

# Female Reproductive System

## Unit 4.3

### 4.3 Journal

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- Look at this myths about women and their periods.
  - Sharks will attack women on their periods
  - Women shouldn't wash their hair during their periods because it will increase their flow
  - Women will contaminate food because they are "unclean"
  - Periods are debilitating for women
- Where do you think some of these ideas came from? Why do people believe these statements? Why do you think there is there such a negative stigma attached to women's periods?

### Objectives

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- Describe three functions of the female reproductive system.
- Summarize the stages of the menstrual cycle.
- Identify five ways to keep the female reproductive system healthy.

### Structure and Function

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- The functions of the female reproductive system are:
  - To produce sex hormones
  - To produce eggs
  - To provide a nourishing environment in which a fertilized egg can develop into a baby

## Ovaries

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- Main functions:
  - Produce sex hormones
    - **Estrogen** - activates certain physical changes at puberty such as breast development; controls maturation of eggs
    - **Progesterone** - activates changes to the woman's reproductive system before and during pregnancy
  - Release mature **ova** or eggs
- When a girl is born, her ovaries already contain hundreds of thousands of immature eggs
- **Ovulation** - once puberty begins, one of the ovaries releases a ripened egg (ovum) about once every month

## Fallopian Tubes

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- Passageways that carry eggs away from the ovaries
- Fingerlike ends of the fallopian tube draw the egg in
- Tiny hairlike extensions called cilia line the tube and sweep the egg toward the uterus
  - Eggs cannot swim like sperm cells
- Fertilization usually occurs here

Cilia →



## Uterus

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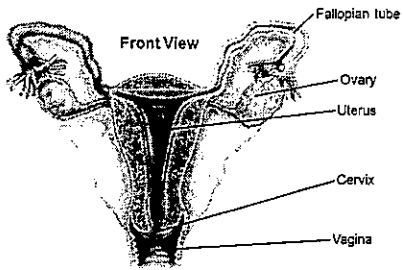
- A hollow, muscular, pear-shaped organ
- It is in the uterus where a fertilized egg can develop and grow
- The narrow base of the uterus that expands to allow a baby to pass through is called the **cervix**.

## Vagina

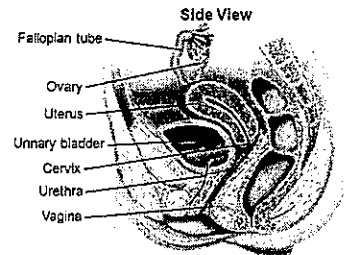
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- A hollow, muscular passage leading from the uterus to the outside of the body
- Also called the birth canal
  - Walls are very elastic to allow it to expand during childbirth
- Sperm enters the body here and a baby passes out of the mother's body through the vagina

Female Reproductive System

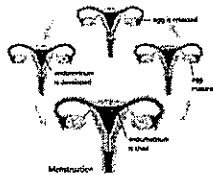


Female Reproductive System



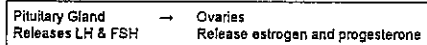
## The Menstrual Cycle

- During the menstrual cycle, an ovary releases a mature egg.
- The egg travels to the uterus.
- If the egg is not fertilized, the uterine lining is shed and a new cycle begins.

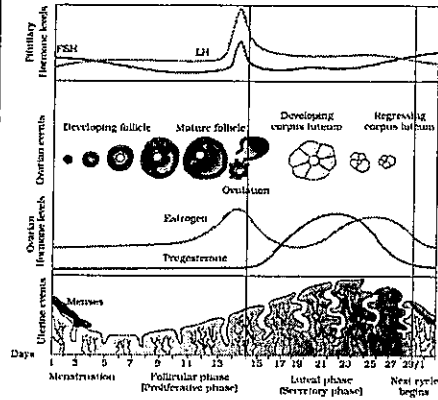
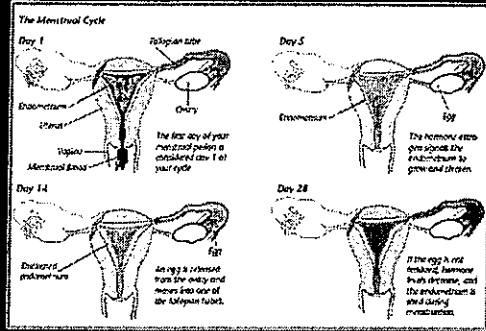


