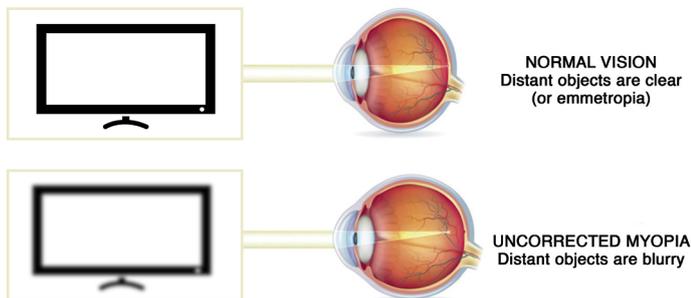


Your Child and Myopia (short-sightedness)

What is myopia?

Myopia, otherwise known as short-sightedness, or near-sightedness, is a common eye condition that causes objects in the distance (such as TV and the whiteboard), to appear blurred, while close objects are often seen clearly. Having myopia is not an indication that your child's eyes are in poor eye health.

Myopia occurs when the eye has too much focusing power, either due to the eye being too long or because the cornea (the front of the eye) is more curved than usual. As a result, when viewing distant objects, rays of light focus in front of the retina (the back of the eye), rather than directly onto it, causing the appearance of those objects to appear blurred.



Over the past few years, research has demonstrated that genetic and environmental factors can influence myopia. For instance, children are more likely to be myopic if their parents are as well. In addition, children and teenagers are spending increasing amounts of time on digital devices and less time outdoors, where they would receive the benefits of natural daylight.

Will my child's myopia get worse?

Whilst every child is different, their lifestyle, family history and age will influence how their myopia worsens overtime. You can help by encouraging your child to:

- Avoid spending long periods of time viewing near tasks, including reading books and digital devices
- Spend at least 90 minutes per day outside in natural daylight

If your child starts to show signs of myopia at a young age, it is likely that this will continue to get worse over time. This means they will grow up relying more on contact lenses and/or or spectacles, to see everyday things.

What is myopia management?

Conventional spectacles or contact lenses give your child clear vision. Myopia management is different, as it aims to reduce excessive growth of your child's eyes and subsequently how quickly their myopia develops over time.

There are products available for children requiring myopia management, including contact lenses, spectacles and eye drops (latter is not currently indicated for myopia management). Your eye care professional (ECP) will take time to assess your child and discuss the most appropriate option based on their age, level of myopia and their lifestyle.

Your child's myopia may still develop even if they undergo myopia management.

Why has my ECP advised myopia management?

Research has shown that myopia is on the increase across the globe. Children are becoming myopic at a younger age and the level of their myopia is getting worse. It is important that your ECP explains to you the options available to your child.

Practical reasons for considering myopia management include:

- Potentially lower prescriptions in adulthood
 - Thinner and lighter spectacle lenses.
 - Less blurry vision without spectacles or contact lenses.
 - May avoid limitations in career choice, where good vision is essential.
 - More predictable outcomes for refractive surgery to correct vision should this be important to your child in the future.
- Supports good eye health into adulthood.
 - Myopia has been associated with certain eye conditions that may impact the quality of your child's vision in the future. These include cataracts, glaucoma, retinal detachment and myopic maculopathy.

What options are there for myopia management?

Your ECP can talk through the options available to your child and provide their recommendation. These recommendations may include:

Soft contact lenses (e.g. dual-focus and multifocal):

This is an ideal option for most children with active lifestyles, who would benefit from the freedom of not wearing spectacles. Soft contact lenses are generally easy to handle and well-accepted by children. Your ECP will recommend how many hours a day these should be worn.

Dual-focus contact lenses: Dual-focus contact lenses are specifically designed for younger eyes and indicated for myopia management.

Multifocal contact lenses: Some multifocal contact lenses are indicated for myopia management. Occasionally, your ECP may also recommend multifocal contact lenses which are not indicated for myopia management (also known as off-label options), based on peer-reviewed scientific research.

Orthokeratology (Ortho-k): Rigid Gas Permeable (RGP) contact lenses. Ortho-k lenses act like a 'brace' for your eye and subtly flatten the cornea (the front of the eye) at night while the wearer sleeps. This provides clear vision throughout the day, without the need for spectacles or contact lenses. This is an ideal option for those children who would benefit from being spectacle and contact-lens free during the day, for example when swimming. Ortho-k fitting requires several follow-up appointments over the first month and for maximum treatment effect, it is important that ortho-k lenses are worn every night.

Myopia Management Spectacles: Spectacle lenses designed for myopia management differ in design to conventional spectacle lenses. They may be worn as a standalone option, or on days when it is not convenient to wear contact lenses. Spectacles are also a good option for children who are nervous about, or unable to wear, contact lenses. Your ECP will recommend how many hours a day these should be worn.

Atropine eye drops (Currently not indicated for myopia management): Atropine eye drops are currently not widely available or indicated for the purposes of myopia management (off-label). These eye drops (applied to both eyes at night) do not correct vision and must be used in conjunction with spectacles or contact lenses during the day. Usage of atropine in this way is sometimes called 'combination therapy' and research in this area is still ongoing.

To maximise their chances of success, your ECP may wish to see your child for regular follow-up appointments. Your ECP may also suggest a different myopia management option over time, based on the latest research developments.

Other considerations:

Although complications and eye infections due to contact lens wear are rare, they may occur. Research has shown that young children have very low rates of eye infections in both soft contact lenses and ortho-k. The risk of eye infections or complications can be minimised by maintaining strict hygiene practices and following guidance from your ECP. Ortho-k carries a marginally higher risk due to overnight wear. However the risk of eye infections or complications can be minimised for both soft contact lenses and ortho-k by maintaining strict hygiene practices and following guidance from your ECP. There are no known risks of infections associated with spectacle-wear, however spectacles should be avoided for contact activities and many sports. Atropine is currently not indicated as a myopia management option (off-label) and research shows there may be a risk of rebound effect when treatment is stopped (particularly with higher doses). At the time of writing, there is less longer-term clinical evidence for atropine, compared to other myopia management interventions.

Additional resources:

Please refer to the [BCLA's guide to contact lenses](#) for more advice and information on how to wear and care for your contact lenses.



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