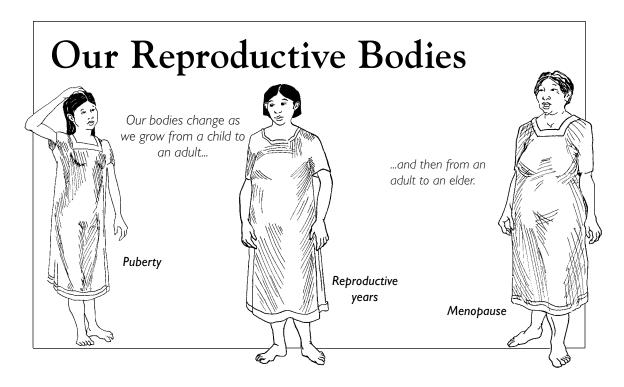
Chapter 4

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This chapter is about the parts of the body that make up a person's reproductive system. It focuses mostly on people who can become pregnant by this we mean women and girls with the body parts recognized as female at birth, as well as some people who do not live as either men or women, and transgender men and boys. All these people can become pregnant, and this chapter explains how their bodies change during their lives to allow for pregnancy.



he parts of the body that make up our reproductive systems are the parts that allow us to make babies. In many places, these parts of the body are considered "private" or not polite to talk about with others. Talking about these parts of our bodies can be difficult for anyone, and more difficult for people who are shy, who do not know what specific parts of the body are called, or who have reason to feel threatened or marginalized.

hip bones

You can feel your hip bones just below your waist. They are part of the **pelvis**. The **pelvic area** is everything between the hips. This is where the parts of the reproductive system are.

Knowing how our bodies work means we can take better care of ourselves. We can recognize problems and their causes and make our own decisions about what to do about them. The more we know, the more we will be able to decide for ourselves if the advice that others give us is helpful or harmful.

Since different communities may have a variety of words for different parts of the body, we try to use medical or scientific names in this book. We hope this makes it possible for people from many different regions of the world to understand this information. Pay attention to the words people in your community use to talk about their bodies, and use this same language with them.

➤ No one should feel ashamed of any part of their body.

The Reproductive System in People Who Can Become Pregnant

People have reproductive parts on both the outside and inside of their bodies. These parts are called "reproductive organs" or genitals. In a person who can become pregnant, all the parts on the outside are together called the vulva. Sometimes people may use the word vagina for this whole area. But the vagina is the part that begins as an opening in the vulva and leads inside to the womb.

The vagina is sometimes called the birth canal.

The drawing below shows what the vulva looks like and what the different parts of the vulva are called. Each person's body is different. There are differences in the size, shape, and color of the parts of the vulva, especially of the outer and inner folds.



THE REPRODUCTIVE PARTS ON THE OUTSIDE Vulva: All the parts on the outside of the body. **Mons:** The hairy, fatty part of the **Outer folds**: The fatty, vulva that sits over the pubic bone. hair-covered folds of skin that surround the vaginal opening. **Clitoris:** The clitoris is the part of the vulva that Inner folds: The is most sensitive to touch. hair-covered, fatty folds Rubbing it, and the area of skin that surround around it, can sexually the vaginal opening. excite a person and During sex, the inner cause climax. lips swell and turn darker. **Vaginal opening:** The Urinary opening: opening of the vagina, The outer opening of the between the inner folds. urethra, a short tube that **Hymen:** The thin piece of **tissue** just carries urine from where it inside the vaginal opening. A hymen is stored in the bladder to may stretch or tear and bleed from the outside of the body. **Anus:** The opening a variety of activities. This can also where solid waste (stool) happen when something is put in the leaves the body. The anus vagina for the first time. connects to the rectum (the lower part of the

intestine).

THE BREASTS

Breasts come in all shapes and sizes. They start to grow during puberty, usually when a person is between 10 and 15 years old. Breasts develop further during pregnancy, and make milk following birth. For some people, sexually touching the breasts can cause pleasure and vaginal wetness.