## Factors Affecting the Menstrual Cycle

- A cycle lasts on average 28 days
- The endocrine system controls the menstrual cycle



- Diet, stress, exercise, and weight gain or loss can affect a woman's cycle.
- **Menopause** - when the ovaries slow down hormone production and no longer release mature eggs



## Menstrual Discomfort

- Abdominal cramps during menstruation are caused by contractions of the uterus.
- Premenstrual syndrome (PMS) - discomfort in the time leading up to menstruation
  - Nervous tension, mood swings, headaches, bloating and irritability
  - May be caused by the dramatic change in hormone levels
  - Helpful to reduce intake of salt, sugar, and caffeine, get regular exercise and try other stress-related techniques



## Toxic Shock Syndrome

- A rare, life threatening complication of certain bacterial infections
- Risk factors include recent surgery, open wounds or the use of superabsorbent tampons
- Symptoms include high fever, rash, low blood pressure, and vomiting
- Decrease the risk:
  - Use the lowest absorbency tampon as needed
  - Change tampons often



## Keeping Healthy

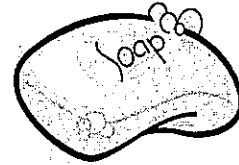
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- Caring for the female reproductive system involves:
  - Cleanliness
  - Protection from sexually transmitted infections
  - Prompt treatment for infections
  - Self-exams
  - Medical checkups

## Cleanliness

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- Wash external vaginal area daily
- Cleanliness during menstruation is important
  - Change sanitary pads or tampons regularly
  - Do not use hygiene sprays, douches, and deodorant tampons



## Protection from Sexually Transmitted Infections (STIs)

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- Healthy choices regarding sexual behavior can prevent serious infections of the reproductive system
- Some barrier methods can also help prevent the spread of STIs, but they can fail
  - Not 100% success rate in stopping pregnancy or STIs
- The only way to eliminate your risk of STIs is to abstain - or refrain - from sexual activity

## Prompt Treatment for Infections

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- Some infections of the reproductive system are not related to sexual behavior.
- Vaginitis - a vaginal infection caused by yeast, bacteria or other microorganisms
  - Symptoms include thick discharge, odors, vaginal itching and a burning sensation during urination

## Self-Exams

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- Pay attention to your body!
- Reasons to consult a doctor:
  - Symptoms of vaginitis
  - Sores on the genitals
  - Unusual pain in abdomen
  - Heavier bleeding than normal during menstruation
  - If periods completely stop or bleeding occurs between regular periods
- Monthly breast self-exams
  - Breast cancer is one of the most common forms of cancer in women
  - Once a month, after menstruation, check for lumps or changes in breast shape or appearance (dimpling of skin, redness, swelling)

