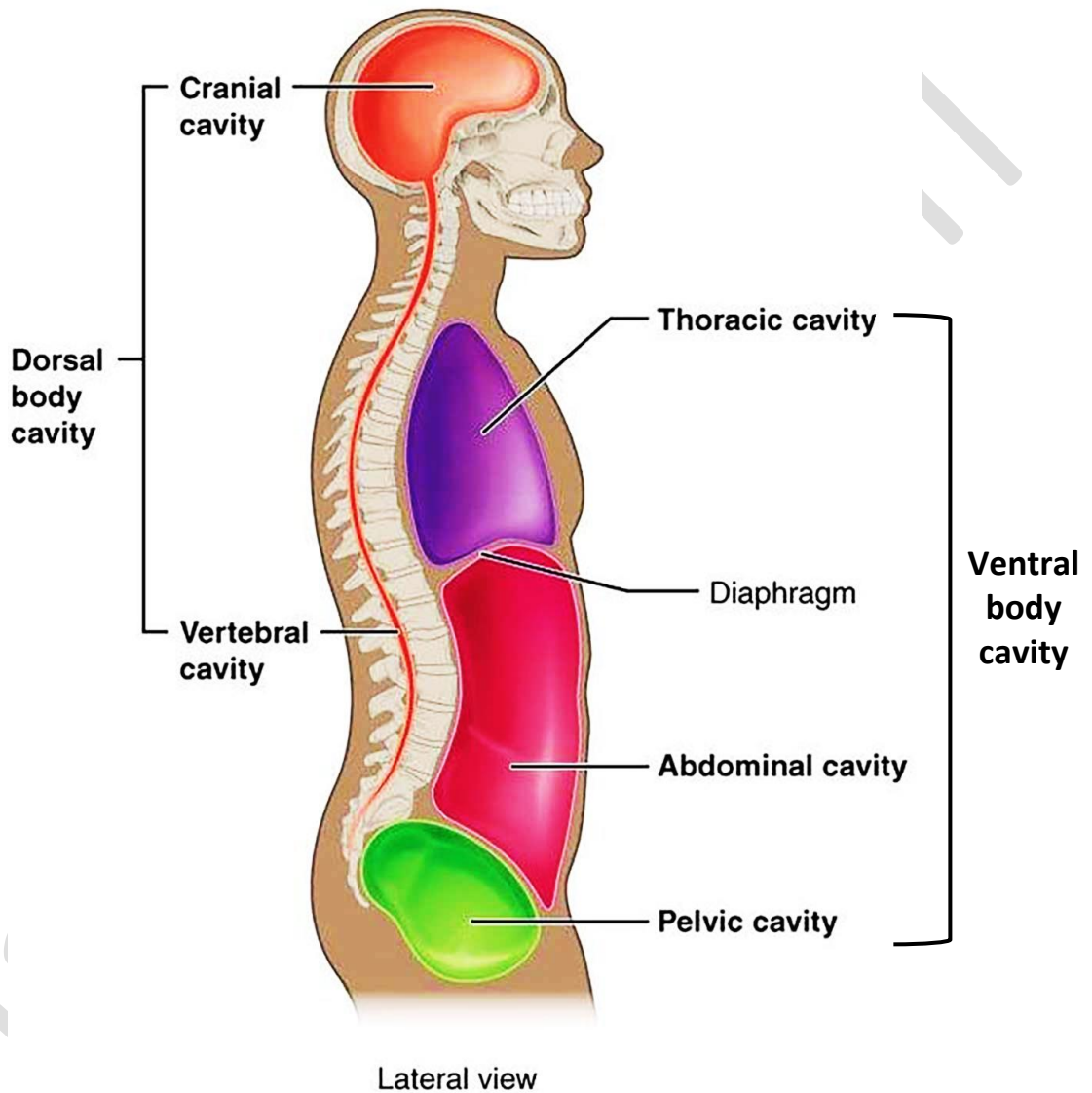


## Body Cavities

**Body Cavity:** is a fluid-filled space inside the body that contain and protect internal organs. Human body cavities are separated by membranes and other structures. The two largest human body cavities are the ventral cavity and the dorsal cavity.