Inside the breasts:



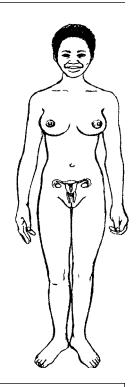
Glands make the milk.

Ducts carry the milk to the nipple.

Sinuses are where milk collects between feedings.

The **nipple** is where milk comes out of the breast. Sometimes they stick out. Sometimes they are flat.

The **areola** is the dark and bumpy skin around the nipple. The bumps make an oil that helps keep the nipples from drying or cracking.



THE REPRODUCTIVE PARTS ON THE INSIDE

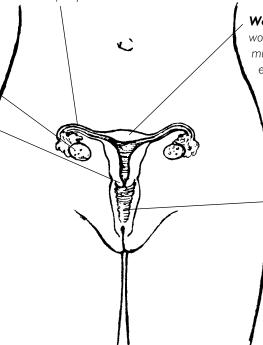
Ovaries: The ovaries usually release one egg into a fallopian tube each month. There are usually two ovaries, one on each side of the womb. Each ovary is about the size of an almond or very small grape.

Cervix: This is the opening of the womb, where it connects to the vagina. Sperm may be able to enter the womb through the small opening in the cervix, depending on the thickness of the mucus that covers it. During childbirth, the opening of the cervix gets bigger to let the baby pass through.

Fallopian tubes: The fallopian tubes connect the ovaries with the womb. When an ovary releases an egg, it travels through a fallopian tube toward the womb. If the egg is fertilized by sperm, this happens in the fallopian tube.

> Womb (uterus): The womb is a hollow organ with muscular walls. A fertilized egg will usually pass to the womb where it implants and grows. Menstrual bleeding flows from the womb if there is no pregnancy.

> > Vagina (birth canal): The vagina leads from the vulva to the womb. The vagina makes a fluid (discharge) that helps prevent infection. The vagina expands during birth.



The Reproductive System in People Who Can Cause Pregnancy

People who can cause pregnancy include men and boys with the body parts recognized as male at birth, as well as some people who do not identify as either men or women, and transgender women and girls. Like people who can get pregnant, they have reproductive organs on the outside and inside of their bodies, and the size, shape and color of the outside parts may differ for each person.

People who can cause pregnancy do so by making and delivering sperm. Sperm travel from the testicles through a tube where they become part of a fluid called semen. Semen comes out of the penis during sex, especially at climax. Each drop of semen has thousands of sperm, which are too small to see without a microscope. If sperm enters the vagina of a person who can become pregnant, it can combine with an egg to cause pregnancy.

THE REPRODUCTIVE PARTS ON THE INSIDE AND OUTSIDE



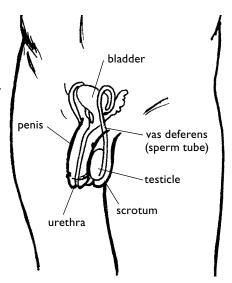
Penis: This tube-shaped organ is made of spongy tissue and contains the urethra. The penis fills with blood and becomes stiff when the person is sexually excited.

Testicles (balls): The testicles begin to make sperm during puberty, and this continues for the rest of the person's life. The testicles also make testosterone, a hormone that causes many of the physical changes of puberty. A person with testicles usually has two.

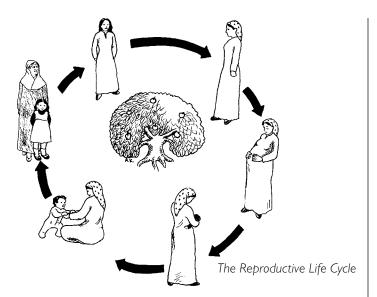
Scrotum: The testicles sit inside the scrotum, a sack of skin and muscle that hangs under the penis.

Vas deferens: These tubes carry sperm, mixed in semen, to the penis. When the vas deferens are cut in a vasectomy, sperm can no longer leave the person's body.