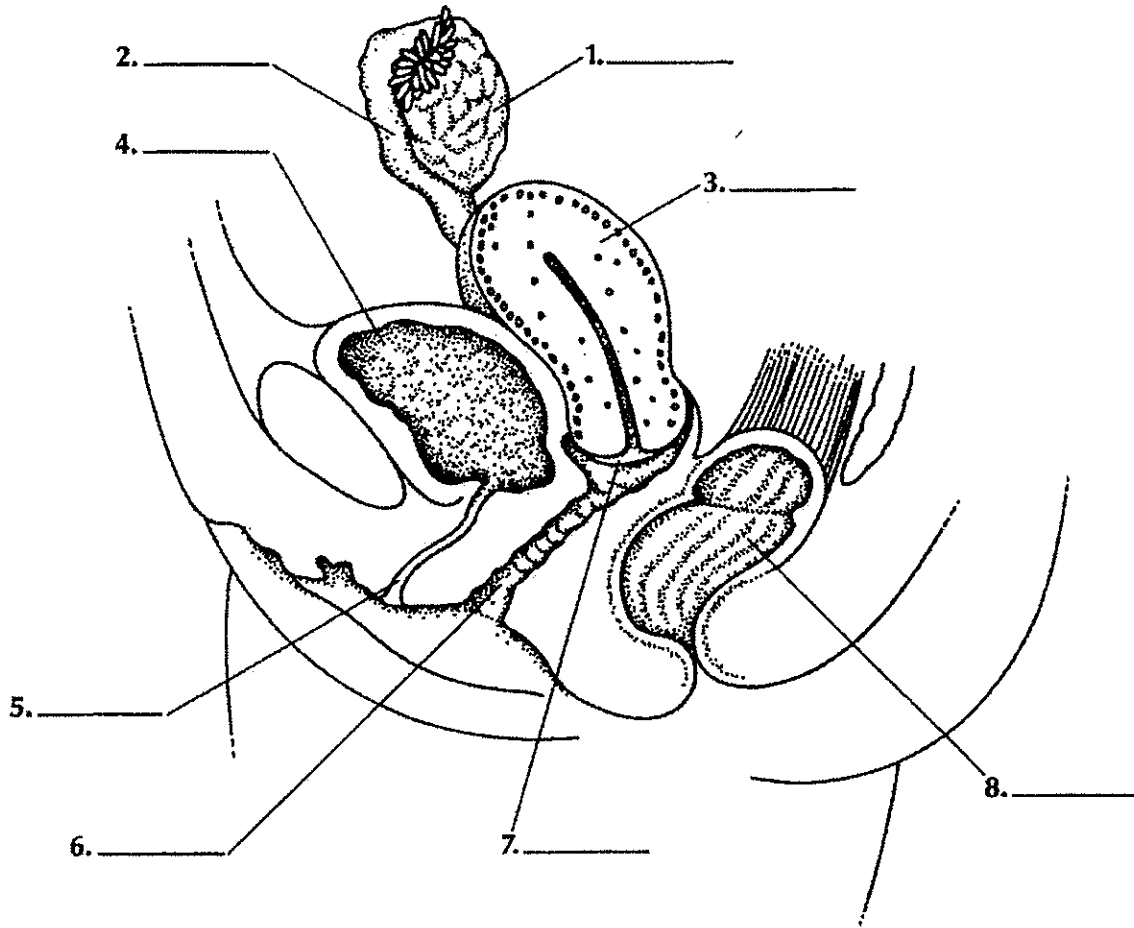
## Medical Checkups

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- Yearly checkup of the reproductive system is recommended for all females who have reached puberty
- Pap smear - When the doctor takes a sample of cells from the cervix to test for cervical cancer
- Mammogram - An x-ray of the breast to detect breast cancer
- Reproductive problems:
  - Ovarian cysts - growths on the ovaries; may be painful
  - Endometriosis - a condition where the lining of the uterus grows in the pelvic cavity outside of the uterus
  - Infertility - possible causes include blocked fallopian tubes and problems with ovulation

Period \_\_\_\_\_

## Reproductive System of Human Female



**Key:** vagina, uterus, ovary, urethra, cervix, rectum, fallopian tube, bladder

**Match the following structures of the female reproductive system with their function.**

___ 1. Vagina	A. The passageways that carry the eggs away from the ovaries.
___ 2. Uterus	B. The reproductive glands where eggs are produced.
___ 3. Ovary	C. The birth canal; passageway leading outside the body
___ 4. Cervix	D. Hollow, muscular, pear-shaped organ where a baby can develop and grow
___ 5. Fallopian Tube	E. The narrow base of the uterus