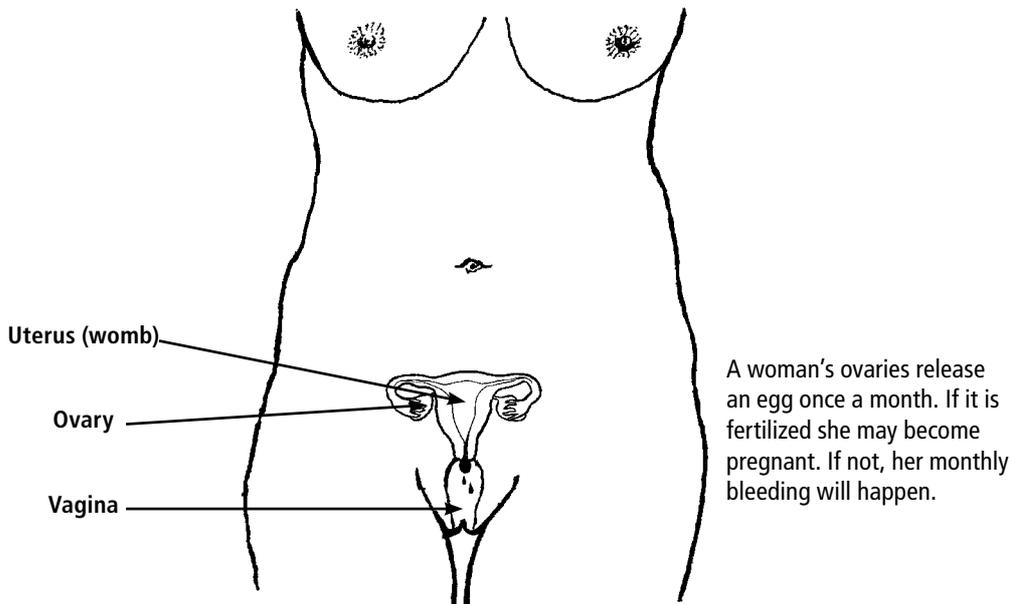


Women's Menstrual Cycles

About once each month during her reproductive years, a woman has a few days when a bloody fluid leaves her womb and passes through her vagina and out of her body. This normal monthly bleeding is called menstruation, or a menstrual period. Because the same pattern happens each month, it is called the menstrual cycle. Most women bleed every 28 days. But some bleed as often as every 20 days or as seldom as every 45 days.



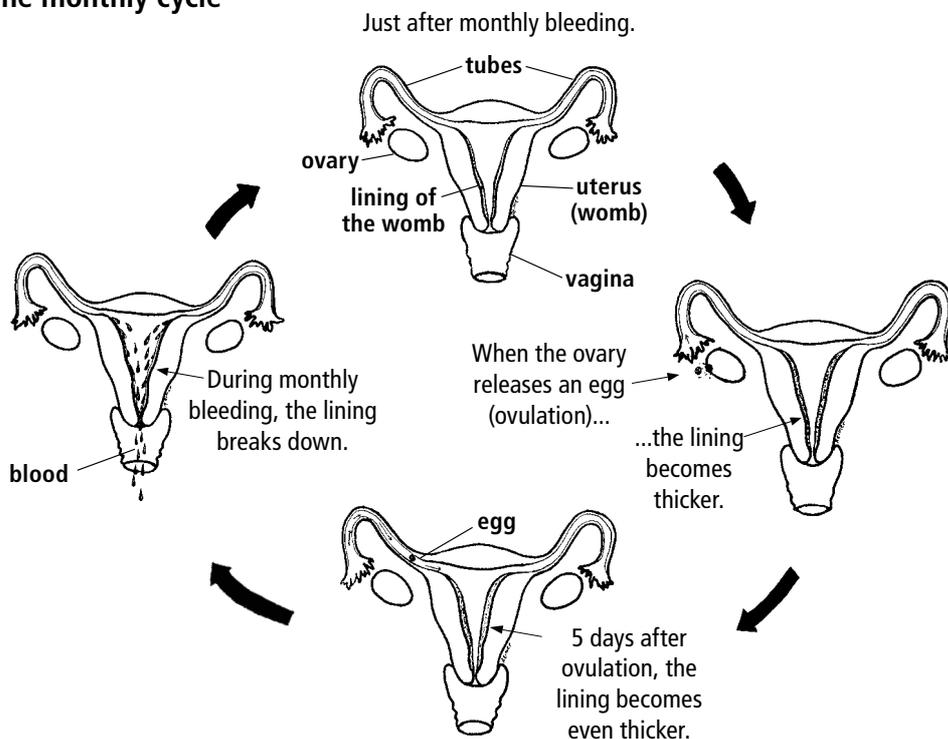
Menstruation is a normal part of women's lives. Knowing how the menstrual cycle affects the body and the ways menstruation changes over a woman's lifetime can let you know when you are pregnant, and help you detect and prevent health problems. Also, many family planning methods work best when women and men know more about the menstrual cycle (see Family Planning).

