

Irregular periods (Menstrual Cycle Variations)

How is the length of a menstrual cycle calculated?

A period is the part of the menstrual cycle when a woman bleeds from her vagina for a few days. The length of your menstrual cycle is the number of days from the first day of the start of your period (including any spotting) to the day before the start of your next period (including spotting).

When is the length of your cycle a cause for concern?

If the gap between your periods keeps changing significantly and this change last for more than 3 cycles in a row, you should seek qualified medical help. If you are concerned about the nature or amount of bleeding or if you are having prolonged bleeding, you may wish to seek medical advice earlier. (See leaflets on *heavy periods*, *bleeding after sex*, *bleeding in between periods*)

What are irregular periods?

Periods that come too frequently or are too far apart (delayed), lasting more than 3 cycles in a row suggests irregular periods (too early or too late for you).

Should you be tracking your menstrual cycle?

In a nutshell, the answer is yes for all women/people with uteruses, who are in the reproductive age group (from the time you start periods (menarche) until you stop completely (menopause)).

How can you track your menstrual cycle?

You can use a simple calendar to mark the days or if you have access to an app on your smart phone, there are many reliable ones on the market which allow you to accurately track your cycle such as Flo and Clue.

Why should you track your cycle?

This will help you understand if there are major variations or if you have bleeding longer than what you are used to or if you bleed when you should not be. I still meet a lot of patients who cannot give me an accurate history as to how long they have had period

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problems, which can then have an impact on treatment offered.

What is a normal variation in menstrual cycles?

Most women do not have perfect 28-day cycles, but many adult women, who are not currently on hormonal contraception (Pill, coil) will have a cycle length of around that sort of frequency.

The length of the menstrual cycle, however, varies from woman to woman but is usually seven days on either side of a 28-day cycle ($28 \pm 7 = 21-35$ days).

Each individual will usually have their own cycle pattern, which also then varies upon many factors including age and pregnancy. But it is not uncommon at all for cycle lengths to vary by a few days each time, which is why using natural family planning methods have a higher failure rate and is not a suitable option for all.

How does age affect the length of your cycle?

Teenagers

Cycle lengths vary when you start having your periods (known as menarche: average age 12.9 in the UK, range is 9-18 years, depending on race, ethnicity, nutrition etc).

It may take a few years for a teenager to start having a regular cycle pattern. This is because, many menstrual cycles are initially anovulatory (no egg is released) so cycle lengths can be very variable until regular ovulation (release of an egg from the ovary) begins, usually a few years after puberty. This helps a regular cycle develop with a similar length of time between periods. If you have any concerns about abnormal or heavy bleeding, it is best to seek professional medical advice, as help is available.

Older women

Women coming to the end of their reproductive age can see a change in their menstrual cycle lengths. This run up is known as the perimenopause which then leads on to *menopause*.

Women coming to the end of their reproductive age can miss or skip cycles, due to anovulation until they stop their periods completely for more than 12 months in a row. This

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is known as the *menopause*: average age 51, range 45-55 years. Bleeding that comes more frequently or is heavy or prolonged is not normal and it is important to seek medical advice sooner rather than later.

What if I do not have periods?

If you are taking the combined pill back to back or the progesterone only pill, it's absolutely fine not to bleed but you should still track your cycle, so you don't miss any pills.

If you are using an implant or a hormone containing coil and don't bleed, this is absolutely fine but make a note each month that you haven't bled so if you suddenly do, you know after how long and if there are any associated symptoms.

If you miss your periods more than 3 months in a row and you are not at extremes of age or pregnant, seek medical advice to rule out conditions such as PCOS.

What are the possible causes of cycle variations?

Not all irregular periods are serious or a problem. Seek advice if you are concerned,

Common causes of varying cycle lengths (not exhaustive list)

- Puberty
- Perimenopause and menopause
- Stress, both good and bad stress can affect cycle lengths. Even moving to new place, starting university, travel, a new job, a breakup and grief can affect your periods and your cycle length. The menstrual cycle is very susceptible to your environment, both internal and external.
- Early pregnancy (if any doubt, do a urine pregnancy test. Done correctly, it is an extremely accurate test)
- Hormonal contraception, especially when starting some types of hormonal contraception - such as the contraceptive pill or hormone containing coil, implant or injection.
- Breast feeding

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Medical conditions that can cause delayed or prolonged or missed periods (not exhaustive list)

- Eating disorders including anorexia, orthorexia, bulimia, binge eating
- Excessive exercise
- Excessive stress
- Extreme weight loss or weight gain
- *Polycystic ovary syndrome (PCOS)*
- Thyroid problems especially an overactive thyroid
- Tumours (ovarian, brain, adrenal)
- Chemotherapy/Radiotherapy
- Substance misuse
- Chronic illness

Can my cycle variations impact fertility and my chances of having a baby?

It can be more difficult to get pregnant if you have irregular periods because you might not ovulate (release an egg) regularly.

It can help to have sex every 2 or 3 days throughout your cycle, as it can be difficult to predict exactly when you ovulate in any given cycle. Having sex just around ovulation can be stressful and unpredictable, even with the help of ovulation kits. Remember even though the egg survives about 24 hours, sperm can remain active for up to five days.

If you are above 35 years of age, have a pre-existing health condition such as PCOS, endometriosis, fibroids, are concerned or you are struggling to get pregnant naturally, seek professional medical advice. You may need further investigations and tests as well as appropriate medications. Fertility treatment may be indicated in some situations.

When should you seek medical advice?

Typically, menstrual periods last three to seven days and most women will have a cycle length between 21 and 35 days.