Bladder: The bladder is a hollow organ where urine collects as it is made by the kidneys.



Urethra: This tube carries semen out of the body when the person climaxes during sex. It also carries urine out of the body, from where it is stored in the bladder.



How the Body Changes

he bodies of people who can become pregnant go though many important changes during their lives—at puberty, during pregnancy and breastfeeding, and when they stop being able to become pregnant (menopause).

During the years they can become pregnant, their bodies change before, during, and after the time of their menstrual periods. The parts of the body where many of these changes happen are the vagina, womb, ovaries, fallopian tubes, and the breasts. Many of the changes are caused by chemicals the body produces called hormones.



puberty, 54 menstrual periods, 48 menopause, 124

HORMONES

Hormones are chemicals our bodies make that affect and control many growth and development processes. Hormones can affect a person's moods, sexual feelings, body temperature, hunger, and bone strength. The amount and type of hormones our bodies make changes throughout life, changing how our bodies look and function.

During the reproductive years, hormones determine when a person can get pregnant. Hormones tell the womb to thicken its lining, which prepares it for a possible pregnancy. Hormones also tell the ovaries when to release an egg during the menstrual cycle. Many family planning methods prevent pregnancy by controlling hormones (see page 207). Hormones also cause changes during pregnancy and breastfeeding. For example, they stop menstrual periods during pregnancy. After childbirth, they tell the breasts to make milk.

Toward the end of the reproductive years, the amount and kind of hormones produced in our bodies changes again. Hormones important to pregnancy are no longer made, the ovaries stop releasing eggs, and the menstrual cycle stops forever. This is called "menopause" (see Chapter 8, "Growing Older" for more information).

Menstrual Periods

 $oldsymbol{\mathsf{A}}$ bout once each month during the reproductive years, people who can become pregnant have a few days when a bloody fluid leaves the womb and passes through the vagina and out of the body. This is called a menstrual period, a period, monthly bleeding, or menstruation. It is normal and is part of preparing the body for pregnancy.



Many people accept their periods as a normal part of their lives. But they may not know why they happen or why they sometimes change.

THE MENSTRUAL CYCLE

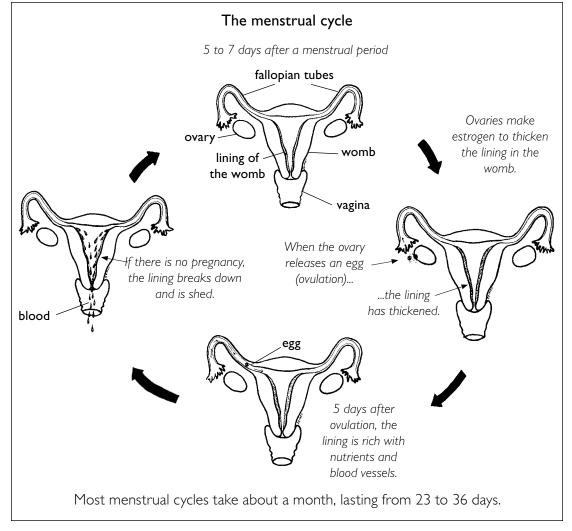
Everyone's menstrual cycle is different. If you start counting on the first day of a person's period, most people will begin bleeding again after about a month. But some bleed as often as every 20 days or as little as every 45 days.

The amount of the hormones estrogen and progesterone produced in the ovaries changes throughout the menstrual cycle. After a menstrual period, the ovaries make mostly estrogen, which causes a thick lining of blood and tissue to grow in the womb. This is where the egg will implant and grow if it is fertilized that cycle.

About 14 days before the end of the cycle, an egg is released from one of the ovaries. This is called *ovulation*. The egg then travels down a fallopian tube toward the womb. This is when the person is *fertile* and can become pregnant. If they have had penisin-vagina sex recently, a sperm may join with the egg. This is called *fertilization*. The fertilized egg continues through the tube to the womb and if it implants in the thickened lining, this is the beginning of pregnancy.

