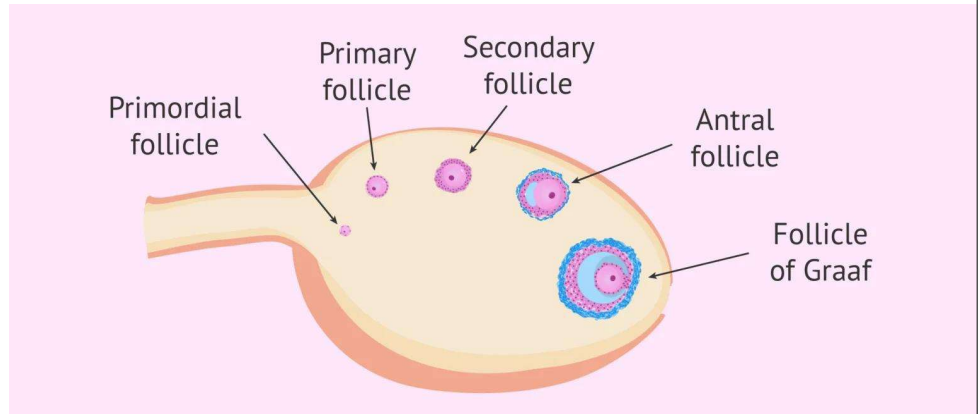


# Development of the Follicles

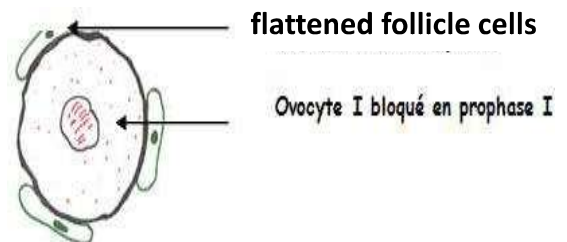
## What are the stages of folliculogenesis?

1. [Primordial follicle](#)
2. [Primary follicle](#)
3. [Secondary follicle](#)
4. [Antral follicle](#)
5. [Graaf follicle](#)



### 1. [Primordial follicle](#)

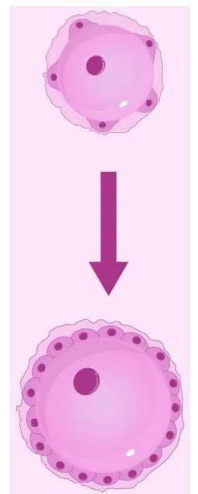
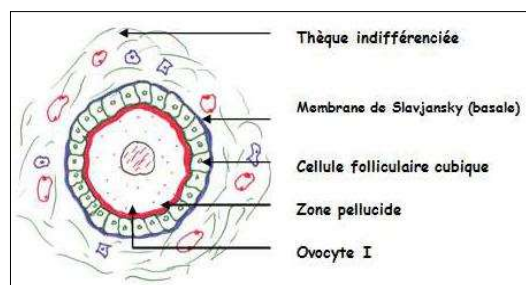
- The primordial follicle constitutes the first stage of follicular development. It is a follicle formed by an oocyte that is surrounded by a single layer of flattened **pre-granulosa cells**.



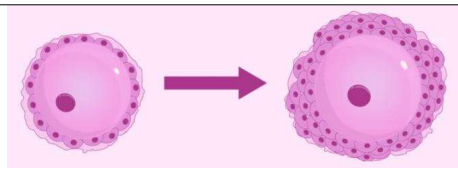
- These primordial follicles are formed in the fetal period of the female, beginning to form in approximately the third month of gestation.