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Seek help

- If periods occur less than 21 days or more than 35 days apart, lasting for three cycles in a row
- if your cycle has always been regular and suddenly changes
- Miss three or more periods in row
- Menstrual flow that is much heavier than usual or you have large clots
- Feel particularly tired
- Have prolonged or unscheduled bleeding or severe pain
- Bleeding after sex or bleeding in between your periods
- If you are concerned you have a medical condition
- If you are pregnant or having fertility issues
- If you are having concerns and need reassurance

Management includes reassurance for many, but some women will need investigations to find the underlying cause if suspected and appropriate treatment. All women should receive advice regarding general lifestyle measures with a focus on nutrition, exercise, sleep, stress management, substance use advice. (See leaflets on *Lifestyle medicine* and on *What should I eat/What supplements should I consider taking?*)

The menstrual cycle?

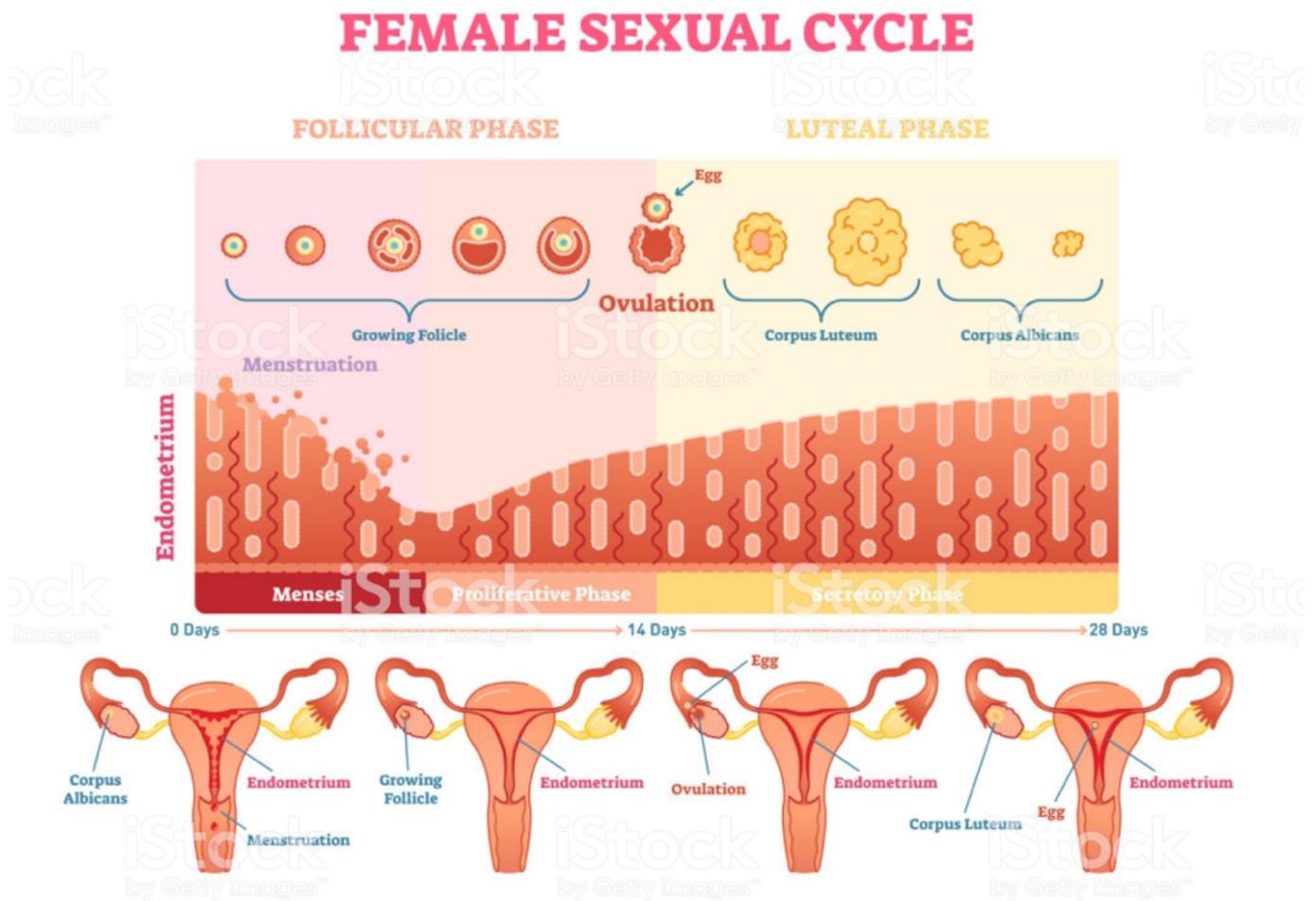
The menstrual cycle is controlled by hormones released by the pituitary gland in your brain (FSH and LH which are in turn controlled by GnRH hormones released by your hypothalamus in your brain). Each menstrual cycle is a failed pregnancy. Women in the modern age can have anywhere between 350-500 cycles in their lifetime, depending on how many children they have, if they breastfeed, take hormonal contraception and the age when they start and finish their periods.

In the first half of the cycle (follicular or proliferative phase, average 16.9 days, range 10 - 30 days), rising levels of the hormone oestrogen cause a follicle in the ovary to develop and release an egg (ovulation). The endometrial lining of the uterus (womb) also starts to thicken in preparation for a pregnancy.

In the second half of the cycle (secretory or luteal phase, average 12.4 days, range 7-17), the hormone progesterone is produced to help the uterus to prepare for implantation of a developing embryo.

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If pregnancy does not occur, the egg is reabsorbed into the body. Levels of oestrogen and progesterone fall, and the womb lining comes away and leaves the body as a period (the menstrual flow).



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