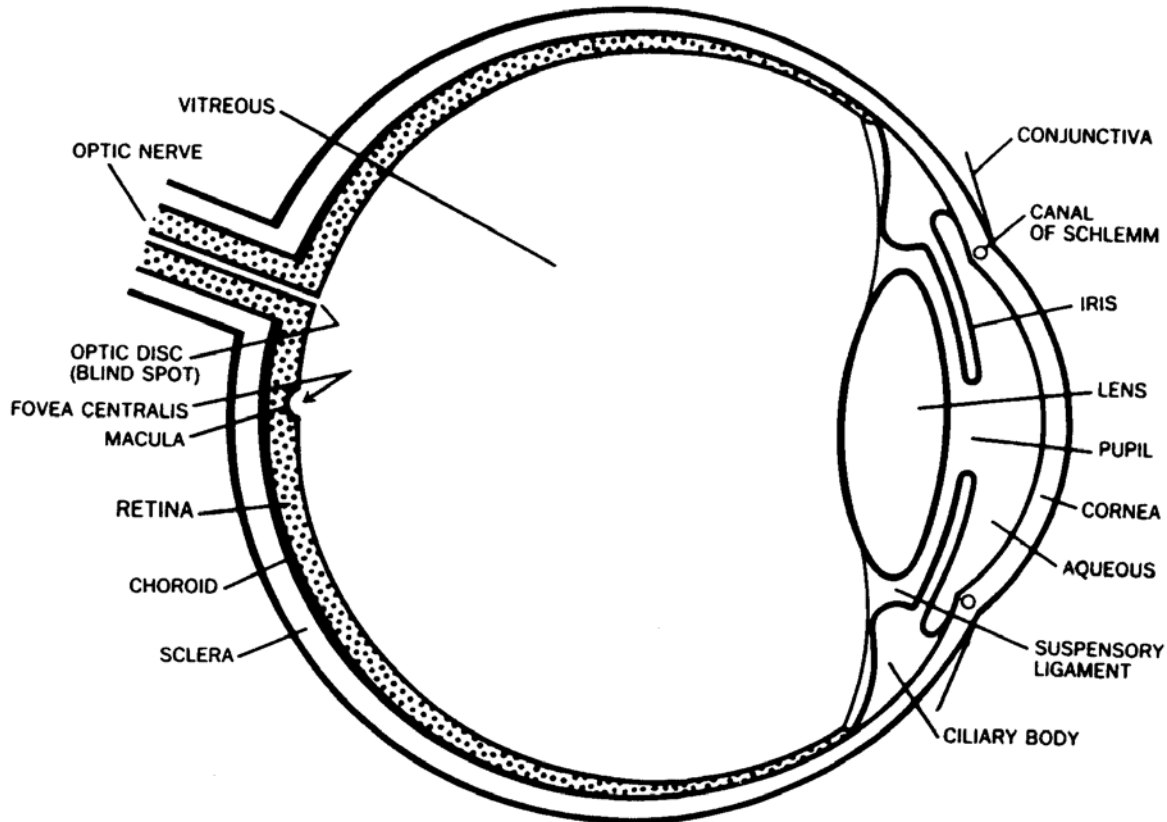


Handout B: Diagram of the Eye

Prevent Blindness America. (2003). *Diagram of the human eye*. Schaumburg, IL: Author.



Overhead View of the Right Eye

Eye diagram reprinted with permission from Prevent Blindness America. Copyright 2003. Written description of the diagram for individuals who are blind was developed by EIVI Training Center.

Roughly the shape of a sphere, the eyeball is held in place and moved by muscles in the eye socket. The outermost layer of the eyeball consists of a tough tissue called sclera that is mostly opaque, except at the front, where it is transparent and is called the cornea. The cornea refracts the light entering the eye. A thin, clear membrane called the conjunctiva covers the visible opaque part of the sclera (i.e., the white of the eye). Behind the cornea is the anterior chamber of the eye, filled with a liquid called aqueous humor. The canal of Schlemm, a ring-shaped passage between the cornea and the sclera, allows aqueous humor to drain into the blood stream. The back of anterior chamber is formed by the iris (the colored part of the eye). Muscles in the iris dilate (widen) and constrict (narrow) the pupil to regulate the amount of light

that enters the eye. Directly behind the iris is a biconvex structure called the lens. The posterior two thirds of the eye is lined with the retina, containing millions of photoreceptor cells. Between the retina and the sclera is the vascular layer called the choroid. The choroid is attached to the iris by a ring-shaped structure known as the ciliary body. A band of fibers called the suspensory ligament (also called zonules) connects the ciliary body to the lens; muscles in the ciliary body contract and relax to vary the tension on the suspensory ligaments, which in turn flatten and thicken the lens, focusing light rays on the retina. The interior of the eye is filled with jellylike vitreous, which helps to maintain the shape of the eyeball. At the back of the eye is a highly sensitive area of the retina called the macula. At the center of the macula is a small depression called the fovea centralis, used for acute vision. Lateral to the macula is a circular blind spot called the optic disc, where nerve fibers meet to form the optic nerve, which carries impulses from the eye to the brain.