

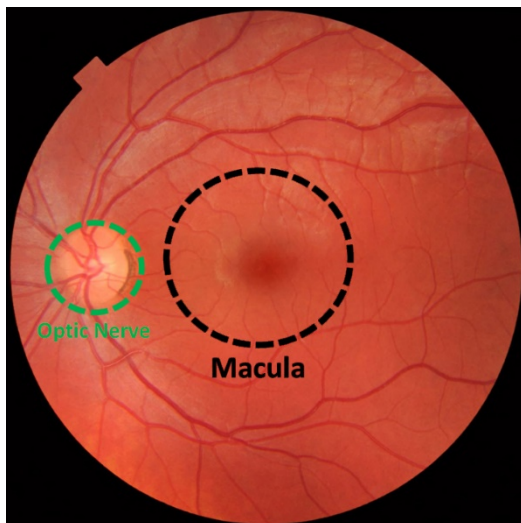
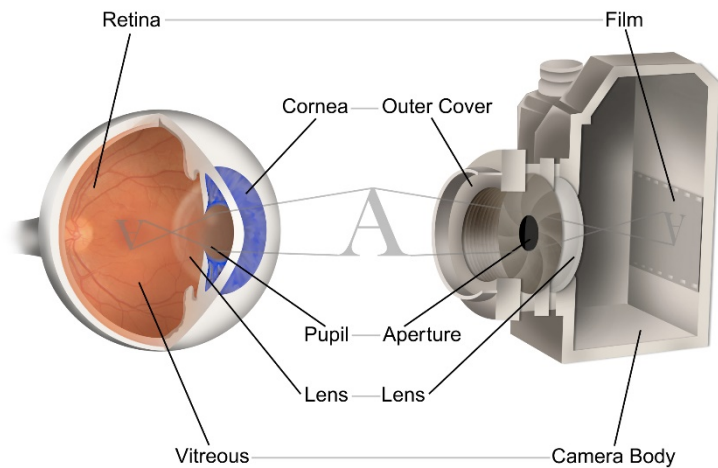
THE RETINA

The eyeball can best be thought of as being analogous to a camera.

Just like a camera lens has a cover, the human eye has a cornea, the only difference being that the cornea is transparent and the camera lens cover is opaque.

Moving on, a camera's adjustable aperture is similar to our iris, both which regulate the amount of light entering the eye or camera. The

lens of both the eye and the camera helps to focus light as it traverses through the camera body, or vitreous cavity in the case of the eye. Light waves are ultimately focused on the film of a camera, or retina of the eye. While a camera's film captures the image, the retina transmits that image via the optic nerve to the brain where the image is ultimately processed, thereby allowing us to see what it is that we are looking at.



In short, the retina is similar to the film of a camera, where light rays are focused and captured to form images, what we call vision. The central portion of the retina is known as the *macula* which is responsible for our sharp central (used for reading, facial recognition, etc.) and color vision. The remainder of the retina is responsible for our peripheral and night vision.

References:

Campbell FP. Retina and optic nerve. Arch Ophthalmol. 1968 Jun;79(6):789-802.