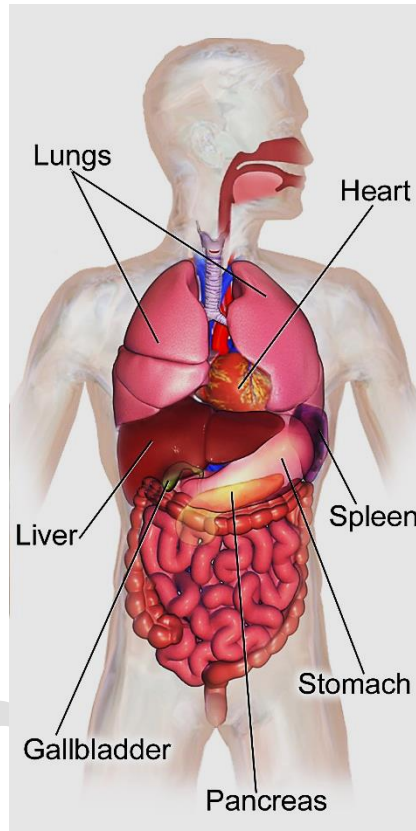


### 1. Ventral Cavity التجويف البطني

It is located in the anterior (front) part of the body. Organs contained within this body cavity include:

- ✓ **Thoracic cavity:** space within the rib cage holding the heart and lungs. It is separated from the abdominal cavity by the diaphragm

- ✓ **Abdominal cavity:** largest hollow space in the ventral cavity below the diaphragm. Contains the stomach, intestines, liver, spleen, pancreas and other organs.
- ✓ **Pelvic cavity:** located in the ventral cavity. Contains reproductive organs, bladder and rectum.



## 2. Dorsal Cavity التجويف الظهري

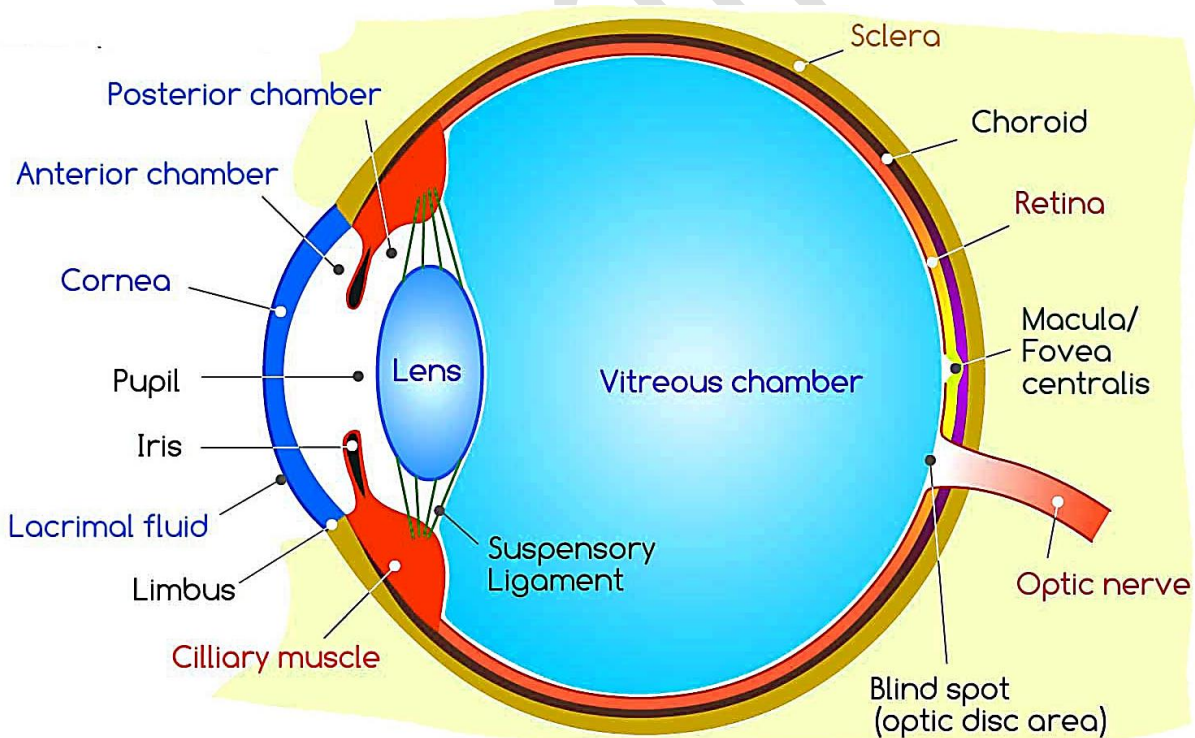
The dorsal cavity is at the posterior, or back, of the body, including both the head and the back of the trunk. The dorsal cavity is subdivided into:

- ✓ **Cranial cavity:** space inside the skull holding the brain.
- ✓ **Spinal cavity:** narrow channel following the spine holding the spinal cord.

