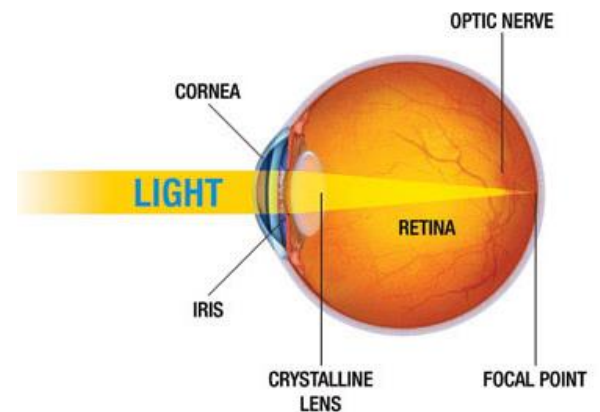


Cataracts

Cataracts are the opacification of the clear crystalline lens inside the eye. This clouding can feel like you're looking through a fogged up window, making reading and driving at night a challenge.

The crystalline lens is located behind the eye's pupil and is responsible for focusing. By changing its shape the crystalline lens allows us to focus from distance to close. As we age proteins in the structure of the lens bind together changing the molecular and cellular structure. The lens can become dense and opaque. As the process continues, light struggles to successfully pass through the lens to the retina, decreasing vision quality.

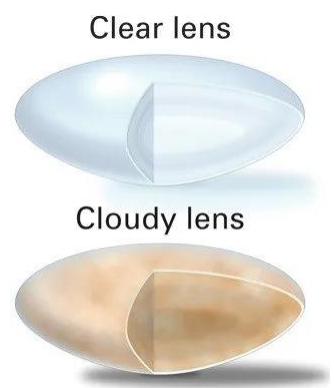


Types of Cataracts:

1. Nuclear Cataracts: affecting the centre of the crystalline lens.
2. Cortical Cataracts: affecting the edges of the lens.
3. Posterior Subcapsular Cataracts: affecting the back of the lens.
4. Congenital Cataracts: developed in utero or early childhood.

What can cause Cataracts?

Cataracts can form due to environmental factors, poor nutrition and as a side effect of medical treatments. Most occur due to the cumulative effect of long term sunlight exposure or aging. As we age the proteins in the crystalline lens denature and the lens flexibility is gradually lost. This change, known as presbyopia, is why we need reading glasses between 40-50 years of age. As change continues the crystalline lens becomes denser, the lens becomes cloudy, and a cataract forms. Excess exposure to sunlight in youth, obesity, diabetes, smoking, previous eye injury or drinking alcohol excessively accelerates these changes. If you have a family history of cataracts, you are at a risk of developing cataracts.



Common symptoms include:

- Blurred or dim vision.
- Poor vision at nighttime.
- Sensitivity to light and glare.
- Seeing halos around lights.
- Needing brighter light to read.
- Deterioration of colour vision- fading and yellowing.
- Struggling to read print on coloured backgrounds.

Prevention

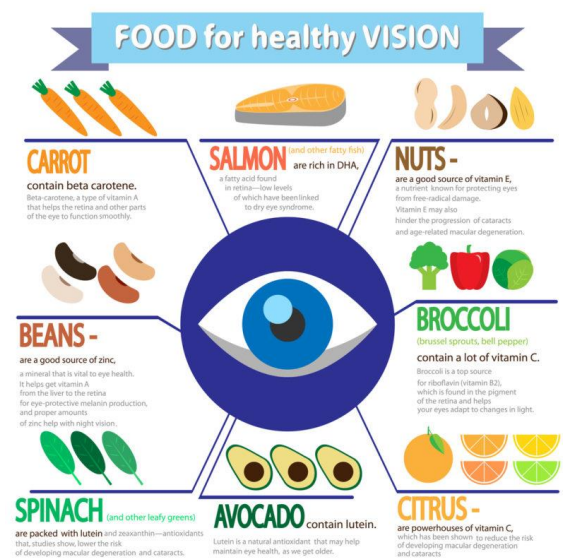
If you live long enough you will develop cataracts. Delaying the onset of cataracts requires reduced sun exposure. People living in temperate zones, rather than tropical or sub-tropical zones develop cataracts 5 to 10 years later in life. Wearing a hat and sunglasses whenever you are outside significantly reduces your UV exposure and can slow cataract development. Having your eye health evaluated regularly allow us to document any progression or signs of cataracts and provide advice on the rate of progression and when surgery will be required, so you can plan your health insurance and time off work to have surgery done.

Maintaining a healthy diet and cutting back on alcohol is beneficial to your overall health but especially your eye health. Ensuring fruit and vegetables are in your daily diet gives your eyes essential antioxidants, vitamins, and minerals needed to sustain your eyes.

Smoking or vaping cause a multitude of eye health issues including cataracts. Compared to non-smokers the changes to the crystalline lens proteins occur more rapidly and are more pronounced.

Treatment of Cataracts

Cataracts which impede vision require surgical intervention via an ophthalmologist. The crystalline lens is removed from the eye and replaced with an artificial lens known as an intraocular lens (IOL) inserted at the time of surgery. This clear plastic lens replaces the cloudy



lens. The IOL has a refractive power which is calculated to reduce dependence on glasses for distance vision.

Most surgeons now offer customised vision correction with various options on offer: Distance, Toric, Spherical, Monovision, Extended depth of focus (EDOF), and Multifocal (MF). Our optometrist offer advice on the best option to suit your ocular health, lifestyle, expectations and vision requirements. Each option has pros and cons such as clearer vision, haloes, loss of depth perception, compromised near vision, compromised distance vision, blur and glare.

Generally, EDOF and MF IOLs provide the most complete vision correction, but these are not suitable if there is any retinal or corneal disease, or you frequently drive at night. If you have poor tolerance to progressive glasses or small prescription changes, or poor tolerance to blur it is advisable to avoid EDOF and MF IOLs as your vision correction choice. Your suitability should be discussed at length with our optometrist.

After surgery, a review at 6 weeks with us can ensure that any inflammation inside the eye has settled and any residual refractive error for distance, intermediate or near vision can be resolved with appropriate glasses.

If you are wanting to discuss cataracts further or would like to have an eye health evaluation, call our friendly team to book an appointment. At Buck and Todd Optometrists, we take the time to care for your vision.

