# Anatomy & Physiology Of Female Reproductive System

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## Learning Objectives

- Define the terms listed.
- Identify the female external reproductive organs.
- Identify the female internal reproductive organs.
- Explain the functions and structures of pelvic floor.

# Introduction

#### **External Female Structures**

• Collectively, the external female reproductive organs are called the Vulva.

#### **External Female Structures**

- Mons Pubis.
- Labia Majora
- Labia Minora.
- Clitoris.
- Vestibule.
- Perineum

# Mons Pubis

Is rounded, soft fullness of subcutaneous fatty tissue, prominence over the symphysis pubis that forms the anterior border of the external reproductive organs.

It is covered with varying amounts of pubic hair.

## Labia Majora & Minora

• The labia Majora are two rounded, fleshy folds of tissue that extended from the mons pubis to the perineum.

• It is protect the labia minora, urinary meatus and vaginal introitus.

## Labia Minora

- It is located between the labia majora, are narrow.
- The inner surfaces are similar to vaginal mucosa, pink and mois.
- Their rich vascularity.

### Clitoris.

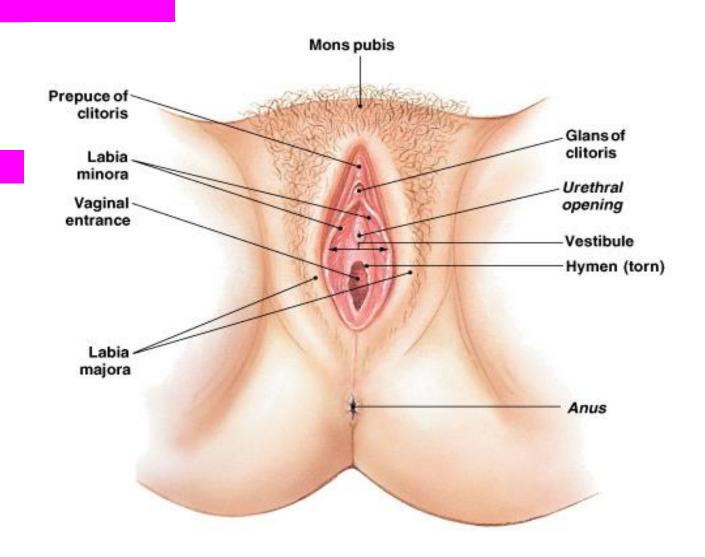
- The term clitoris comes from a Greek word meaning key.
- It's rich vascular, highly sensitive to temperature, touch, and pressure sensation

### Vestibule.

• Is oval-shaped area formed between the labia minora, clitoris, and fourchette.

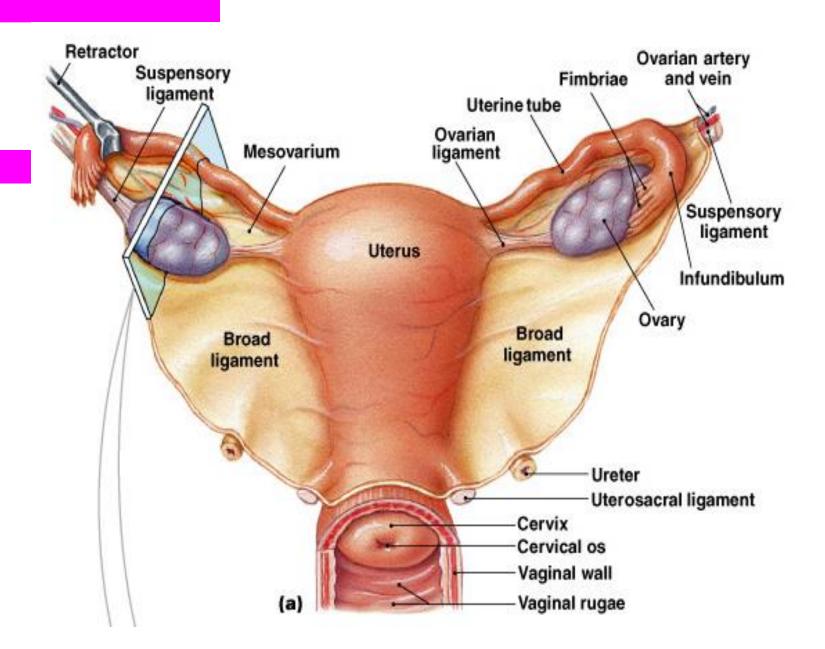
### Perineum

 And is composed of fibrous and muscular tissues that support pelvic structures.



