

# ANTERIOR HUMAN EYE ANATOMY

Reference Chart: External to Internal Layers

*[ Illustration Area: Anterior Segment Cross-Section ]*

## **ANATOMICAL LAYER**

### **KEY FUNCTIONS & CHARACTERISTICS**

**Tear Film**

Lipid, aqueous, and mucin layers; maintains moisture and optical clarity.

**Corneal Epithelium**

Fast-healing outermost barrier; protects against debris and infection.

**Bowman's Layer**

Acellular, condensed collagen layer; provides structural integrity.

**Corneal Stroma**

Comprises 90% of corneal thickness; organized collagen for transparency.

**Descemet's Membrane**

Basement membrane of the endothelium; resistant to proteolytic enzymes.

**Corneal Endothelium**

Single layer of cells; regulates fluid transport to prevent corneal edema.

**Anterior Chamber**

Space between cornea and iris filled with aqueous humor.

**Iris & Pupil**

Contractile diaphragm regulating light entry via the central aperture.

**Crystalline Lens**

Biconvex structure providing fine-tuned focus (accommodation).

Clinical Anatomy Series | Educational Use Only | Page 01