Hormones and the menstrual cycle

In women, the hormones estrogen and progesterone are produced mostly in the ovaries, and the amount of each one changes throughout the monthly cycle. During the first half of the cycle, the ovaries make mostly estrogen, which causes the lining of the womb to thicken with blood and tissue. The body makes the lining so a baby would have a soft nest to grow in if the woman became pregnant that month. When the soft lining is ready, an egg is released from one of the ovaries. This is called ovulation. The egg then travels down a tube into the womb. At this time a woman is fertile and she can become pregnant. If the woman has had sex recently, the man's sperm may join with her egg. This is called fertilization.

During the last 14 days of the cycle, a woman also produces progesterone. Progesterone causes the lining of the womb to prepare for pregnancy. Most months, the egg is not fertilized, so the lining inside the womb is not needed. Then, the ovaries stop producing estrogen and progesterone, and the lining begins to break down. The monthly bleeding is when the lining inside the womb leaves the body. This is the start of a new monthly cycle. After the monthly bleeding, the ovaries start to make more estrogen again, and another lining begins to grow.

The monthly cycle



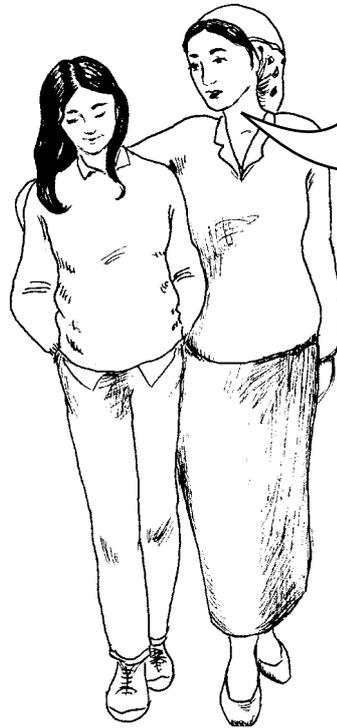
For most women, the whole menstrual cycle takes about 28 days —just like the cycle of the moon.

Menstruation

Girls start bleeding around age 12, some earlier, some later. For the first year or so, menstruation can be very short, and can also happen on and off instead of once a month. This is normal.

Girls who were never told about menstruation often think something is wrong when their bleeding starts. Girls are more confident and comfortable when they have been told about it and know what to expect.

Menstruation is a sign that a girl can become pregnant. But she can actually become pregnant a few months **before** her first menstruation, because her ovaries start releasing eggs first. (To learn about pregnancy and family planning methods, see Family Planning.) Even though a girl's body has the ability to get pregnant, it does not mean that pregnancy is safe for her or that she is ready to be a mother. Teach girls how pregnancy happens and about different family planning methods. Make sure family planning is available to girls.



This means you are a woman now. I will show you how to use a cloth to stay clean. Then we will cook your favorite dinner tonight.

