

# The Urinogenital System

## Female Reproductive System

In the female, with the exception of the clitoris and the labia, the parts of the reproductive system are inside the body. Like the male, the pelvic girdle protects the organs, but it is larger in a female so that a baby can be expelled.

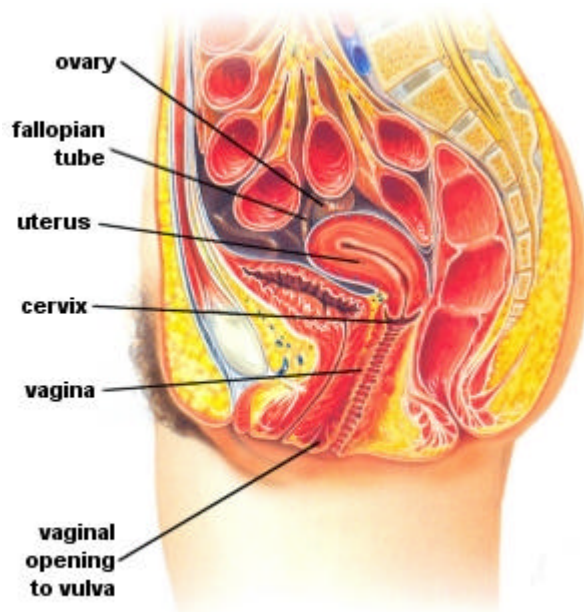


Fig. 1 Female Reproductive System (cross section)

## Vagina

The vagina is a muscular passage leading from the cervix to the vulva and connects the internal organs with those on the outside of the body.

The vagina serves as a passage for menstrual blood, is the site of penetration during intercourse and also forms part of the birthing canal.

The vulva (collective name for the external organs) include:

- mons pubis - a protective pad of fat over the symphysis pubis which is covered in hair after puberty
- labia majora - two large folds of fatty tissue that run lengthways either side of the vulva from the mons pubis to the perineum (between the anus and sex organs)
- labia minora - two smaller folds of skin within the labia majora which surround the clitoris and form a hood to protect it

- clitoris - a small, sensitive organ that contains erectile tissue like the penis, and swells during sexual activity as a result of increased blood flow

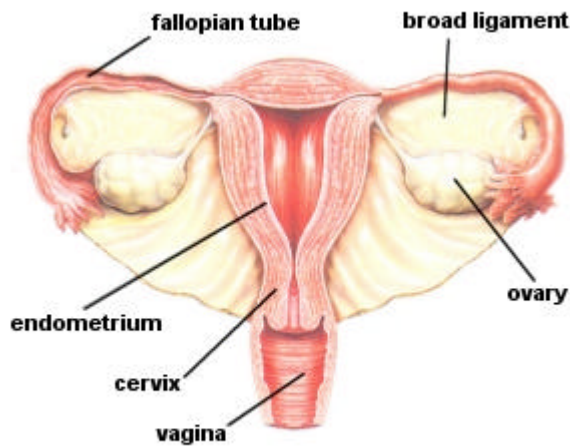


Fig. 2 Uterus

## Uterus

The uterus is the centre of female reproduction and is also known as the womb. Here, fertilised ova grow into babies.

The top of the uterus opens into the fallopian tubes and the bottom (cervix) opens into the vagina, forming the birth canal.

The uterus is a muscular, hollow organ that sits at right angles to the vagina and is the size and shape of an upside down pear (7.5cm long and 5 cm wide). During pregnancy it expands to accommodate the foetus. The lining of the uterus is made up of tissues that respond to hormonal secretions; each month these layers thicken in anticipation of acting as a nourishing bed for a fertilised ovum.

## Ovaries

The ovaries are glands not much bigger than the size of an almond, and are positioned either side of the uterus. The ovaries secrete hormones responsible for female characteristics, as well as storing female sex cells. At birth, all the eggs necessary for a lifetime of reproduction are present in the ovaries as immature follicles. When FSH signals the ovary to develop a follicle, it eventually ruptures and releases an ovum.

## Breasts

The breasts are accessory organs to the reproductive system. They develop during pregnancy ready for their function of secreting milk.

Situated at the front of the chest, each breast is circular and convex, with a central raised nipple. They consist of adipose tissue supported by

fascia. The tissue forms lobes, subdivided into lobules that open into several ducts. These ducts open on the surface of the nipple. Hormones cause the breasts to grow during puberty, and during pregnancy activate the secretion of milk.

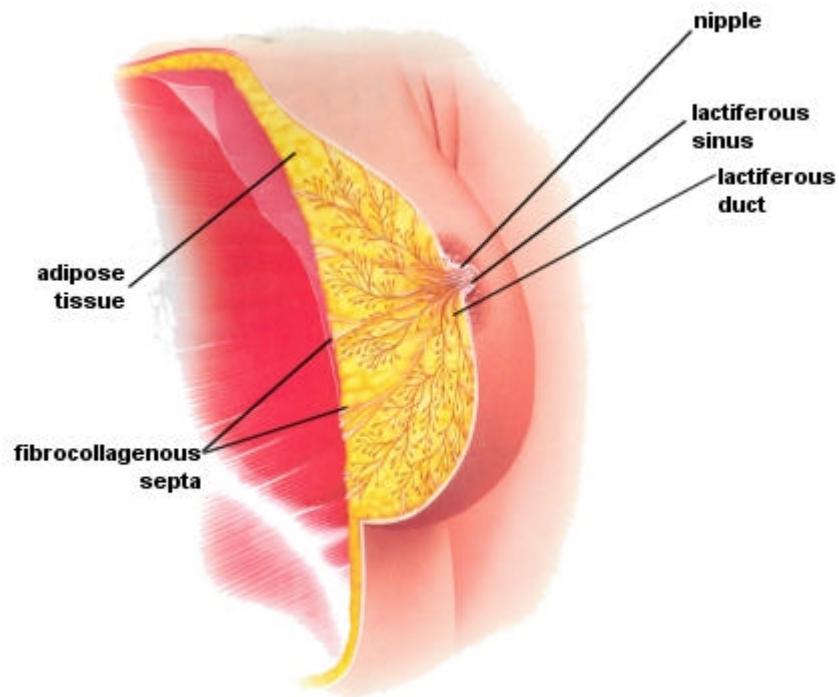


Fig. 3 Breast