

Presbyopia – Difficulty in focusing in middle age.

Focusing issues after the age of 46 are commonly due to a natural condition called presbyopia. This condition is a part of the normal ageing process of the eye and usually becomes noticeable in the mid-40s to early 50s. Here's a detailed explanation of why this happens:

- 1. Ageing of the Eye's Lens:** The human eye has a lens, much like a camera, which is elastic and flexible in youth. This elasticity allows the lens to change its shape and focus on objects at various distances – a process known as accommodation. As you age, the lens gradually becomes less elastic.
- 2. Loss of Elasticity:** With reduced elasticity, the lens can't change shape as easily or as much as it used to. This loss of flexibility affects its ability to focus on close objects. In younger people, the lens can change shape to focus light directly onto the retina. However, with age, as the lens stiffens, it becomes increasingly difficult to focus on objects that are close up.
- 3. Ciliary Muscle Role:** The ciliary muscle, which is responsible for changing the shape of the lens, also weakens with age. Even if the lens retained some flexibility, the weakened muscles wouldn't be able to manipulate it effectively for proper focusing.
- 4. Onset of Presbyopia:** This gradual change leads to presbyopia. The first sign is often difficulty reading small print or needing to hold reading materials further away to see them clearly. It's not preventable and happens to virtually everyone to some degree.
- 5. Adjustment in Vision Correction:** People who already wear glasses or contact lenses for myopia (short-sightedness), hyperopia (long-sightedness), or astigmatism may need to switch to bifocals, trifocals, or progressive lenses. Those who never needed glasses before might require reading glasses. These typically need updating as one ages as the lens becomes stiffer. Starting off as jelly like in childhood to a pastel consistence in middle age and a wine gum in old age.

Also glasses either bifocals, separate glasses or multifocal glasses take getting use to. There are also many different types of lenses and finding a style that suites you can take time.

It's important to note that regular eye exams are essential as you age, not only to adjust prescription lenses for conditions like presbyopia but also to check for other age-related eye conditions such as cataracts, glaucoma, and age-related macular degeneration.