

## Near Vision Loss

### Understanding Near Vision Loss

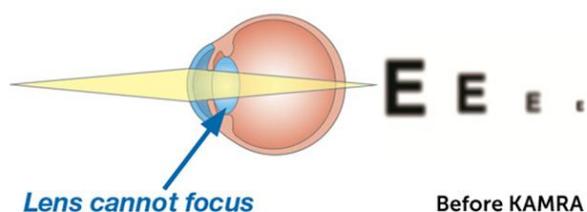
#### Why is My Near Vision Changing?

In our 40s and 50s, we begin to experience the naturally frustrating effects of blurry near vision. Reading the newspaper, seeing the computer screen or sending a text message becomes a struggle. We end up depending more and more on reading glasses or contact lenses to see up close. This natural loss of reading vision is called **presbyopia** (prez-bee-OH-pee-ah), and it eventually affects all of us, even if we never needed vision correction before.

#### What Causes Presbyopia?

The eye's natural lens is normally elastic and flexible. It works like a camera lens to automatically adjust and focus our vision. This lets us automatically switch our gaze from something near to something far away. Over time, the lens in your eye begins to stiffen. It can't bend into the right shapes to bring close objects into clear focus. To compensate, you end up moving objects further away to help your eye to focus.

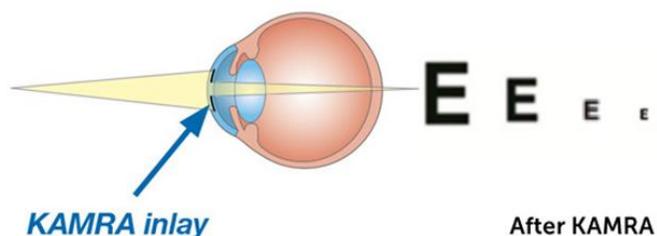
Presbyopia continues to progress over time. For example, someone who is 45 may only notice it when trying to read tiny print in low light. However, someone who is 50 may need to use reading glasses many times throughout the day.



BEFORE: When the natural focusing ability of the eye diminishes, near vision becomes blurry.

#### How the KAMRA® Inlay Helps

The KAMRA inlay treatment is an eye procedure that restores near vision and frees you from the constant frustrations of reading glasses. The KAMRA inlay sits in the first few layers of the eye known as the cornea. Smaller and thinner than a contact lens, the KAMRA inlay is a mini-ring with an opening -- or pinhole -- in the center. The inlay uses this pinhole to focus light coming into the eye. This restores near vision while maintaining distance vision.

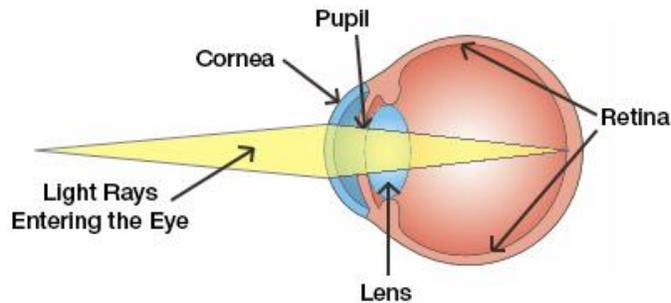


AFTER: With the KAMRA inlay, unfocused light is blocked, making near vision clear

## Common Vision Conditions:

### How Our Eyes Work

The eye is a tiny organ that measures about an inch long and weighs about 1/4 of an ounce. It is part of a complex system that translates light into images. Light enters our eye through the cornea and into the pupil. The pupil is the black hole in the middle of the iris, the colored part of the eye. Behind the iris is the natural lens. It focuses the light onto the retina, the inside layer of the eye. The retina contains cells that are sensitive to light. The image is then converted into electrical impulses that are sent through the optic nerve at the back of the eye to the brain.



All of this happens continuously and instantly to give us clear vision from near to far distances. But, our eyes don't always work perfectly. Their exact size and shape affect how well they focus light. These differences can cause some of us to have refractive errors such as myopia, hyperopia or astigmatism. In addition, over time, we all lose our ability to focus on near objects. This is a refractive condition known as presbyopia.

### Presbyopia



- Presbyopia is the clinical term for near vision loss that starts affecting us in our 40s and 50s
- Over time, the eye's natural lens becomes too stiff to focus up close
- Print and other nearby objects become blurry

### Myopia (Nearsightedness)



- Ability to clearly see near objects, but distant objects are blurry
- Occurs when the cornea is too rounded or steep, or the eyeball is too long
- The eye's refractive power is too strong

### Hyperopia (Farsightedness)



- Ability to clearly see distant objects, but nearby objects can be blurry
- Occurs when the cornea is too flat or the eye is too short
- The eye's refractive power is too weak

### Astigmatism



- Light coming into the eye is focused inconsistently
- All objects are stretched or distorted
- Occurs when the cornea has an irregular oval shape
- Can occur simultaneously with nearsightedness or farsightedness