The egg is not fertilized during most cycles, so the lining inside the womb is not needed. The ovaries make less estrogen and progesterone, and the lining is shed from the womb. This is a menstrual period. When the lining inside the womb leaves the body during a period, the unfertilized egg comes out too. After the menstrual period, the ovaries start to make more estrogen again, and the lining of the womb begins to thicken again.

➤ You may notice that the time between your periods changes as you grow older, after giving birth, while breastfeeding, or because of stress or illness.







Press hard on the tender place between your thumb and first finger to ease pain from cramps. For other pressure points to ease pain from your period, see page 546.



PROBLEMS WITH YOUR MENSTRUAL PERIOD

If you have problems with your menstrual period, talk with family members or friends who may have similar problems and ideas for solutions. Or talk with a health worker.

Changes in bleeding

Menstrual cycles may change over time. Young people whose periods have just begun and people who recently gave birth or stopped breastfeeding may only bleed every few months, bleed very little, or bleed heavily. Their cycles usually become more regular with time.

People who use hormonal family planning methods sometimes bleed in the middle of their cycle. See pages 208 to 214 for more about changes in bleeding caused by these methods.

People close to menopause may have heavier bleeding or bleed more often than when they were younger. They may also stop having monthly bleeding for a few months and then have it again. It is still possible, though very unlikely, to become pregnant during this time. Using condoms can help prevent pregnancy until you are sure you have reached the end of your fertile years (see pages 128 and 202 to 204).

Pain from your menstrual period

During your period the womb squeezes to push out the lining. This squeezing can cause pain in the lower belly or lower back, sometimes called cramps. The pain may begin before bleeding starts or just after it starts.

What to do:

- Rub your lower belly. This helps the tight muscles relax.
- Fill a plastic bottle or some other container with hot water and place it on your lower belly or lower back. Or use a thick cloth soaked in hot water.
- Drink raspberry leaf, ginger, or chamomile tea. Ask others in your community about local remedies that help with this pain.
- Keep doing your daily work, if possible.
- Try to exercise and walk.
- Take a mild pain medicine. Ibuprofen works very well for the pain that comes with your period (see page 482).
- If you also have heavy bleeding and nothing else works, a combined hormonal family planning method, such as combined pills or a hormonal IUD, may help.

Pre-menstrual syndrome (PMS)

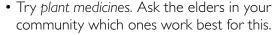
Some people notice one or more discomforts a few days before their period begins. Called pre-menstrual syndrome (PMS), signs include:

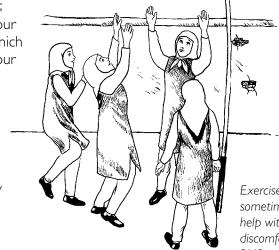
- sore breasts
- an uncomfortable fullness in the lower belly (bloating)
- feeling extra tired
- oiliness or spots (pimples) on the face
- feelings that are especially strong or harder to control

What to do:

Try different things and notice what works for you. First, try the suggestions for pain from your menstrual period (see page 50), then try these ideas;

- Eat less salt. Salt makes your body hold extra water, which makes the full feeling in your lower belly worse.
- Avoid caffeine (found in coffee, tea, and some soft drinks like cola).
- Eat foods high in protein (nuts, beans, pulses, fresh fish, meat, and milk). They help your body get rid of extra water, so your belly feels less full.





Exercise can sometimes help with the discomforts of PMS.

Polycystic Ovary Syndrome (PCOS)

People with PCOS may have irregular menstrual periods periods that are infrequent or have varying numbers of days between one and the next. They may also have acne and increased face and body hair. An ultrasound machine may show many small fluid-filled sacs ("cysts") on their ovaries.

The cause of PCOS is unknown, but it seems to run in families. Having PCOS increases the difficulty of getting pregnant and the likelihood of developing diabetes and cancer of the womb. The most common treatment for PCOS is combined hormonal birth control pills.



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