Every girl needs an adult she trusts or a health worker to talk with about how her body is developing.

Keeping clean during menstruation

All girls and women are more comfortable during their periods when they can stay clean. This helps girls keep going to school and helps all women continue normal activities. Bathing and also changing pads frequently help prevent infection. During your period:

- Use clean, dry cloths, sanitary napkins (pads), or tampons, and change them several times a day.
- Bathe every day and wash the genitals.
- Wash cloths with hot water and soap, and dry them in the sun if possible before using them again.



Some girls or women with disabilities may need extra help when they have their period.

Menstruation and daily activities

Different myths exist about menstruation and the things a girl or woman should or should not do during her period. Many of these myths are used to keep girls and women from taking active roles in their communities. Women do not have to act differently during their periods. The following is true for all women:

Food: All kinds of food are fine for a woman to eat during her period. If the food is healthy, it is also healthy and safe for her to eat during menstruation. If she has heavy bleeding, eating foods with iron (see page 8 of Good Food Makes Good Health) can help prevent anemia.

Exercise: Normal activities and exercise are fine for a woman during her period. Exercising may even help reduce pain or cramping.

Bathing: Bathing while menstruating is healthy. Keeping the genitals clean can help prevent infection.

Sex: A woman can have and enjoy sex during her period. However, if one of the partners has HIV, the risk of infecting the other may be higher.

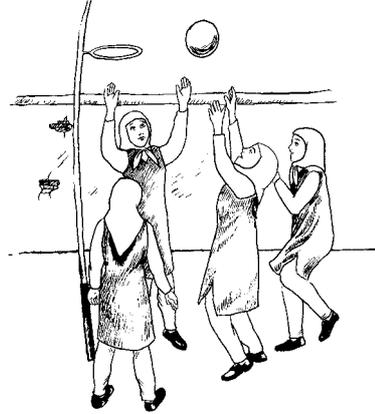
Concerns and Problems with Bleeding

Pain

Pain or cramps are common just before and during menstruation, and are not dangerous. Some women also feel tired or get mood changes, headaches or diarrhea. All of these are due to the changes in hormones at the end of the cycle (see page 2).

Treatment

- Take ibuprofen or another mild pain medicine.
- Rub or massage the lower belly or back.
- Use a hot water bottle or other container that is made to hold hot water, and place it on the lower belly or lower back. Or use a thick cloth soaked in hot water to warm the lower belly.
- Exercise or walk. Being active can help.



There are many local remedies and treatments for painful menstruation. If no remedy seems to be much help, you can try taking daily low-dose combination birth control pills for 6 to 12 months. Sometimes the hormones in birth control pills help lessen the pain. See page 9 and page 22 in Family Planning.

Pain in the lower belly when you are not bleeding is not normal. It can be caused by infection (see page 16 in *Belly Pain, Diarrhea, and Worms*), ectopic pregnancy (see page 10 of *Belly Pain, Diarrhea, and Worms*), cancer (see *Cancer, in development*), or some other problem. See a health worker.

Irregular bleeding

Regular bleeding is bleeding that starts about the same time each month and lasts about 5 days. But there is a lot of variation: some women start bleeding about once every 35 days, some every 24 days. Some women have several months with no bleeding. Some have a few months with a shorter cycle, and then a few months with a longer cycle. All of this is usually normal and just another way that each person's body is different.

Birth control injections or pills can help make menstruation more regular.

Too much bleeding

Some women have very heavy bleeding, or menstruation that lasts more than a week. This blood loss can lead to anemia which weakens the body and makes you tired. Women who have HIV and bleed too much are especially likely to get anemia. Eat plenty of iron-rich foods like meat, beans, eggs, and dark green vegetables. This helps replace the nutrients lost during menstruation. For more on anemia, see page 8 in *Good Food Makes Good Health*. An iron supplement is also helpful (see page 39 in *Good Food Makes Good Health*).

Heavy menstrual bleeding or bleeding between menstrual periods can be a sign of small growths in the uterus (womb), either fibroids or polyps (see page 7).