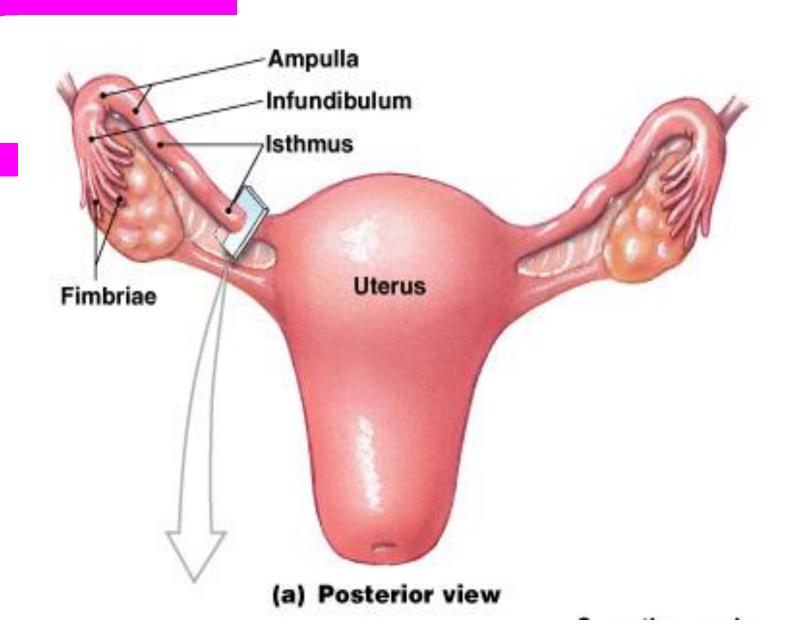
#### **Internal Female Structures**

- Vagina
- Uterus
- •Fallopian tubes
- Ovaries



# Fallopian tubes

- The two tubes extended from the cornu of the uterus to the ovary.
- It runs in the upper free border of the broad ligament.
- Length 8 to 14 cm average 10 cm



# Fallopian tubes Its divided into 4 parts.

- •1. Interstitial part
- •2. Isthmus
- •3. Ampulla
- •4. Infundibulum

# Functions of fallopian tubes

• Gamete transport (ovum pickup, ovum transport, sperm transport).

• Final maturation of gamete post ovulate oocyte maturation, sperm capicitation.

• Fluid environment for early embryonic development.

• Transport of fertilized and unfertilized ovum to the uterus.

# **Ovaries**

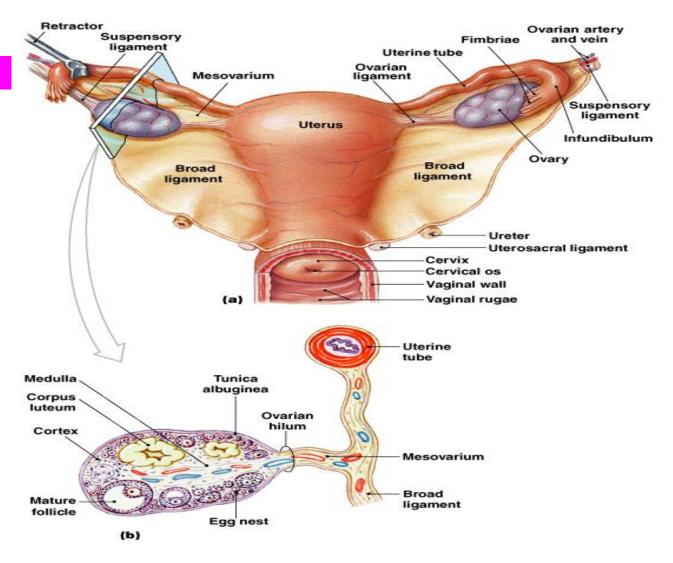
Oval solid structure, 1.5 cm in thickness,
2.5 cm in width and 3.5 cm in length

 Ovary is located on each side of the uterus, below and behind the uterine tubes

#### Structure of the ovaries

- Cortex
- Medulla
- Hilum

# Ovaries and Relationship to Uterine Tube and Uterus



## Function of the ovary

• Secrete estrogen & progesterone.

