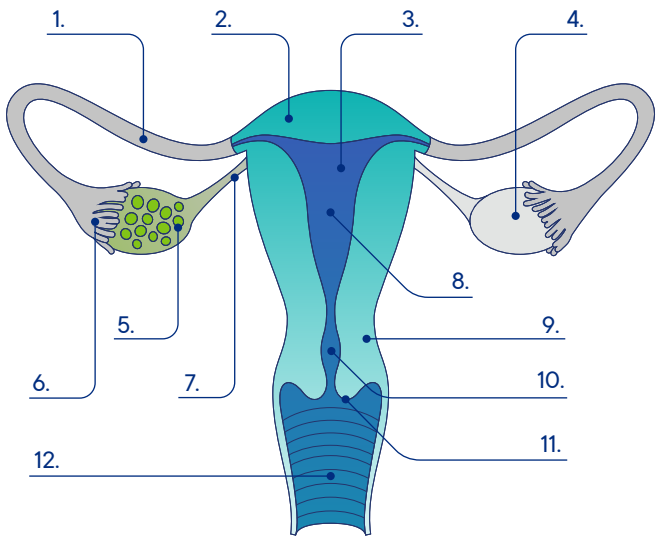
MENSTRUAL CYCLE

What is a menstrual cycle?

The menstrual cycle is the changes in hormones that occurs in a cyclical way throughout a woman's reproductive years, from puberty to menopause. These hormones affect the structures of the ovaries and the womb to make the woman ready for a pregnancy.

Puberty is when changes happen to a child's body to become an adult body and in women, from this time until menopause, she can get pregnant. From puberty to menopause, most women will have a monthly menstrual cycle, of which the two key events are having a period and ovulation. During a period, the lining from the womb is shed in the form of blood via the vagina. The first period is called menarche. The average age for a first period is around 12 years, but it can start as early as nine and as late as 16. If women are taking hormonal contraception, they may not have a period. When a woman gets to around age 45-55, and she has not had a period for one year, she will have gone through menopause.

A menstrual cycle is counted from the first day of a period to the day before the next period starts. Some women have shorter, and some have longer cycles. Cycles between 21 to 35 days are normal. In most women, 7 or less days variation in their cycle length are considered normal.



1. Fallopian tube
2. Uterine fundus
3. Womb
4. Ovary
5. Follicles
6. Infundibulum
7. Ovarian ligament
8. Endometrium
9. Myometrium
10. Cervical canal
11. Cervix
12. Vagina

Period problems

Irregular cycles or cycles that are shorter than 21 days or longer than 35 days, can be a sign that ovulation is not happening. Other period problems include period pain that affects your daily activities, heavy bleeding, periods that last more than 8 days, no periods, and bleeding between periods or after sex.

Common conditions that affect the menstrual cycle are premenstrual tension (PMT), endometriosis and polycystic ovary syndrome (PCOS).

See the information leaflets on endometriosis and PCOS for further information.

Several issues can affect your menstrual cycle and period, such as stress, travelling, and illness.

Talk to your doctor if you have any of these symptoms or are worried about your menstrual cycle.

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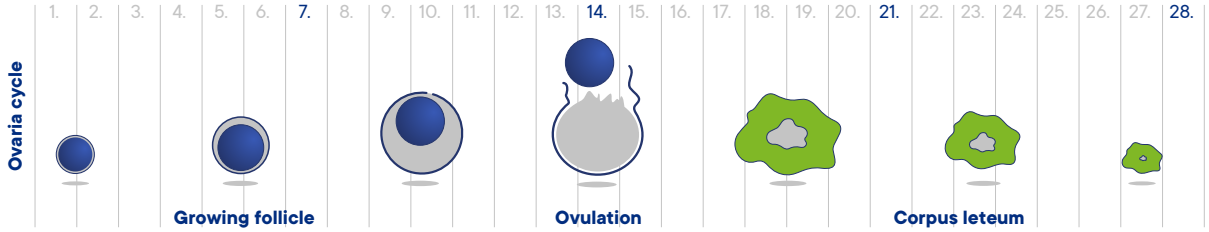
Menstrual cycle hormones and what they do

The pituitary gland in the brain produces two hormones which are needed for the development and release of eggs; follicle stimulating hormone (FSH) matures follicles which contain eggs, and luteinising hormone (LH) stimulates the release of a mature egg from the follicle.



The follicular phase begins on the first day of a period (cycle day 1). During this phase FSH is released from the pituitary, which stimulates a cluster of follicles containing eggs to begin to grow. These follicles release oestrogen. One of these becomes the leading follicle and when the egg inside it is mature and ready to be released, a spike in LH from the pituitary causes the follicle to rupture and the egg is released into the Fallopian tube.

Oestrogen is needed for puberty, the menstrual cycle, pregnancy, bone strength and other functions of the body. Progesterone prepares the womb for the embryo to implant in.

The release of the egg is called ovulation. If there is sperm in the Fallopian tube at the time of ovulation, the egg may be fertilised.

The two weeks after ovulation is the luteal phase. During the luteal phase, the left over follicle that the egg was in forms into the corpus luteum, which releases progesterone and a small amount of oestrogen. This causes the lining of the womb to prepare for pregnancy. If a fertilised egg (embryo) implants in the lining of the womb, the corpus luteum continues to produce progesterone, and this maintains the thickened lining. But if the embryo does not implant, the corpus luteum dies, progesterone levels drop, the womb lining sheds, and a period starts.