

The Reproductive System

The reproductive system is quite different in **males and females**. Sexual maturity occurs between the ages of **11 to 13 in girls** and **14 to 16 in boys**.

Female genital Structures

The female reproductive system includes the following organs:

- **Ovaries**
- **Fallopian tubes(Uterine tube)**
- **Uterus**
- **Vagina**

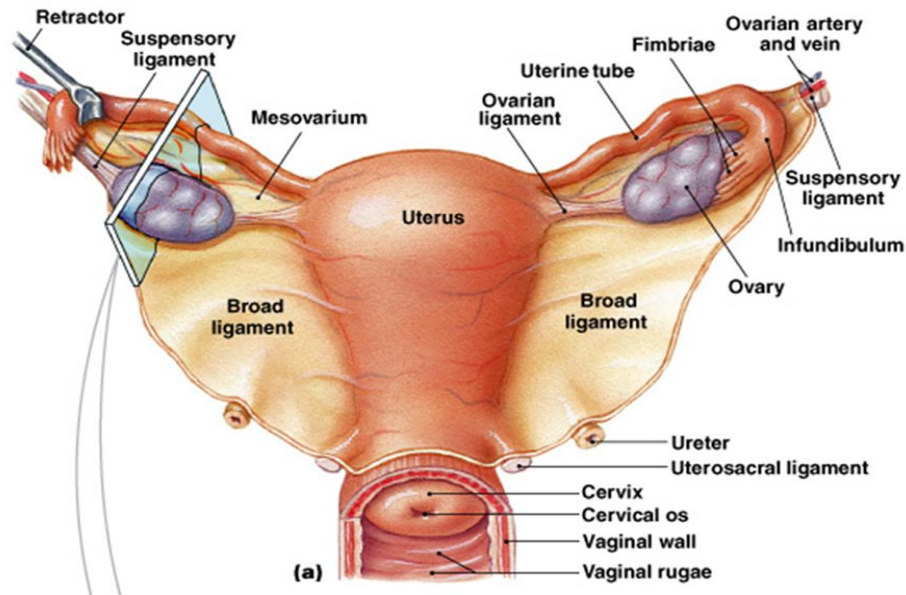


Fig1: Female Genital Organs

- **Ovaries**: are the solid structures. **Located** on each side of the uterus, below and behind the uterine tubes on the lateral walls of the pelvic cavity.

Function of ovaries:

- a - Secrete estrogen & progesterone hormones.
- b - Production of ova

- **Fallopian tubes(Uterine tube)**: two tubes extended from the **cornu of the uterus** to the **ovary**. Length 8 to 14 cm average 10 cm. It's divided into **3 parts**:
 - **Infundibulum**: funnel-shaped contain **fingerlike Fimbriae**
 - **Ampulla**: the wider part about 5 cm in length. **Fertilization** occurs in the ampulla.
 - **Isthmus**: the narrow part of the tube **adjacent to the uterus**.

Functions of fallopian tubes:

- 1-Gamete transport (ovum pickup, ovum transport, sperm transport).
- 2-Fluid environment for early embryonic development.
- 3-Transport of fertilized and unfertilized ovum to the uterus.

- **Uterus:** is a hollow, **pear-shaped** muscular organ. The uterus divided into:
 - Funds
 - Body
 - Cervix: The lowermost position of the uterus “**neck**” attached below to the **vagina**

Layers of the uterus:

- **Perimetrium:** The outer sheath
- **Myometrium :** Thick middle layer of smooth muscles
- **Endometrium:** The inner lining layer consists of glandular epithelial tissue. Here the fetus is attached through the placenta in pregnancy.

Functions of the uterus:

- **Menstruation:** the uterus sloughs of the endometrium.
- **Pregnancy:** the uterus support fetus and allows the fetus to grow
- **Labor and birth:** the uterine muscles contract and the cervix dilate during labor to expel the fetus.

