

Figure 14
The relative spectral sensitivities of long wavelength (L), medium wavelength (M) and short wavelength (S) cone photoreceptors.

Rods and cones are distributed differently across the retina (Figure 15). Cones are concentrated in one small area that lies on the visual axis of the eye, called the fovea, although there is a low density of cones across the rest of the retina.

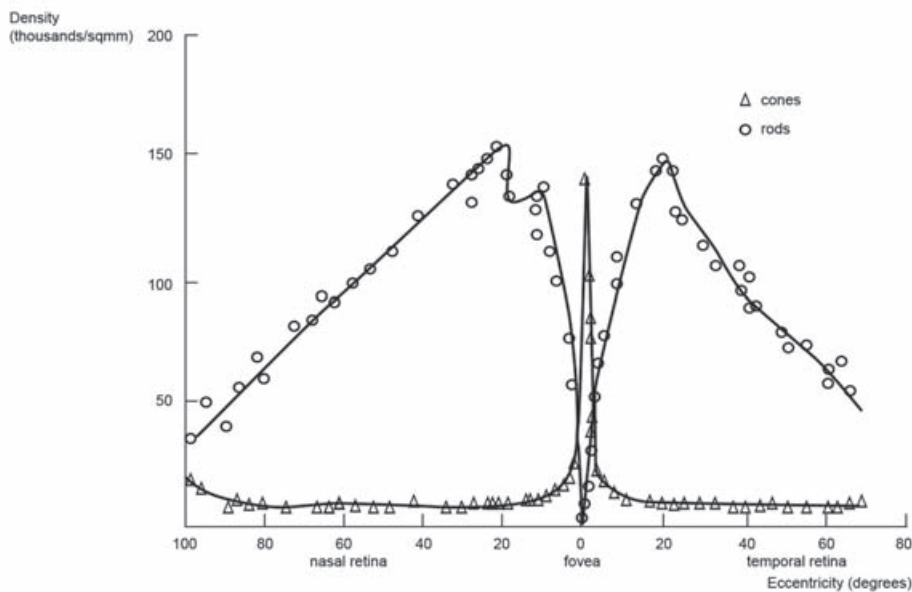


Figure 15
shows the distribution of rod and cone photoreceptors across the retina. The 0 degree indicates the position of the fovea. The three cone types are also not distributed equally across the retina. The L- and M-cones are concentrated in the fovea, their density declining gradually with increasing eccentricity. The S-cones are largely absent from the fovea; reach a maximum concentration just outside the fovea and then decline gradually in density with increasing eccentricity.

For more details about optics and function of eye please refer to the SLL Handbook article 2.1.3 and following ones.