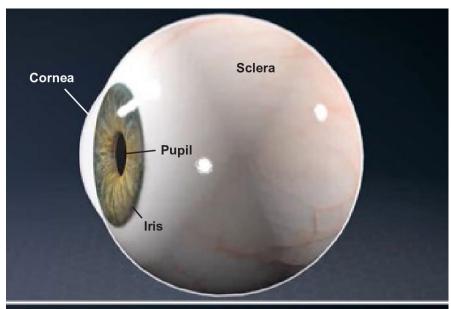


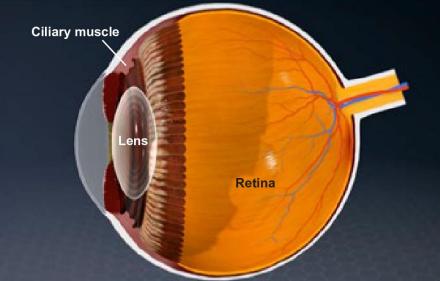


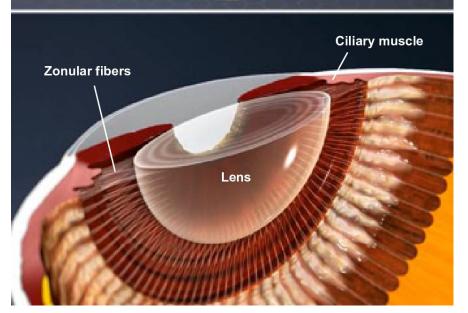


Anatomy of the Eye



ViewMedica





Overview

The eye is the organ of sight. It helps focus light and convert it into a signal that can be received by the brain. Let's take a closer look at the main parts of the eye.

Exterior

The sclera and the cornea compose the eye's exterior. The sclera is a protective layer of white tissue. The cornea is the clear window in the front of the eye. It helps focus incoming light.

Interior

When you look through the cornea you can see the iris. This is the colored muscle that contracts and relaxes to regulate the amount of light that enters the eye. The opening in the center of the iris is called the pupil. After light passes through the pupil, it reaches the lens.

The Lens

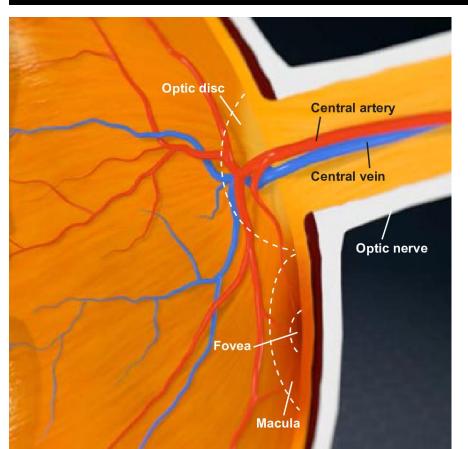
This flexible, disc-shaped structure allows the eye to focus light. Tiny strands called zonular fibers attach to the lens capsule. They connect to the ciliary muscle, which contracts and relaxes to control the shape of the lens.

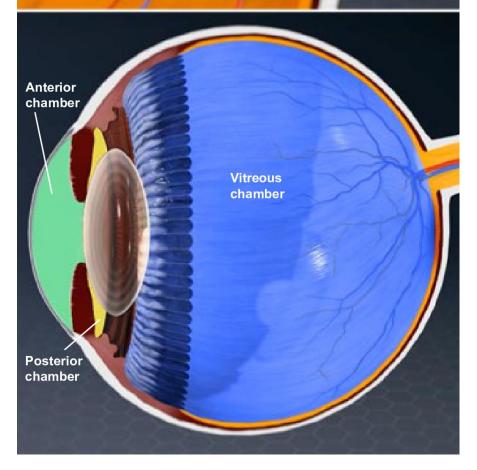






Anatomy of the Eye





Retina and Optic Nerve

After light passes through the lens, it strikes the retina. This thin layer of light-sensitive tissue covers the back of the eye's interior. The small central portion, called the "macula," is responsible for detailed vision. In the center of the macula is a small dimple called the "fovea." It contains the highest concentration of light-sensitive cells. The retina is nourished by blood vessels in an underlying layer of tissue called the "choroid."

The Optic Nerve

The retina converts light signals into electrical impulses. These travel to the brain through the optic nerve. The area where the optic nerve attaches to the retina lacks light-sensitive cells. It is called the "optic disc," and is the eye's blind spot. The central artery and vein of the retina are bundled with the optic nerve. The branches of these vessels carry blood to and from the retina's inner surface.

The Eye's Chambers

The interior of the eye is divided into three chambers: the anterior, the posterior and the vitreous. The anterior chamber and posterior chambers are filled with a thin, clear fluid called aqueous humor. The vitreous chamber is filled with a thicker fluid called "vitreous humor." It helps the eye keep its shape.

Conclusion

The eye is one of the most complex and delicate organs in the body. In a healthy eye, the many parts work in harmony to give us the sense of sight.

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