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How the eye works:

The eye is a spherical structure. It has a transparent front side which is the cornea. The wall of the eye beyond the cornea consists of three tissue layers. The outermost layer is the sclera, a tough protective coating that covers the outer surface of the eye. The middle layer is the choroid, which is a vascular layer that is continuous with the ciliary body and the iris on the anterior part of the eye. The inner layer is the retina, a light-sensitive tissue that lines the inside back wall of the eye. The eye is more complex than a camera, but the principles of how it function is similar.

Cornea

Cornea is the clear transparent tissue in front of the eye that allows light to pass into the eye

Pupil

The pupil is like the aperture of a camera. It is where light enters, which then passes through the lens. Liquid flowing through the pupil, called aqueous, provides nourishment to the lens, iris and cornea. Pressure within the eye depends on the delicate balance between the body's production and absorption of this fluid.

Lens

The lens is a transparent and flexible (when healthy) structure behind the iris. Along with the cornea, it helps refract light to be focused on the retina. Cataracts are opacities of the lens. Cataracts usually develop as the aging lens becomes more opaque. Cataracts can also form congenitally or after injury to the lens.

Vitreous

Vitreous body is the clear gel that fills the space between the lens and the retina.

Retina

The retina is a light-sensitive tissue that lines the back of the eye (like the film in a camera). The retina receives the picture formed by the light rays and sends the image to the brain via a cable known as the optic nerve.

Macula

Macula is the central part of the retina, which processes detailed vision. It is responsible for focusing central vision in the eye, and controls our ability to read, drive, recognise faces/ colours and see objects in fine detail. The progressive destruction of the macula is a disease known as macular degeneration.

Optic Nerve

The optic nerve is the cable that transmit the image from the eye to the brain.