

A closer look at eyesight

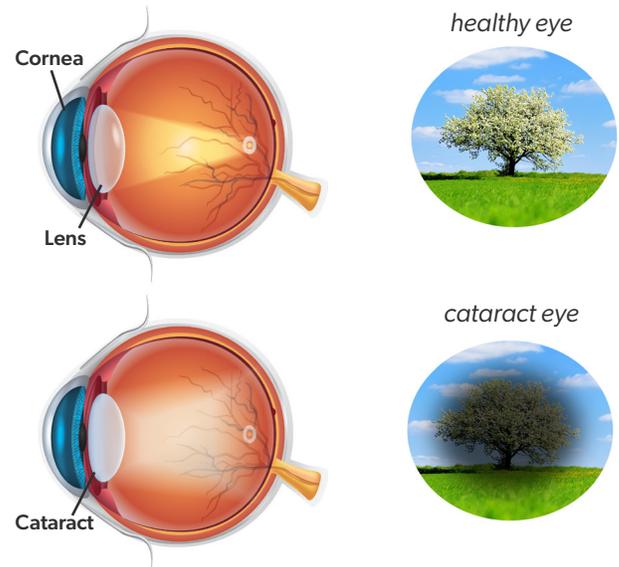
Vision is all about light rays entering and passing through the eye much like a camera.

When you look at an object, light rays reflect off that object and reach the **cornea** on the surface of your eye

The **cornea** bends the light and sends it to the **lens** inside your eye

The **lens** further bends the light, sending it to the **retina**

The **retina** interprets the light as an image and sends it to your brain



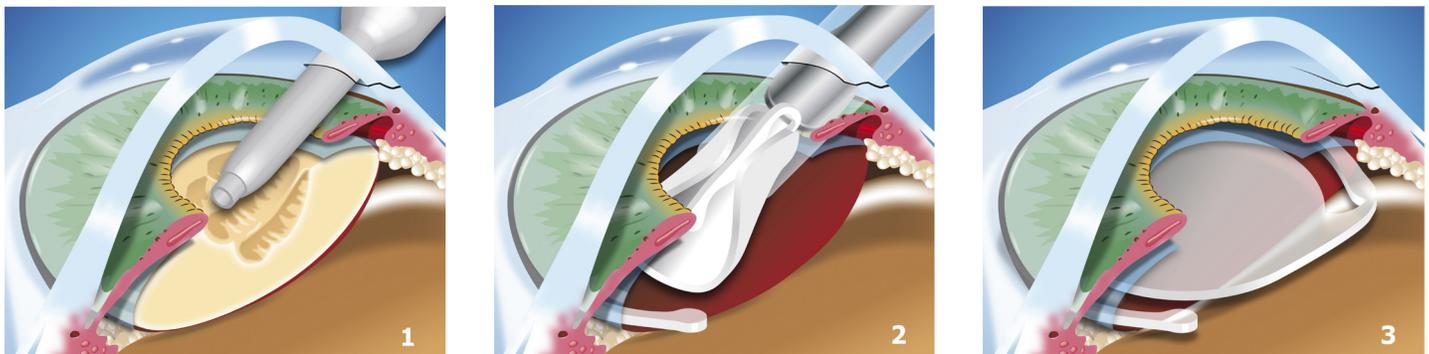
What is a cataract

As you age, the lens becomes cloudy, making it harder for light to reach the retina. **This clouding of the natural lens is what we call a cataract.**



Cataract Surgery

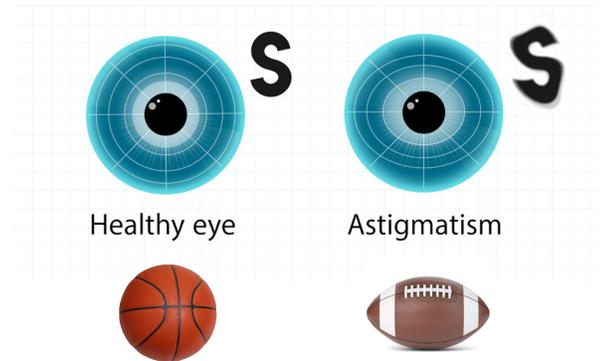
Your surgeon will remove the cloudy lens in your eye through a tiny incision and will replace it with an artificial lens called an **intraocular lens or IOL**. You can choose which type of IOL implant best matches your goals for vision



What is astigmatism

Astigmatism is a common defect in the shape of a cornea that blurs vision. It distorts light before it reaches the lens of the eye. Normal corneas are spherical, like a basketball whereas corneas with astigmatism are shaped more like a football.

If you have astigmatism but don't have it corrected during cataract surgery, you may still need to wear glasses after the procedure. A **toric IOL** is a modification of a standard IOL that has the needed astigmatism treatment built in. This customized lens is implanted inside the eye and oriented to reduce the astigmatism.



Presbyopia

Presbyopia is a normal part of aging that causes you to lose the ability to focus on nearby objects and causes most people to need glasses for reading. It is caused by the gradual stiffening of the natural lens which can no longer flex properly to focus for sharp close-up vision.

If you don't have presbyopia corrections with your cataract surgery, you can expect to need glasses for near-vision tasks such as reading or computer work. A **presbyopia-correcting IOL** may be an option to reduce your dependence on reading glasses after surgery, by correcting **BOTH** astigmatism and presbyopia.