



The Female Reproductive System

BIG IDEA The female reproductive system matures during the teen years, and can then create new life.

Before You Read

QUICK WRITE Write what you think is the single most important thing teens can do to care for their reproductive systems.



Video

As You Read

FOLDABLES Study Organizer

Make the Foldable® on page 63 to record the information presented in Lesson 1.

Vocabulary

- › reproduction
- › reproductive system
- › egg cells
- › ovaries
- › ovulation
- › uterus
- › fertilization
- › embryo
- › menstruation
- › menstrual cycle
- › cervix
- › gynecologist



Audio



Bilingual Glossary

YOUR REPRODUCTIVE SYSTEM

MAIN IDEA The reproductive system becomes able to take part in making a new human being during puberty.

Puberty is a time when many changes take place that affect the physical, mental/emotional, and social health of females. Many of the changes are easy to recognize. The female body grows taller and fills out. For both genders hair grows in the genital area and under the arms. The female body begins to release hormones. A female experiencing puberty may not feel in control of her emotions.

Some changes, however, are not visible. As the body changes and grows, the female is becoming an adult. The most important change that you will experience during puberty is that you will gain the ability to become a parent.

The **reproductive system** is the only body system that is *different* for **females** and **males**.

Reproduction, or *the process by which living organisms produce others of their own kind*, is a main function of the human sex organs. The sex organs are known as the **reproductive system** (ree-pruh-DUHK-tiv). The reproductive system *is the body's organs and structures that make it possible to produce children*. The reproductive system is the only body system that is different for females and males.

Myth vs. Fact

Myth: During her period, a female should not bathe or shower, wash her hair, or take part in physical activity.

Fact: A female can do any of these, and should bathe regularly. Some females experience cramping or pain, making it difficult to perform ordinary activities. Otherwise, there is no reason to avoid physical activity.

FUNCTIONS OF THE FEMALE REPRODUCTIVE SYSTEM

MAIN IDEA The female reproductive system has three main functions.

When a female reaches puberty, her body changes in several ways. These changes make her capable of having children. A female who has just reached puberty can become pregnant. However, her body and reproductive system are still not fully mature. This can lead to serious problems during a pregnancy.

The female reproductive system has three main functions:

- To store female reproductive cells, called **egg cells**. An egg cell is *the reproductive cell from the female that join with a sperm cell to make a new life.*
- To provide a place for the fertilized egg to grow into a baby.
- To give birth to the baby.

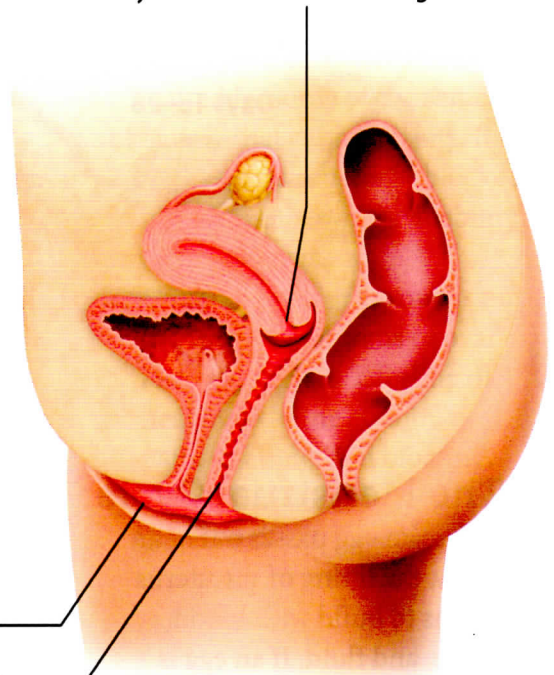
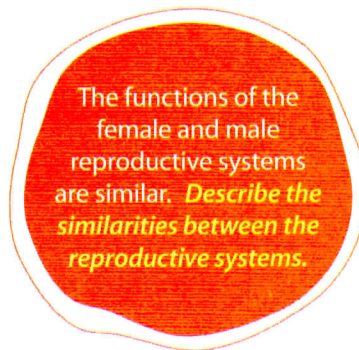
Parts of the Female Reproductive System

