lower amounts of hCG than urine pregnancy tests.

Examples of pregnancy tests available in LiveLife Pharmacies



Emergency Contraception and the Morning-After-Pill

Emergency contraception refers to back-up methods for prevention of pregnancy after unprotected intercourse or possible failure of contraceptive methods (e.g. missed pills, condom breakage).

This option is available to you from the pharmacist as a schedule 3 product and involves taking a pill containing the hormone levonorgestrel.

Please note these pills:

- **May be used for up to 72 hours after sex (and later with pharmacist's discretion).**
- **Are not suitable in all cases and the pharmacist must be involved in every request.**
- **Are not effective once the process of implantation has occurred and will not cause abortion.**
- **Are not suitable for regular use.**