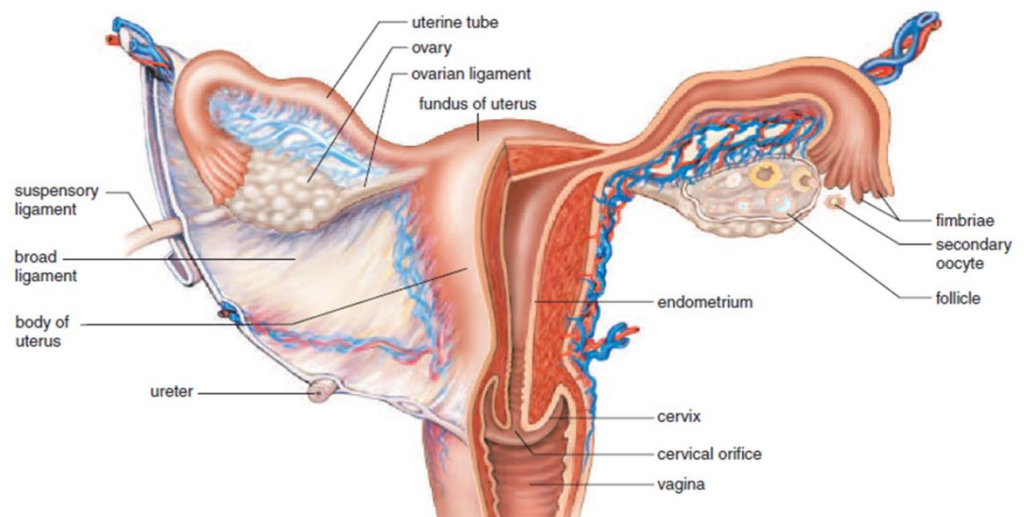
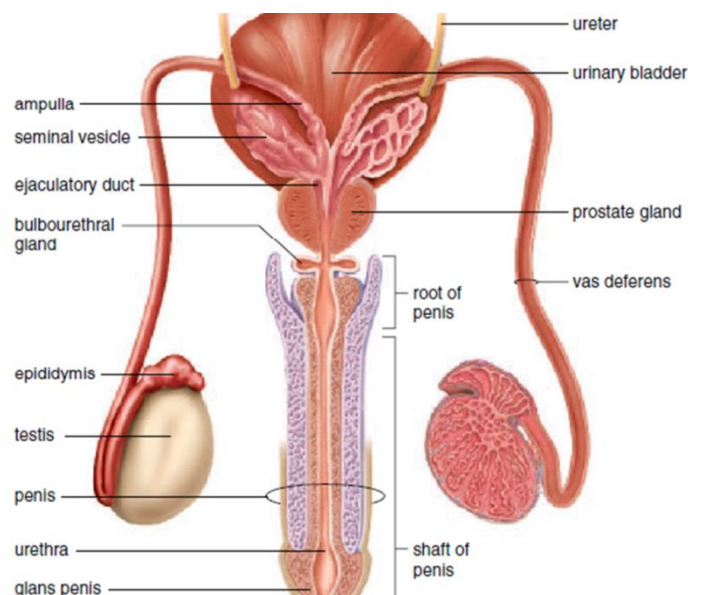


Fig2: Female Genital Structures

Male Genital Organs

The male reproductive system includes the following organs:

- **The primary** sex organs of a male are the paired **testes** (sing., **testis**), which are suspended within the sacs of the **scrotum**.
- **The accessory (or secondary)** sex organs of a male. Sperm produced by the testes are stored within the **epididymis**.



- Then they enter a **vas deferens** which transports them to an **ejaculatory duct**. The ejaculatory ducts enter the **urethra**.

Testes: are the two-oval shaped male organs **lying outside the abdominal cavity** of the male within the **scrotum**. The testes begin their development **inside the abdominal cavity** but descend into the scrotal sacs during the **last two months** of fetal development.

Function:

- Production of sperms
- Production of male sex hormones (**androgen**).

Male Internal Accessory Organs: Sperm are transported to the urethra by a series of ducts.

- **Epididymidis:** is a tightly coiled tube receiving sperms from the seminiferous tubules. It acts as **maturation and storage place for sperm**.
- **Vas Deferens:** is a tube that starts from the epididymis to the urethra, **transport sperm**.
- **Seminal Vesicles :** are **sac-like structures** attached to the vas deferens at one side of the bladder. They produce a **sticky yellowish fluid** that contains **fructose**.
- **Ejaculatory ducts :** that function to **transport sperm**. Are formed by the union of the vas deferens ducts and the seminal vesicle ducts.
- **Prostate gland:** surrounds the ejaculatory ducts at the base of the urethra, just **below the bladder**. Prostatic fluid enhances **the motility of sperm**.
- **Urethra:** Is a part of both **the urinary system** and **the reproductive system**. The urethra passes through the penis and transports sperm to outside the body.
- **Bulbourethral Glands (Cowper glands):** are two small glands about the size of peas. They are located inferior to the prostate gland.

Note:

The bulbourethral glands also contain many tubules that secrete **mucus-like fluid**. This fluid lubricates the end of the penis preparatory to **sexual intercourse**.

