

# Presbyopia

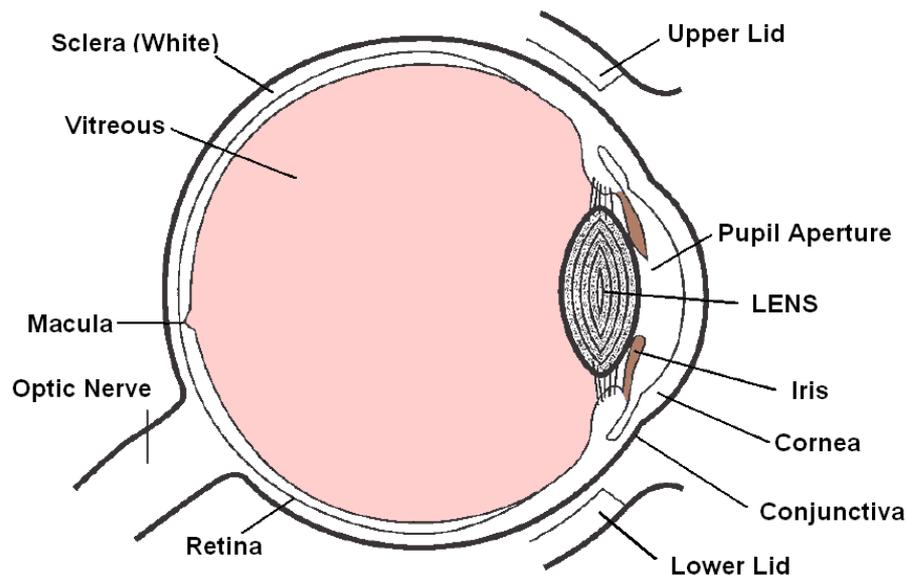
## What is Presbyopia and what are the causes?

Presbyopia is a vision condition in which the lens of your eye gradually loses its ability to focus, making it difficult to see near objects clearly. It is not a disease but a normal age-related process which affects everyone – even if you have never had a vision problem before.

Normal healthy, young eyes have the ability to naturally change the shape of the lens to provide a wide range of clear vision from far distance to near. However this range of clear vision decreases progressively with age. The symptoms of presbyopia usually become noticeable in the early to mid-40s and continue to worsen until around age 60. This may seem to occur suddenly, but the actual loss of ability to focus begins in adolescence and gets worse over the following years.

The exact mechanisms of presbyopia are not known with certainty but it is generally believed that it is due to thickening and loss of flexibility of the lens in the eye. There is no proven prevention for presbyopia.

**Cross section of the human eye**



## Early signs of Presbyopia:

- Difficulty seeing fine objects or small print
- Headaches, tired or sore eyes when reading
- The need to hold reading material further away
- The need to increase lighting for close work

## Treatment of Presbyopia

To help you compensate for presbyopia, your optometrist can prescribe reading glasses, bifocals, trifocals, multifocals or contact lenses depending on your natural eyesight, age, lifestyle, occupation, and hobbies. Because presbyopia can complicate other common vision conditions like nearsightedness, farsightedness and astigmatism, it is necessary for your optometrist to perform a comprehensive eye examination.



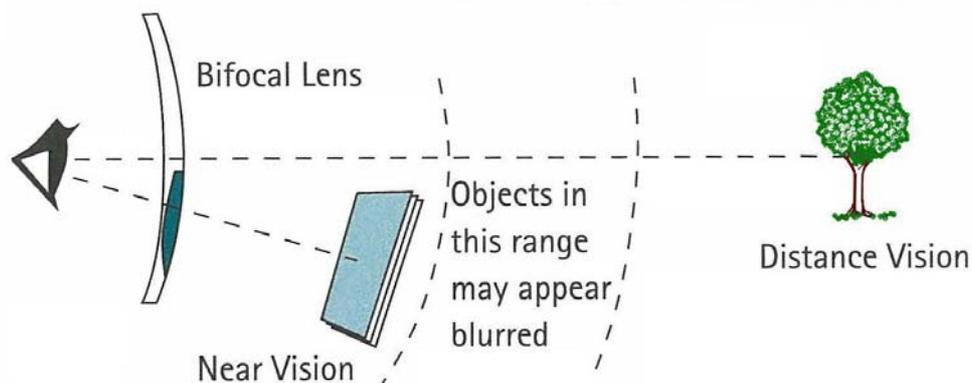
### Over the counter or ready-made spectacles

For many people these may help initially but often fail to give comfortable or relaxed vision. For a correction best suited to your individual needs a professional examination of your vision is needed. Once your ideal prescription is determined the spectacles must be carefully fitted to ensure that the lenses are correctly positioned for your eyes.

If you need glasses for driving and for watching TV and need a correction for reading as well, then there are a couple of options. You can choose to use two separate pairs of prescription reading and distance glasses, which will mean that you need to keep changing glasses depending on what you are doing. Alternatively you could request that your lenses are made as either bifocals or as multifocals (progressives). Your optometrist can discuss the various options with you.

### Using bifocal or multifocal lenses

Bifocal lenses give clear distant vision through the upper part of the lens, and clear near vision through the segment or 'window' at the bottom. As age increases, there is a gap between the range of clear near vision, and the beginning of clear distance vision. When this occurs, it may be necessary to consider trifocal lenses or progressive lenses to give clear vision for objects at arms' length. Progressive lenses have a graded change from top to bottom and give clear vision at any distance, though with a narrower field of view towards the bottom. They are the 'bifocal lenses without a line'.



### Helpful Hints

- When reading or sewing, remember to tilt your eyes down – not your head.
- On stairs, at the kerb and when getting on and off buses, tilt your head so that you are looking through the distance portion.
- When reading a newspaper, fold it in half and learn to move your head to scan from column to column.
- Keep your frame properly adjusted to ensure that the lenses are in the correct position. Don't hesitate to return to your optometrist for checking and adjustment.
- For sports, bifocals may be inappropriate. Discuss your sports and hobbies with your optometrist.

## Contact lenses for presbyopia

With the use of contact lenses, some people choose to correct one eye for near and one eye for far vision. This is called "monovision" and eliminates the need for bifocals or reading glasses, but it can adversely affect depth perception. There are also newer contact lenses that can correct for both near and far vision with the same lens. These contact lens designs for presbyopia correction rely on the ability of the brain to select the image it wants and filter out images from other distances. Best visual acuity often is not achieved until the lenses have been worn for 1 or 2 weeks, so you should not expect to achieve optimum vision with multi-focal contact lenses on the first day. However, vision will improve as the brain learns to select the desired image at the proper time. As for all multi-focal solutions the is some degree of compromise between clarity and convenience.



## Regular examinations are essential

Between the ages of 45-55, vision changes rapidly and frequent lens changes may be required. Regular examinations are essential to ensure that your eyes are healthy and give you efficient and comfortable vision.

If your eyes haven't been examined recently by an optometrist or ophthalmologist, you could have an eye disease which may lead to permanent vision loss if not treated. This is true even if you have no identifiable symptoms. It is important that you don't assume that changes in vision are simply a result of age – while this may be true, changes may also be due to a disease or condition that can lead to blindness. If in doubt, check it out!

## Vision correction for particular situations

Your optometrist is able to prescribe lenses for quite specific needs such as playing the piano, fine needlework, using a computer or to provide clear vision in specific work situations. Discuss your vision needs with your optometrist, and if possible have a friend measure the distance from the computer, music or work to your eyes. This will be of assistance in determining the ophthalmic prescription required for clear vision at the actual distance needed.

To find your nearest NZAO member optometrist, check the Yellow Pages ® of your phone book or contact:



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