

Anatomy of the Oviduct:

Structure	Function
Infundibulum	<ul style="list-style-type: none">- Opening to the oviduct- Funnel shape that covers the ovary to catch the ovum
Fimbria	<ul style="list-style-type: none">- Lines the infundibulum- Contains ciliated cells to move the ovum- Increases surface area
Ampulla	<ul style="list-style-type: none">- 1st ½ of oviduct- Large diameter- Contains many folds, ciliated epithelium- Not very muscular
Ampullary-isthmic junction	<ul style="list-style-type: none">- Site of fertilization
Isthmus	<ul style="list-style-type: none">- 2nd ½ of oviduct- Small diameter- Contains fewer folds, ciliated epithelium- Very muscular

What are the functions of the oviduct?

- Transportation of sperm to the site of fertilization
- Reduce sperm numbers to prevent polyspermy
- Transportation of oocyte to site of fertilization
- Provide proper environment for oocyte, sperm, and fertilization
- Transportation and facilitate development of early embryo

Uterus:

What are the types of uterus?

Bicornuate

- 2 uterine horns and small uterine body
- Mare, cow, ewe, doe, sow, dog

Simplex

- No uterine horns and one single uterine body
- Primates and humans

What are the functions of the uterus?

- Transport sperm when female is in estrus
- Muscle contractions
- Sperm motility
- Absorption and phagocytosis
- Partially prepares sperm for fertilization
- Provides an environment for embryo
- Supports development of embryo
- Expels fetus at birth
- Recovery from pregnancy
- Involved with regression of CL

How is Uterine Involution different between species?

Uterine involution- myometrium contractions and enzymatic activity shrinks uterus back to normal size

Swine: occurs as parturition is occurring

Equine: occurs a few days after parturition

Bovine: occurs 30-50 days after parturition

Cervix:

Functions of the cervix

- Barrier to sperm
- Transport sperm
- Produces long strands of mucus
- Reservoir for sperm
- Blocking bacterial invasion during pregnancy
- Birth canal

What is the difference in cervical mucus under estrogen and progesterone?

-Estrogen: thin and watery, SIALOMUCIN “priveleged pathway”

-Progesterone: thick and viscous, SULFOMUCIN

What are the functions of the vagina?

- Copulatory organ
- Site of semen deposition
 - o Fornix vagina in cow, ewe, doe
- Birth canal

Where are the cranial and caudal vagina located?

- Cranial
 - o Closest to cervix
 - o Final fusion of mullerian ducts
- Caudal (vestibule)
 - o Closest to external genitalia
 - o Upgrowth of urogenital sinus

What are the functions of the Caudal Vagina(Vestibule)?

- Common duct for urine and reproduction
- Stimulates males for copulation
- Vestibular glands: produces lubricating secretions which contain pheromones during estrus