



## Lecture title: Female Reproductive System

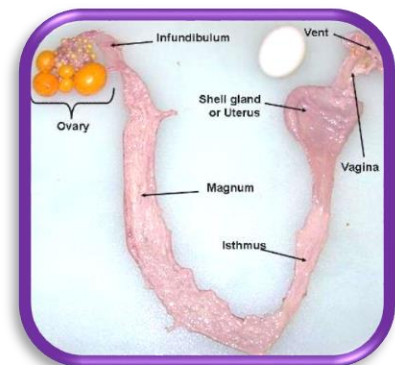
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### Summary:

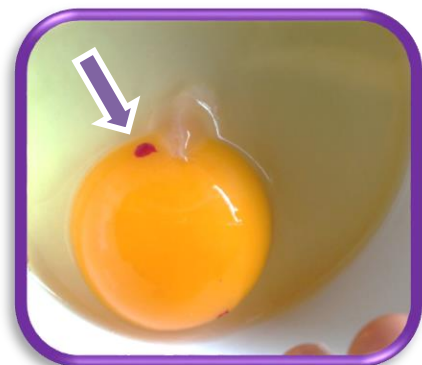
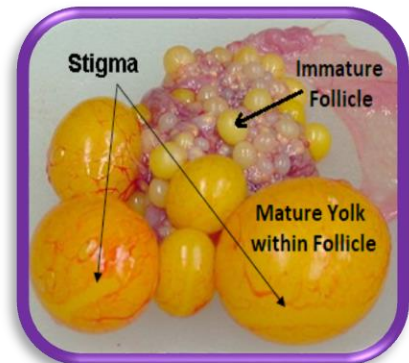
The female reproductive system consists of two main parts:

1. Ovary.
2. Oviduct.
  - At the time of early embryonic development, **two ovaries** and **two oviducts** exist. But the **right set atrophies**, leaving only the **left ovary** and **oviduct** at hatching.
  - Egg formation requires **21-24 hours**.



### First: the ovary

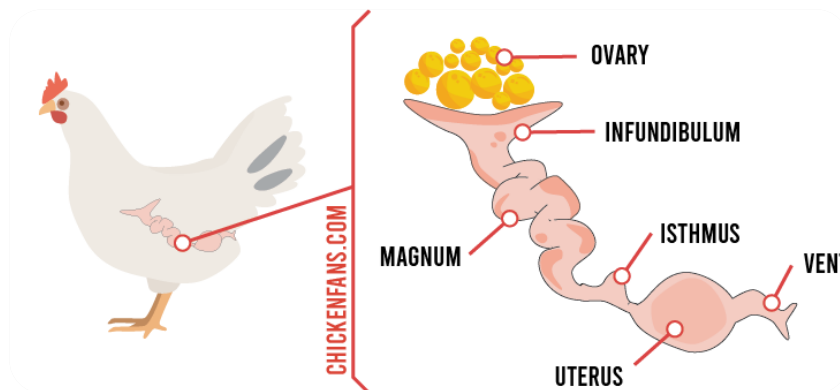
- The **ovary** consists of a mass of yellowish, rounded objects called “**Follicles**”, each containing an **ovum** or **yolk**.
- When a mature follicle is examined, an area virtually free of blood vessels will be found on the surface of it, this area called the **stigma** or (suture line) is where the follicle normally splits to release the yolk into the oviduct.
- If, for some reason, the follicle splits at other than the stigma, the numerous blood vessels that rupture will result in free blood being found in the egg, i.e. a **blood spot** will form.





## Second: the oviduct

- The **oviduct** : Is a **long tube** through which the **yolk passes** and where the **remaining portions of the egg are secreted**. It consist of the following parts :-



### 1. Infundibulum

- The funnel-shaped upper portion of the oviduct is called **the infundibulum**.
- When functional, its length is approximately **(9 cm)**. Normally inactive except immediately after ovulation, **its purpose is to search out and swallows the yolk causing it to enter the oviduct, and also for fertilization**.

### 2. Magnum

- The magnum is the **albumen-secreting portion** of the oviduct and it is about **(33 cm)** long in the average laying hen.

### 3. Isthmus

- A relatively short section approximately **(10 cm)** in length.
- Here **the inner and outer shell membranes are formed in such a manner as to represent the final shape of the egg**.

### 4. Uterus (Shell Gland)

- The uterus is (10 to 12 cm) long in the laying hen.
- Eggshell calcification begins just before the egg enters the uterus.

### 5. Vagina

- The final section of the oviduct is the **vagina**, which is about **(12 cm)** in length in a bird during egg production.
- Normally, the egg is held in the vagina for only a few minutes. **The vagina has no role in egg formation and only serves to expel the egg once it leaves the shell gland**.

