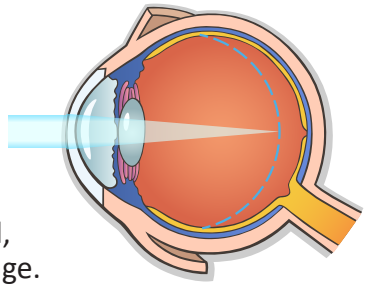
Clinical Myopia Profile

The clinical myopia profile is a summary of the extensive scientific data available on what increases and decreases risk of development or progression (worsening) of myopia.

Your optometrist has elected to profile your myopia because you/your child:
1. Currently has normal visual clarity but is AT RISK of developing myopia, or
2. Is already myopic, and at risk of further myopia progression.



MYOPIA (shortsightedness) is where the eyeball is too long or too powerful, resulting in blurred far vision. Vision for close objects is clear within a certain range.

Why do we need to control myopia?

Generally once you become myopic, it tends to worsen over time. Higher levels of myopia are associated with higher risks of eye diseases like glaucoma, retinal detachment and cataract later in life.

What causes myopia development and progression?

Genetics, each individual's characteristics and environment. Your clinical myopia profile is below.

GENETICS: FAMILY HISTORY OF MYOPIA

Neither parent myopic	One myopic parent *(three times risk)*	Two myopic parents *(six times risk)*
Low Risk	Medium Risk	High Risk

INDIVIDUAL CHARACTERISTICS: VISUAL CLARITY – current far vision

Age appropriate	Less than age-normal (at risk)	Already myopic
Low Risk	Medium Risk	High Risk

VISUAL EFFICIENCY (eye teaming) 1 – esophoria / convergence excess

Normal	Borderline	Esophoria
Low Risk	Medium Risk	High Risk

VISUAL EFFICIENCY (eye teaming) 2 – accommodative lag

Normal	Borderline	Accommodative lag
Low Risk	Medium Risk	High Risk

NOTE: It is recommended that an **AT RISK, normally sighted child** should be monitored every six months if two or more of these are medium risk. If two or more of these are high risk, active treatment is recommended.
A myopic child – if both visual efficiency risk factors 1 and 2 are high, progressive addition or bifocal spectacles may be recommended. If only one is high, orthokeratology/CRT or multifocal soft contact lenses may be recommended. Monitoring every six months is advised.

Myopia Profile
Improving children's vision care worldwide

https://myopiaprofile.com

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ENVIRONMENT: TIME SPENT OUTSIDE (daylight hours, per day)

High (2.7+ hours) | Moderate (1.6 to 2.7 hours) | Low (0 to 1.6 hours) *(2-3 times increased risk)*

Low Risk — Medium Risk — High Risk

TIME SPENT DOING CLOSE VISION TASKS (per day) *not including school time*

This includes reading, homework, handheld games, drawing, computer work.

Low (0 to 2 hours) | Moderate (2 to 3 hours) *(around 2 times risk)* | High (3+ hours) *(2-3 times increased risk)*

Low Risk — Medium Risk — High Risk

NOTE: Environmental risk factors are unlikely to affect the management pathway, however they are modifiable and should be considered in view of the overall myopia risk profile. Tips for modifying environmental risk:

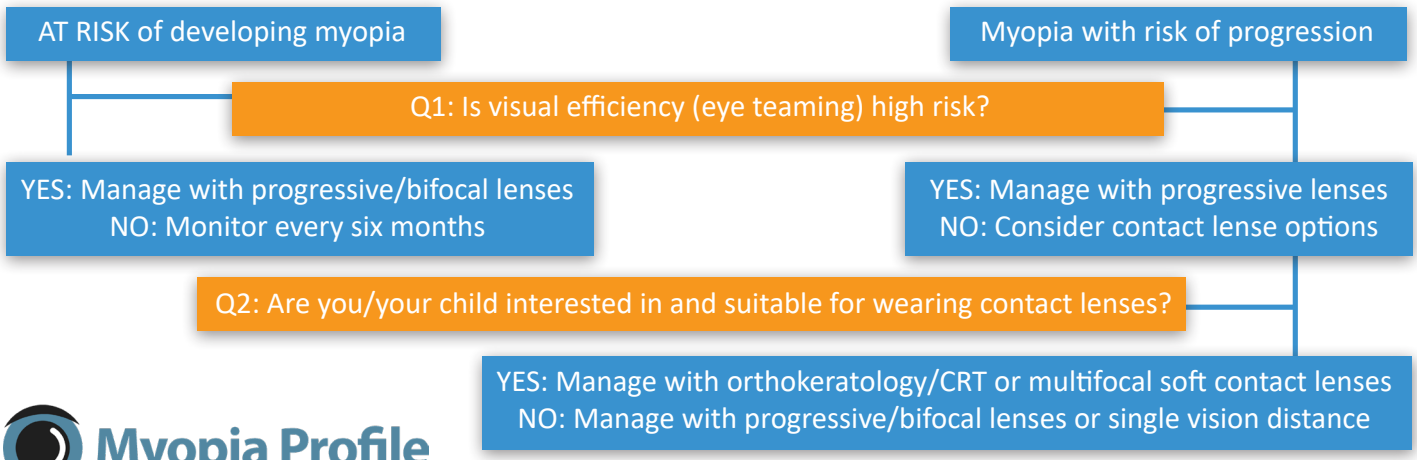
- ☑ **Spend time outside each day.** Walk the dog, ride a bike, play in the backyard, sit outside in shade. It is the brightness of natural sunlight which is beneficial rather than UV light–still take sun protection precautions.
- ☑ **Take regular breaks from close work.** Look away for a minute or so to change your focus, or change your task every 30-60 minutes to alter the demand on your visual efficiency (eye teaming) systems.
- ☑ **Try to limit near tasks (after school/work) to 2 hours per day.** This also includes leisure time – ensure it is not primarily spent on handheld digital devices or other close vision tasks like reading and drawing. On the week-ends, ensure a balance between inside and outside time, and increase natural lighting.

I'M ALREADY MYOPIC! How can I put the brakes on my shortsightedness?

Myopia control is the area of science dedicated to slowing down or stopping the progression, or worsening, of myopia in children and young adults. The following table is a compilation of over 30 research papers on myopia control, published up to and including 2013.

Type of vision correction	Effect on slowing myopic progression
Normal glasses and standard contact lenses	0-5%
Progressive/bifocal lenses (with reading power)	12-55%
Myovision (special design spectacle lenses)	0-30%
Multifocal soft contact lenses	29-45%
Orthokeratology/CRT (special design rigid contact lenses)	32-100%
Atropine (daily eye drops to paralyse focus)	30-77%, reducing to 30% after cessation. Side effects include significant glare sensitivity and constant requirement for reading glasses.

Clinical Myopia Management Pathways



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SCIENTIFIC REFERENCES ARE AVAILABLE ON REQUEST.