Production of ova

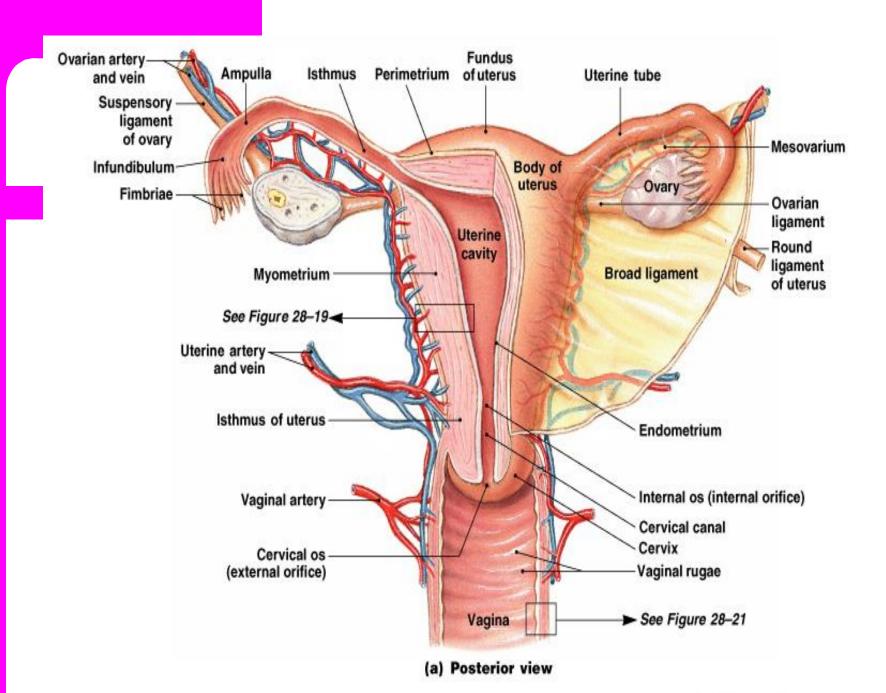
## Uterus

• The uterus is a hollow, pear shaped muscular organ.

The uterus weight about 50 − 60 gm.

## Layers of the uterus

- Perimetrium.
- Myometrium.
- Endometrium.



## 1. Perimetrium

• Is the outer peritoneal layer of serous membrane that covers most of the uterus.

# 2. Myometrium

• Is the middle layer of thick muscle.

# 3. Endometrium

• Is the inner layer of the uterus.

#### The Function of the uterus

• Menstruation ----the uterus sloughs off the endometrium.

 Pregnancy ----the uterus support fetus and allows the fetus to grow.  Labor and birth---the uterine muscles contract and the cervix dilates during labor to expel the fetus

# Vagina

- It is an elastic fibro-muscular tube and membranous tissue about 8 to 10 cm long.
- The vagina connects the uterus

### Functions of the vagina

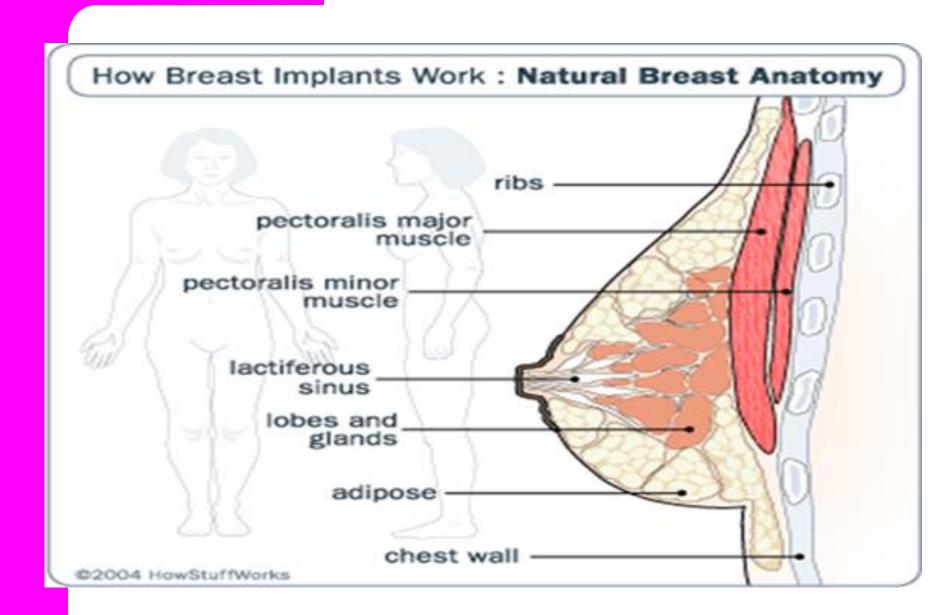
- To allow discharge of the menstrual flow.
- As the female organs of coitus.

### Support structures

• The bony pelvis support and protects the lower abdominal and internal reproductive organs.  Muscle, Joints and ligaments provide added support for internal organs of the pelvis against the downward force of gravity and the increases in intra-abdominal pressure

# Bony Pelvis

- Bony Pelvis Is Composed of 4 bones:
  - 1. Two hip bones.
  - 2. Sacrum.
  - 3. Coccyx.



# Thanks