In general, every female is born with enough egg cells to last throughout her childbearing years. These cells are protected in two glands called **ovaries**. The ovaries *are the female endocrine glands that release mature eggs and produce the hormones estrogen and progesterone.* Each ovary contains hundreds of thousands of egg cells. About once a month, one of the ovaries releases a mature egg. **Ovulation** is *the process by which the ovaries release mature eggs, usually one each menstrual cycle.*

After ovulation, the egg cell travels through one of two fallopian tubes to the **uterus** (YOO·tuh·ruhs). The uterus is *a pear-shaped organ, located within the pelvis, in which the developing baby is nourished and protected.* If sperm enter the vagina and travel to the fallopian tubes shortly after ovulation, the sperm cell and egg cell may unite. This is called **fertilization**. Fertilization *is the joining of a male sperm cell and a female egg*

Cervix

This is the narrow part of the bottom of the uterus. The opening of the cervix enlarges to allow a baby to leave the uterus during birth.



Labia

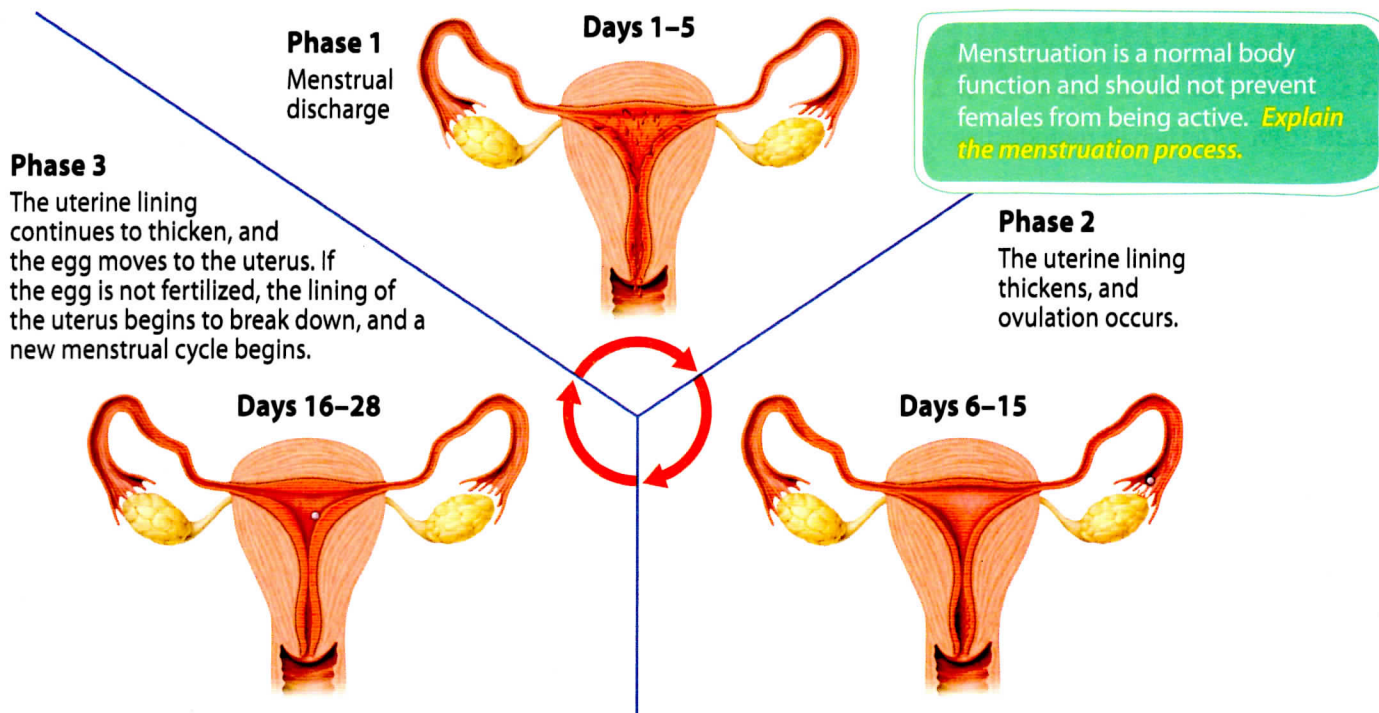
Labia are folds of skin that cover the opening of the vagina.

