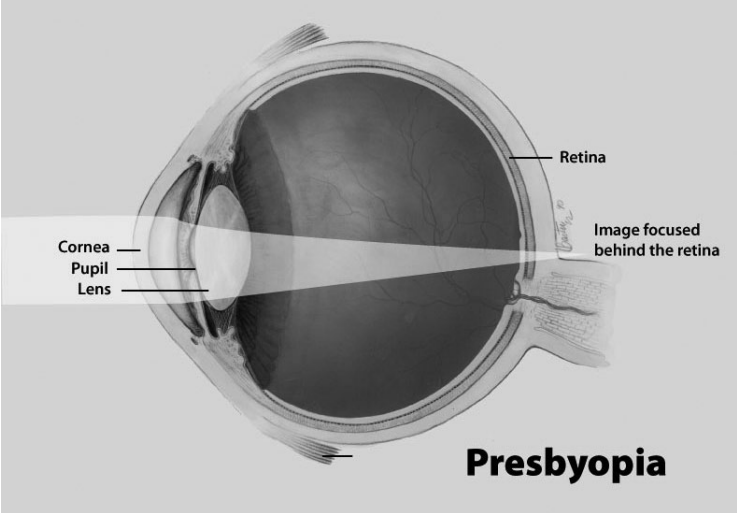
National Eye Institute
National Institutes of Health

Presbyopia



Presbyopia is a common type of vision disorder that occurs as you age. It is often referred to as the aging eye condition. Presbyopia results in the inability to focus up close, a problem associated with refraction in the eye.

What is presbyopia?

Presbyopia is a common type of vision disorder that occurs as you age. It is often referred to as the aging eye condition. Presbyopia results in the inability to focus up close, a problem associated with refraction in the eye.

Can I have presbyopia and another type of refractive error at the same time?

Yes. It is common to have presbyopia and another type of refractive error at the same time. There are several other types of refractive errors: myopia (nearsightedness), hyperopia (farsightedness), and astigmatism.

An individual may have one type of refractive error in one eye and a different type of refractive error in the other.

What is refraction?

Refraction is the bending of light as it passes through one object to another. Vision occurs when light rays are bent (refracted) by the cornea and lens. The light is then focused directly on the retina, which is a light-sensitive tissue at the back of the eye. The retina converts the light-rays into messages that are sent through the optic nerve to the brain. The brain interprets these messages into the images we see.

How does presbyopia occur?

Presbyopia happens naturally in people as they age. The eye is not able to focus light directly on to the retina due to the hardening of the natural lens. Aging also affects muscle fibers around the lens making it harder for the eye to focus on up close objects. The ineffective lens causes light to focus behind the retina, causing poor vision for objects that are up close.

When you are younger, the lens of the eye is soft and flexible, allowing the tiny muscles inside the eye to easily reshape the lens to focus on close and distant objects.

Who is at risk for presbyopia?

Anyone over the age of 35 is at risk for developing presbyopia. Everyone experiences some loss of focusing power for near objects as they age, but some will notice this more than others.

What are the signs and symptoms of presbyopia?

Some of the signs and symptoms of myopia include:

- Hard time reading small print
- Having to hold reading material farther than arm's distance
- Problems seeing objects that are close to you
- Headaches
- Eyestrain

If you experience any of these symptoms you may want to visit an eye care professional for a comprehensive dilated eye examination. If you wear glasses or contact lenses and still have these issues, a new prescription might be needed.

How is presbyopia diagnosed?

Presbyopia can be found during a comprehensive dilated eye exam. If you notice any changes in your vision, you should visit an eye care professional. Exams are recommended more often after the age 40 to check for age-related conditions.

How is presbyopia corrected?

Eyeglasses are the simplest and safest means of correcting presbyopia. Eyeglasses for presbyopia have higher focusing power in the lower portion of the lens. This allows you to read through the lower portion of the lens and see properly at distant through the upper portion of the lens. It is also possible to purchase reading eyeglasses. These types of glasses do not require a prescription and can help with reading vision.

For More Information

View Eye Health Organizations
http://nei.nih.gov/health/resourceSearch.asp?Disp=1&strKey=Refractive+Surgery

Tips on Talking to Your Doctor
http://nei.nih.gov/health/talktodoc.asp

How to Find an Eye Care Professional
http://nei.nih.gov/health/findprofessional.asp

For the most up-to-date information, you may wish to visit
http://www.nei.nih.gov/health/errors/presbyopia.asp

This information was developed by the National Eye Institute to help patients and their families search for general information about presbyopia. An eye care professional who has examined the patient's eyes and is familiar with his or her medical history is the best person to answer specific questions.

The National Eye Institute (NEI) is part of the National Institutes of Health (NIH) and is the Federal government's lead agency for vision research that leads to sight-saving treatments and plays a key role in reducing visual impairment and blindness.

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