More than 2 pads full of blood in an hour is too much. Get help.

If heavy menstruation is bothering you, birth control injections or taking birth control pills daily may help. Talk with an experienced health worker.

The IUD, a birth control method, may cause heavier, more painful periods for some women. See page 16 in *Family Planning*.

Get help if there are signs of too much blood loss (feeling weak, dizziness, pale skin).

Bleeding is rare or stops

Infrequent periods or a stop in bleeding can be caused by:

- Pregnancy. Always consider that pregnancy could be the cause – even if you are older, if you only had sex one time, if you are breastfeeding, or if you thought you could not get pregnant. A pregnancy test is the sure way to know if you are pregnant.
- Breastfeeding can stop menstruation for a few months.
- Some birth control injections or pills can stop menstruation. This is not harmful.
- Being young or old. It is normal and not harmful for young women and older women to have infrequent menstruation.
- Extreme stress, either emotional or physical. Menstruation should come back when the stress is relieved.
- Malnutrition. When a woman is too thin, her body stops menstruating.



Bleeding between menstrual periods

Some women have light bleeding between menstrual periods. If this happens once or twice, it is not likely to be a problem. If it keeps happening, it can be a sign of an infection in the vagina, cervix, or womb. For more on these infections, see *Genital Problems and Infections* (in development).

Bleeding between menstrual periods or heavy menstrual bleeding can also be a sign of small growths in the uterus – either fibroids or polyps. A pelvic exam by a trained health worker or an ultrasound test may be needed to find these growths. Often fibroids and polyps need no treatment at all but if they do cause problems, they can be removed. You may need surgery to remove fibroids but polyps can usually be removed by a trained health worker in a clinic. For more on fibroids or polyps see *Where Women Have No Doctor*, also available from Hesperian Health Guides.

Bleeding between menstrual periods or bleeding experienced by older women who have stopped menstruating (menopause) can also be a sign of cancer. See a health worker. Cancer in the cervix can be treated and cured when it is found early (see *Cancer*, in development).



When something is different or painful about your period, don't be shy — talk to your health worker about it.

Bleeding after sex is not normal. It can be caused by a sexually transmitted infection (see *Genital Problems and Infections*, in development) or cancer (see *Cancer*, in development). It can also happen after rough or forced sex.

Bleeding during pregnancy is not normal. Early in pregnancy it can be a sign of losing the pregnancy (miscarriage). Later in pregnancy, it can be a very dangerous sign that the placenta is separating from the womb. This is an emergency and medical help is needed to prevent the woman from bleeding to death.

Menopause: The End of Menstruation

Women usually stop menstruating around age 50. Before menstruation stops completely, a woman's periods can become very irregular. A woman may go months between menstrual periods. Bleeding can become lighter or heavier.

For some women, other noticeable signs of menopause include changes in mood, sleep problems, and hot flashes that result from changing hormones inside the woman's body. These can be uncomfortable or upsetting, but for many women they lessen or go away within a few years.

The vagina gets dryer and smaller during menopause. Use a water-based lubricant like saliva or *K-Y Jelly* to make sex more comfortable and to avoid the small tears that can happen when the vagina is dry during sex. Do not use skin creams or oils in the vagina because these can cause irritation. See page 9 in Family Planning to learn more about lubricants.

Along with an end to bleeding, women stop releasing eggs during menopause, and so eventually can no longer become pregnant. But for as long as a year after bleeding stops, the body may still release eggs and a woman might still become pregnant months after menstruation stops.

Although in some countries women mourn the end of their body's ability to have children, many cultures see menopause as a transition when "wise women" become respected elders in the community.



Hormone Replacement Therapy

In the past, doctors recommended that women take medicines containing estrogen and progesterone to relieve the symptoms of menopause. This is called Hormone Replacement Therapy (HRT). Now it is known that **HRT is not safe** and increases women's risk of breast cancer, heart disease, blood clots, and stroke.