Vagina

The vagina is the passageway that leads from the cervix to the outside of the body. Menstrual flow leaves the body through the vagina. Sperm enter the female reproductive system through the vagina. During birth, a baby leaves the mother's body through the vagina.

cell to form a fertilized egg.

Sperm enters the fallopian tubes when a male ejaculates inside the female's vagina. It is also possible for sperm to get into the female's reproductive system in other ways. For example, when a male ejaculates near the vagina. It can happen as well if the male deposits fluid from the penis near the vagina even if he does not ejaculate.



The Menstrual Cycle

Before an egg passes out of an ovary, the lining of the uterus begins to build with blood, tissue, and fluid. If an egg is fertilized, these tissues provide nutrients to the **embryo**, the newly formed organism during its first two months of life. If fertilization does not occur, the thickened lining of the uterus breaks and passes out the body. *The flow from the body of blood, tissues, and fluids that result from the breakdown of the lining of the uterus is called **menstruation** (men·stroo·AY·shuhn).*

During menstruation, a small amount of blood, other liquid, and tissue leave the body through the vagina. Menstruation usually lasts from five to seven days. However, the amount of bleeding and length of this cycle may vary from female to female.

When all of the blood and tissue have passed out of the body, the **menstrual** (MEN·stroo·uhl) **cycle** begins again. The menstrual cycle *is the hormonal change that occurs in females from the beginning of one menstruation to the next.* The average length of the menstrual cycle in most females is 28 days.

For most females, menstruation begins between the ages of 10 and 15.

For most females, menstruation begins between the ages of 10 and 15. Some females may experience cramps, or soreness in the abdominal area. Some do not, especially during the teen years. These differences are common among female teens.

Female Health Concerns

Proper care of the female reproductive system will help limit some problems. However, it may not rule out problems altogether. Following are some of the problems that can arise.

- **Premenstrual Syndrome** or **PMS** is a set of symptoms that some females experience just before menstruation. Symptoms may include feeling tired, nervous, worried, or depressed. The cause of PMS is unknown. However, it is believed that stress, a poor eating plan, and an imbalance of hormones may be involved.
- A **yeast infection** is an infection of the vagina. It is caused by changes in the amounts of bacteria and fungi that normally live in the vagina. As a result, the female experiences itching as well as a discharge.

The infection is usually brought on by hormonal changes, certain medicines, and tight clothing. It can be treated with medicine.

- **Endometriosis** occurs when tissue in the uterus grows in the ovaries, fallopian tubes, or the lining of the pelvic cavity.
- **Vaginitis** is an infection of the vagina. The female may have itching, discharge, and may experience pain. The infection is treated with medication.
- **Toxic shock syndrome (TSS)** is a rare bacterial infection. Some studies show that it can be caused by using a single tampon for more than 24 hours. TSS can lead to death if it is not treated. Signs of TSS include high fever, a rash, and vomiting. TSS can be prevented. Females who use tampons must read the directions that come with the package and follow them very carefully. Choose tampons with the lowest absorbency for your menstrual flow. A female should change her tampon every four to six hours.
- **Cancer** can occur in the breasts, ovaries, uterus, and cervix. The **cervix** is *the neck, or lower section, of the uterus*. Cancer is caused by uncontrolled cell growth in the tissues of these organs.