### 2. [Primary follicle](#)

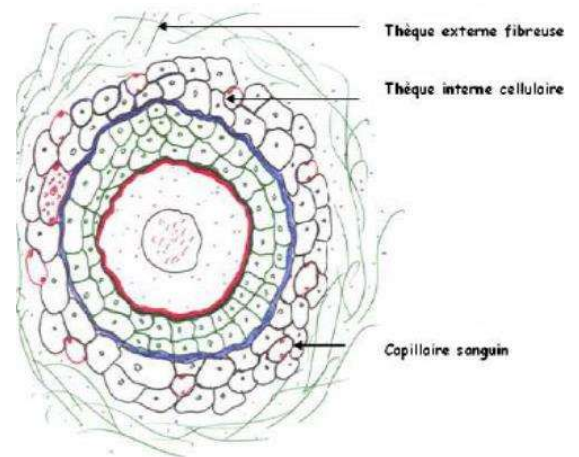
- The primordial follicles constitute the "reserve" from which some of them will be stimulated to advance in their development to primary follicles.
- In the primary follicle stage, the **flat** cells that surrounded the oocyte in the primordial follicle now become **cubic** (die-shaped) . In addition, the oocyte itself increases in size.
- On the other hand, the **zona pellucida** that will surround the oocyte, which is composed of glycoproteins, also begins to form in the secondary follicle.



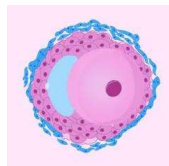
### 3. Secondary follicle



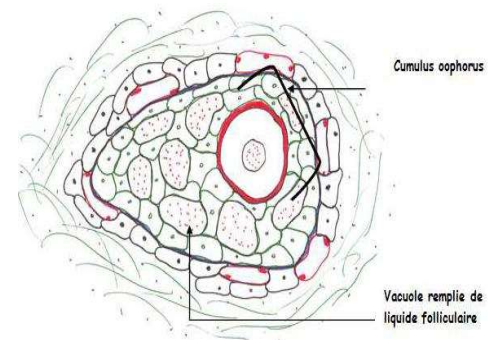
- In the secondary follicle stage, the cubic cells layers surrounding the oocyte are several, between 6 and 7 = **granulosa**.
- On the other hand, the **zona pellucida** that will surround the oocyte, which is composed of glycoproteins, also begins to form in the secondary follicle.
- At this stage, the granulosa cells continue to increase. *In addition*, the oocyte will also be surrounded by the **cells of the theca**, which will constitute the **inner theca** and the **outer theca**.



### 4. Antral follicle (or tertiary)

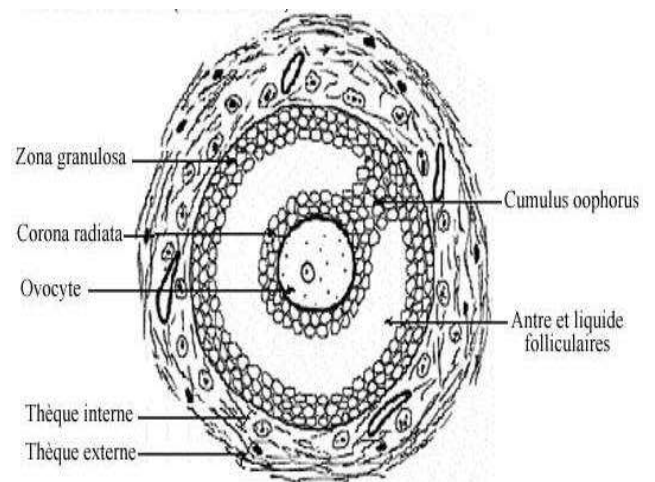
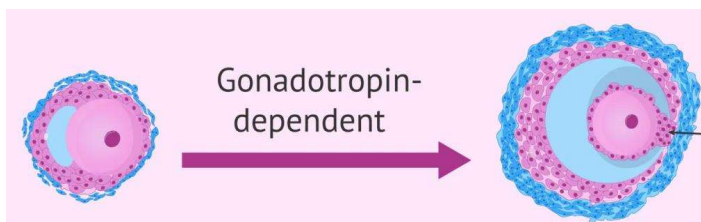


- The antral (or tertiary) follicle is characterized by the presence of a cavity filled with follicular fluid, known as the antrum **antrum**.



### 5. De Graaf follicle

- The Graafian or pre-ovulatory follicle is the fully developed follicle, which will lead to ovulation of the oocyte it contains. Due to the growth of the antrum, the oocyte is located in one of the sides of the follicle. The oocyte, however, remains surrounded by **granulosa** cells, forming the **cumulus oophorus** or cumulus.



#### - Le corps jaune:

- Après l'ovulation, le follicule se transforme en corps jaune. La cavité se comble de cellules folliculaires, qu'on appelle cellules lutéales
- En l'absence de gestation, le corps jaune dégénère.