## تجاويف وغرف العين Cavities and Chambers of The Eye

The eye has several cavities and chambers that help it function properly:

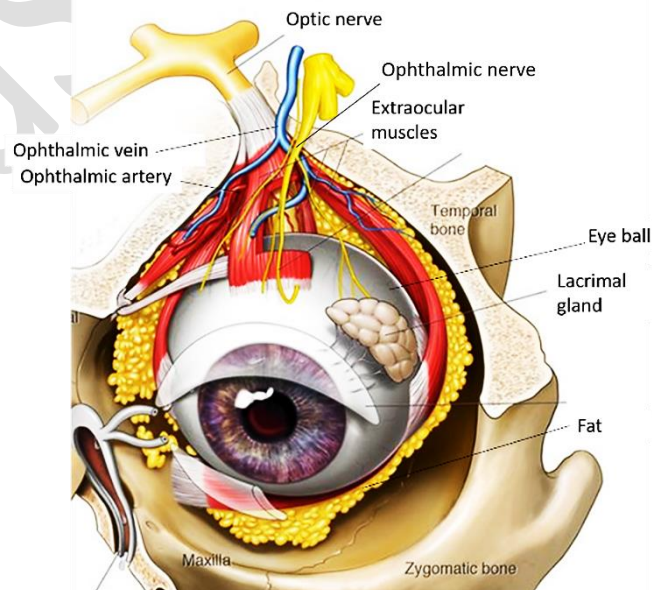
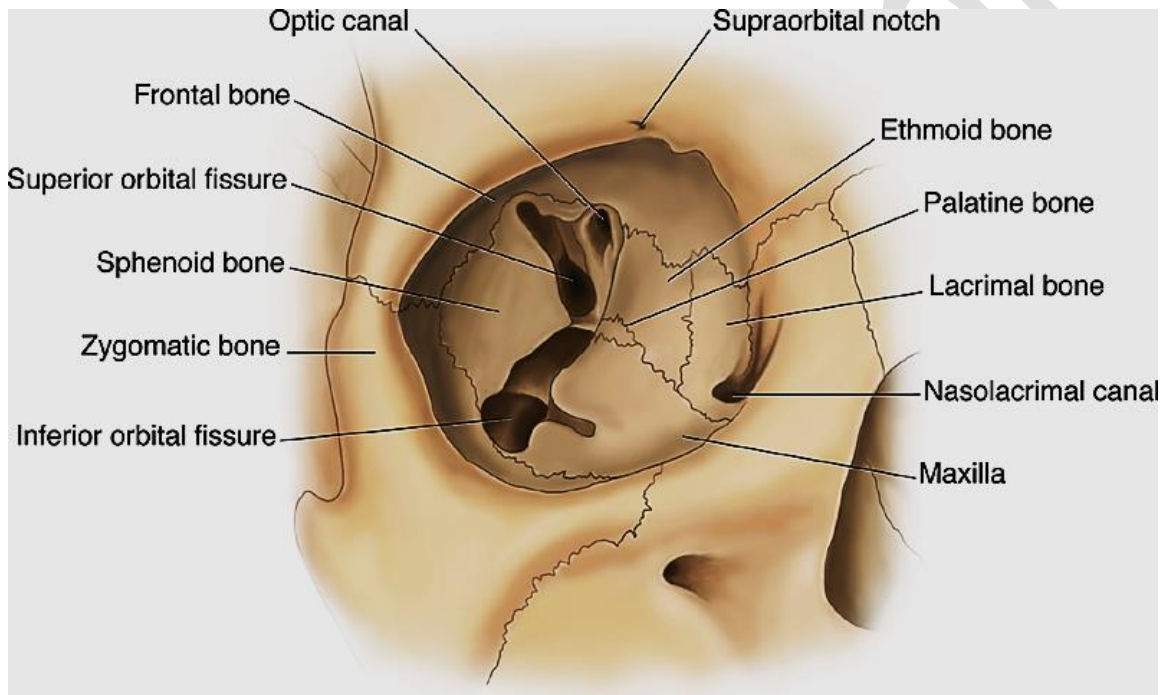
- **the anterior cavity:** space inside the eye between the cornea and lens. It is divided into two chambers:
  - ✓ The anterior chamber: space between the cornea and iris. It is filled with a watery fluid called the aqueous humor which provides nutrients to eye tissues.
  - ✓ The posterior chamber: small space behind the iris and in front of the lens. It is also filled with aqueous humor.
- **the posterior cavity:** large cavity behind the lens, i.e., the space between the lens and the retina which filled with a transparent gel called the vitreous humor which gives the eye its shape.



**تجويف محجر العين orbit cavity of eye**

The orbit is the bony cavity or socket in the skull that contains and protects the eyeball and its muscles, nerves, and blood vessels. There are other minor openings into the orbital cavity:

- optic canal
- nasolacrimal canal
- superior / inferior orbital fissure
- supraorbital / infraorbital canal



## Body Planes

There are three planes of the body:

- 1. Coronal (frontal) plane:** is a vertical plane which divides the front (anterior) and back (posterior) of the body, also perpendicular (at a right angle) to the sagittal plane.
- 2. Sagittal (longitudinal) plane:** is a vertical plane which passes through the body longitudinally. Also, it divides the body into a left section and a right section.
- 3. Transverse (axial) plane:** is a horizontal plane which divides the body into an upper (superior) section and a lower (inferior) section. Also, it is perpendicular to both the sagittal and coronal planes, and parallel to the ground.