Caring for the reproductive system can reduce the risk for health concerns. *Name two concerns of the female reproductive system.*

Early detection is the best way to prevent the serious complications of cancer. This is done by having regular health screenings. Many kinds of cancer can be treated through surgery, radiation, or chemotherapy. Cancer involving the reproductive system is rare among teens.

Early detection is the best way to prevent serious complications of cancer.

- **Sexually transmitted diseases (STDs)** are diseases that are spread from person to person through sexual contact. STDs can pose serious health problems. Any person who is sexually active can become infected with an STD.

- **Sterility** is the inability to produce children. It can be caused by factors including untreated STDs, hormone imbalances caused by stress, diet, overexertion, and aging. Some types of sterility can be treated.
- **Infertility** is a reduced ability to produce children. It can be caused by some of the same factors that cause sterility. It may also be caused by blocked fallopian tubes or the inability to release eggs.
- **Ovarian cysts** are growths on the ovary. Symptoms of ovarian cysts include a feeling of heaviness in the abdomen, pain, swelling, and bloating.

Reading Check

RECALL What is toxic shock syndrome?



REVIEW

Care of the Female Reproductive System

Here are some steps females can take to keep their reproductive systems healthy.

- Do a breast self-examination every month (BSE).
- Bathe regularly. Change sanitary pads or tampons at least every four hours. Change your underwear daily.

Do a breast self-examination once a month.

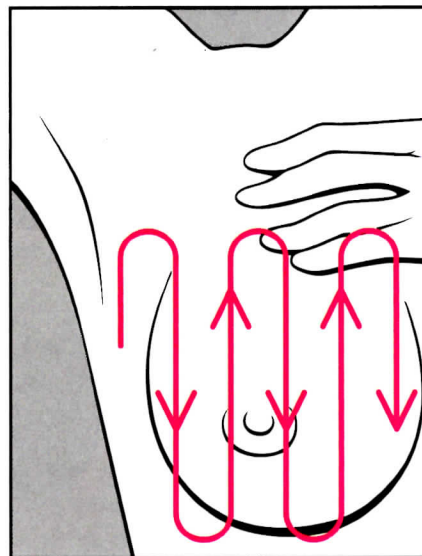
- Have annual medical check-ups. Starting at age 21, or earlier if sexually active, have a medical exam that includes a Pap test. This test should be done by a family doctor or a **gynecologist**. A gynecologist is a doctor who specializes in the female reproductive system. Healthy females under the age of 30 should have a Pap test once every two years.
- Abstain from sexual activity to protect yourself from STDs and unplanned pregnancy.

Breast self-exams can reveal cancerous lumps. Explain why females should check their breasts once a month.

Breast Self-Exam

Females should check their breasts once a month. The best time to do a self-examination is about one week after the menstrual period ends. Do the following:

- Lie down with a pillow under your right shoulder. Put your right arm behind your head. Place the three middle finger pads of your left hand on the right breast. Move the fingers in a circular motion, applying light, then medium, then firm pressure. Use this process over the entire breast and lymph nodes.
- Repeat the procedure for your left breast.
- Stand up and place your hands on your hips. Looking in a mirror, inspect your breasts for any changes. Look for dimpling, rash, puckering, discharge from the nipple, and scales on the skin or nipples.
- Raise your arms over your head and repeat the previous step.
- Examine your underarms.



After You Read

1. **DEFINE** What is fertilization?
2. **DESCRIBE** Describe two problems that affect the female reproductive system.
3. **RECALL** What is the purpose of the ovaries?

Thinking Critically

4. **EVALUATE** In a short paragraph, describe how the proper care of the female reproductive system can help reduce health problems.
5. **PERSUASIVE** In your opinion, why is it important for both females and males to learn about the female reproductive system?

Applying Health Skills

6. **COMMUNICATION SKILLS**
Molly is 18 years old and not sexually active. She feels that she does not have time to go to a gynecologist and that since she isn't sexually active, she doesn't have to worry about her reproductive system. How would you explain to Molly why it is important that she have a yearly checkup? What health concerns might she prevent by visiting a gynecologist?

 Review

 Audio