About Age & Vision

Even if you have had “normal” eyesight all your life, anyone who is over 40 knows quite well that vision begins to change in a number of different ways. Between the ages of 40 and 60, the most obvious changes to vision occur in the eye structure called the crystalline lens.

In people under 40, the crystalline lens is typically crystal clear, as the name implies, and is also soft and flexible. It is this flexibility that allows the lens to change its shape and alter its curvature so that it can focus your vision at various distances—from far, to near, to arm’s length, letting us enjoy being able to see things at all distances. As we enter the 40’s, the crystalline lens begins to lose its flexibility, making it more and more difficult for us to change focus and see arm’s length or close objects or reading material. This loss of flexibility is called Presbyopia.

About Near Vision & Presbyopia

Presbyopia, which literally means “old eyes”, is a normal and expected consequence of the aging process. When the crystalline lens loses its ability to flex, it is no longer able to change its shape and effectively bend light rays as sharply, and the ability to focus on near objects is diminished. People experiencing the start of presbyopia often notice that their “arms are too short” to read and they have to hold close things further away to see them clearly. Presbyopia typically becomes noticeable between age 40 and 50 and progressively worsens through age 65. Presbyopia affects everyone including those who have cataracts. When presbyopia begins, people who already wear glasses may need bifocals or trifocals, and those who have never worn glasses may require reading glasses. Recently, thanks to advances in lens extraction surgery techniques and modern lens implants, lens replacement surgery has helped many patients restore their normal range of vision without dependence on bifocals and trifocals.

About Cataracts

Another change that occurs in the crystalline lens as we progress through our 50’s and 60’s is that the normally crystal clear lens begins to lose its transparency and gradually becomes yellow and cloudy. As the crystalline lens loses its transparency and its optical clarity, it may begin to disturb your ability to see well in dim illumination such as for night driving, and may create glare or just an overall dimming of your vision.

Sometimes parts of the lens may actually become cloudy enough that they cause a significant decrease in day and night vision. These symptoms are what patients who have cataracts typically experience.

If you have been told that you have a cataract, there is no need to be overly concerned as you are not alone.
About Cataract Surgery

Each year in the United States, more than 2.5 million people have cataract surgery. Thanks to advanced surgical procedures and technology, cataract surgery is not only one of the most frequently performed surgical procedures in the United States, but it is also one of the safest and most successful surgical procedures. Cataract surgery is performed on an outpatient basis and usually only requires a few hours of your time from beginning to end.

To begin the procedure, your eye will be treated with an anesthetic so that you will feel little, if any discomfort. A tiny incision will be made and a microscopic instrument will be passed through it. Using ultrasound from the tip of the microscopic instrument, the cataract is gently broken into pieces small enough to be washed away, drawn through the instrument and removed from the eye. This technique is called “phacoemulsification” and is the most advanced method of cataract surgery and crystalline lens removal available today.

Once your cataract has been removed, it can now be replaced by a new permanent Intraocular Lens Implant. The new lens is readily inserted and placed in position through the same tiny incision at the outer edge of the cornea through which the cataract was removed.

After the procedure, you will rest for a short time at the surgery center before going home. Usually your eye will be examined within 24 hours after your procedure. We will prescribe some eye drops for you to use. Although each patient heals a slight bit differently, most patients see well enough to return to their routine activities within a day or so after surgery.

Monofocal Lens Implants

Monofocal Lens Implants are the most basic type of lens implant used to correct vision after removal of the crystalline lens. A Monofocal Lens Implant can provide very good vision after your surgery—but only at one set distance-usually for seeing things at a distance such as for driving or going to the movies. A Monofocal Lens Implant does not correct intermediate or arm’s length vision for doing things like playing cards and seeing the golf ball on the tee, or even seeing computer screens clearly. Monofocal Lens Implants do not correct near vision for doing things up close like seeing medicine bottles, reading, or keeping your golf score, as these tasks require the correction of presbyopia.

Aspheric Lens Implants

An Aspheric Lens Implant is designed to reduce the visual disturbances caused by optical aberrations found in ordinary lens implants. This reduces the tendency to see “glare” that you might experience with basic lens implants and thus can offer improved sharpness and contrast, helping patients in certain lighting conditions. Aspheric Lens Implants only correct distance or far vision, such as that required for driving. Aspheric Lens Implants do not usually correct intermediate or “arm’s length” vision, such as that required for viewing computer screens. They do not correct near vision as required for reading. Even with Aspheric Lens Implants, you need to remember that it will be necessary to wear reading glasses or bifocals to correct intermediate and near vision.

Toric Lens Implants

Toric Lens Implants correct astigmatism. Astigmatism is an optical aberration that is caused by the cornea being shaped more like a football instead of spherical like a basketball. For patients who have astigmatism, and who do not wish to wear eyeglasses to see clearly at a distance, choosing a Toric Lens Implant can help them be independent of glasses for tasks such as driving that require clear distance vision. Toric Lens Implants do not correct presbyopia, so that most patients still require reading glasses or bifocals to be able to comfortably perform near vision tasks such as reading and intermediate vision tasks such as computer work.

Near Vision Presbyopia Correcting Lens Implants

Near Vision Presbyopia Correcting Lens Implants provide excellent vision at the full range of distances—far or distance vision, arm’s length or intermediate vision and up close near vision. Depending on your specific vision requirements, there are several types of presbyopia correcting multifocal lens implants, including Crystalens®, ReSTOR® and the ReZoom™ Lens Implants. Each of these works in a different way to help you achieve your vision correction goals of being able to see at a variety of distances without being dependent on eyeglasses or reading glasses.

Patients choosing to have a presbyopia correcting lens implant will likely find that they can drive, watch television, play golf and keep score, read a menu, play cards or do crafts—without the need for glasses. Patients choosing presbyopia correcting lens implants typically experience a greater overall freedom from glasses, allowing them to participate in most everyday activities without the dependence, or the hassle of glasses.