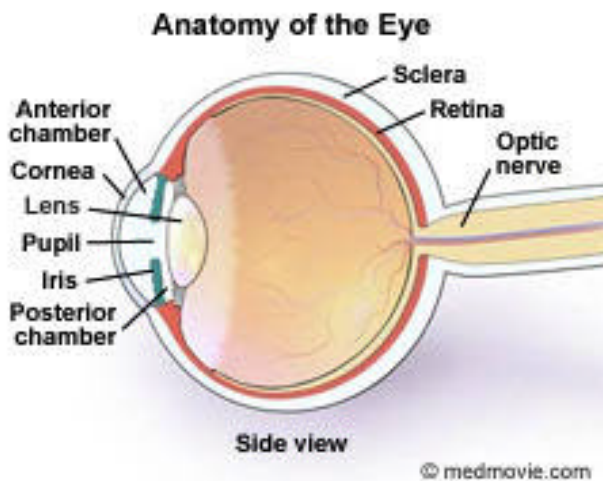


# Phakic Intraocular Lenses

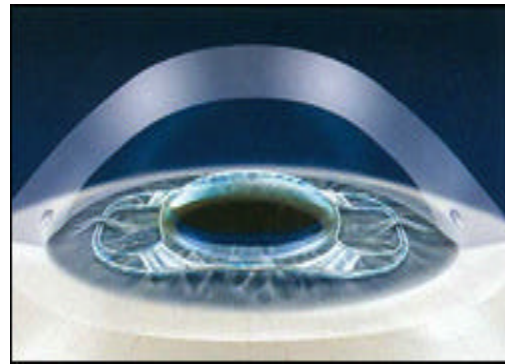
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ELE 282  
10/5/05

Vision occurs when light rays hit the cornea and are bent or refracted by the cornea and lens and then received by the retina, the nerve layer at the back of the eye, as an image. The image is then sent through the optic nerve to the brain. However, there are people with refractive errors. Refractive errors occur when the eyes are not refracting light properly. There are three main types of refractive errors: nearsightedness, farsightedness, and astigmatism. Approximately 148 million people (52% of the population) in the United States wear some form of corrective eyewear (Eye Institute). Almost half of North Americans are nearsighted.



These refractive errors can be fixed by wearing glasses, contact lenses, or refractive surgeries. One type of refractive surgery involves the use of Phakic intraocular lenses. Phakic intraocular lenses are made of plastic or silicone. The lens is implanted in the

anterior chamber on the iris after an incision of about 3 millimeter is made where the cornea and the sclera meet.



Since this type of surgery doesn't require for the natural crystalline lens to be removed, the natural lens helps adjust between seeing objects that are far or near.

## Sources:

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