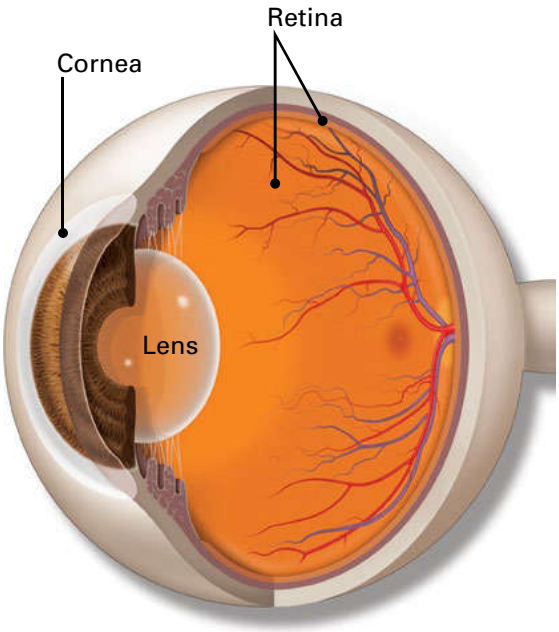
Presbyopia

What is presbyopia?

Presbyopia is when your eyes gradually lose the ability to see things clearly up close. It is a normal part of aging. In fact, the term "presbyopia" comes from a Greek word which means "old eye." You may start to notice presbyopia shortly after age 40. You will probably find that you hold reading materials farther away in order to see them clearly.



Eye Words to Know

Cornea: Clear, dome-shaped window of the front of your eye. It focuses light into your eye.

Lens: Clear part of the eye behind the colored iris. It helps to focus light on the retina (back of the eye) so you can see.

Retina: Nerve layer at the back of your eye. It sends light signals to the brain so that you can see.

What causes presbyopia?

Your clear lens sits inside the eye behind your colored iris. It changes shape to focus light onto the retina so you can see. When you are young, the lens is soft and flexible, easily changing shape. This lets you focus on objects both close-up and far away. After age 40, the lens becomes more rigid. It cannot change shape as easily. This makes it harder to read, thread a needle, or do other close-up tasks.

There is no way to stop or reverse the normal aging process that causes presbyopia. However, presbyopia can be corrected with eyeglasses, contact lenses or surgery. If you do not correct presbyopia, you may be bothered by headaches and eye strain.

With presbyopia, reading glasses can help refract (bend) light rays before they enter the eye to compensate for loss of near vision.

Ways to correct presbyopia

Reading glasses. If presbyopia is your only vision problem (you do not have nearsightedness, farsightedness or astigmatism), glasses may be all you need. Reading glasses help correct close-up vision problems by bending (refracting) light before it enters your eye. They can be bought without a prescription, but the specific power of reading glasses that you need should be determined by an eye exam.

There is no way to stop or reverse the normal aging process that causes presbyopia. However, presbyopia can be corrected with eyeglasses, contact lenses or surgery.

Bifocals, trifocals or progressive lenses. If you already wear eyeglasses for other vision problems, now you might need bifocals, trifocals, or progressive lenses.

- **Bifocals** correct for close-up and far vision. A line, which may or may not be visible, divides the lens. The bottom of the lens refracts light for close up vision. The top portion refracts light to allow you to see distant objects.
- **Trifocals** have three lens areas to correct for close-up, mid-range and far vision.
- **Progressive lenses** correct vision like bifocals and trifocals. But instead of a line that divides each refractive area, refraction changes gradually in the lens from top to bottom.

Contact lenses. Some people prefer to wear contact lenses rather than eyeglasses. There are two types of contact lenses that help presbyopia:

- **Monovision contacts.** These correct one eye for distance vision and the other for close-up vision. You need to adapt to monovision lenses and train your brain to see this way. You may find you lose your ability to judge something's distance or speed with monovision lenses.
- **Multifocal contacts.** These lenses have several rings or zones set at different powers. With this design, you are actually using both near and far vision at the same time. However, your brain learns to automatically select the right focus for what you want to see. You may find that using a multifocal lens makes your vision less sharp than when using a monofocal lens.

Refractive surgery. Some people decide to have surgery to achieve monovision. This can reduce their need for glasses for near and far objects.

©2018 American Academy of Ophthalmology
Content last reviewed 09/18

Using a laser, an ophthalmologist reshapes the cornea for clear far vision in one eye and close-up vision in the other. In many ways, this is like wearing monovision contact lenses. Your ophthalmologist may suggest that you try monovision lenses before having LASIK surgery. That way you can tell if monovision is a comfortable option for you.

Summary

Presbyopia ("aging eye") is when your eyes gradually lose the ability to see things clearly up close. It is a normal part of aging.

To improve your vision, you can wear glasses that offer vision correction for both near and far (such as bifocals). You can also try monovision, where one eye is corrected for near vision and the other for clear distance vision. You can do this with contact lenses or with refractive surgery.

Your ophthalmologist can tell you about vision correction options for your presbyopia.

Get more information about presbyopia from EyeSmart—provided by the American Academy of Ophthalmology—at **aao.org/presbyopia-link**.

COMPLIMENTS OF:

BRYAN VEKOVIUS, M.D.

OCULOPLASTIC SURGERY AND
NEURO-OPHTHALMOLOGY

450 ASHLEY RIDGE BLVD.
SHREVEPORT, LA 71106

(318) 675-3733

©2018 American Academy of Ophthalmology
Content last reviewed 09/18