

# Nearsightedness in Children

About 80 million children around the world have myopia<sup>(1)</sup>, and that number is expected to rise sharply by 2050<sup>(2)</sup>. With so many children affected, and so many more likely to be affected, parents need to understand the contributing factors and treatment options to help slow its progression.

## RISK FACTORS, TREATMENT AND PREVENTION

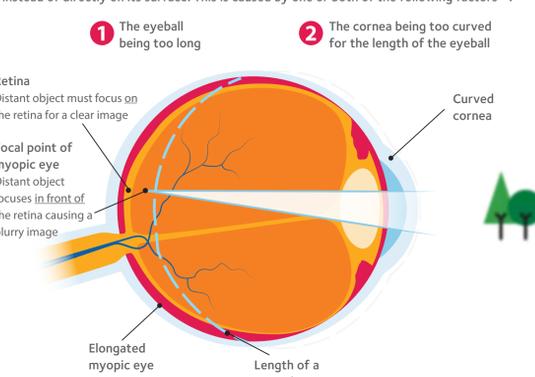
### About Myopia

#### What is myopia?

Myopia, also commonly referred to as 'nearsightedness' or 'shortsightedness', is a common eye condition which causes objects viewed at a distance to be blurry and out of focus, while close objects can be viewed more clearly.

#### The Myopic Eye

Blurry vision due to myopia is the result of light rays focusing at a point in front of the retina, instead of directly on its surface. This is caused by one or both of the following factors<sup>(3)</sup>:



#### When does myopia occur?

The average onset age of myopia is progressively getting younger<sup>(4)</sup>.

11 years old

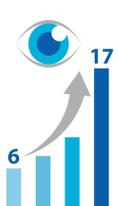


1983

8 years old



2000



**Myopia is progressive.** It will begin as mild but may progress in severity to moderate or high myopia. The earlier myopia starts, the greater chance your child has of developing high myopia<sup>(4,6)</sup>.

The majority of myopia progression typically occurs between the ages of **6-17**<sup>(5)</sup> as this is a key growth time for children, and their eyes.

#### Which children are most at risk?

#### Genetics

The risk of myopia increases when parents are myopic<sup>(5)</sup>:



#### Behavioral Influencers

The following have been reported to contribute to myopia development:



Performing prolonged near tasks (such as reading and gaming on portable devices)<sup>(4,6)</sup>.



Low levels of outdoor activity<sup>(4,7)</sup>.



Poor lighting levels<sup>(4,7)</sup>.

#### Symptoms:

#### What to look out for in your child<sup>(8,9)</sup>



Complaints of headaches or 'tired eyes'



Difficulty in school – this could be due to your child's inability to see the front of the classroom clearly



Sitting close to the television, computer monitor or other screens



Holding books very close while reading



Not able to notice distant objects



Blinking excessively



Rubbing eyes frequently



Squinting

#### Why treatment and prevention is important

In addition to affecting your child's distance vision, high myopia in particular is also connected to other, more serious, eye conditions, including<sup>(4,6,7)</sup>:



Cataracts



Glaucoma



Retinal detachment

Catching and treating myopia early can slow its progression, reducing the severity of myopia and in turn reducing the associated risk of developing these more serious eye conditions<sup>(4,6)</sup>.

### Treatment Options for Children

● Eye drops ● Eyeglasses ● Contact lenses

#### Atropine Eye Drops

Treatment plans vary but eyeglasses may still be needed for child to read clearly as near focusing ability is affected during treatment<sup>(10)</sup>.

81% Proven to reduce the rate of myopia progression up to 81% during the first year. However there is doubt over the effectiveness of these drops after 1 year of treatment<sup>(10)</sup>.

#### Dual Focus 1 Day Soft Contact Lenses

Worn at times distance vision needs correction.

59% Proven to reduce the rate of myopia progression in children (aged 8+) by 59%<sup>(15,16)</sup>.

#### Bifocal / Multifocal Soft Contact Lenses

Worn at times distance vision needs correction.

50% Multifocal contact lenses proven to reduce the rate of myopia progression by up to 50%<sup>(14)</sup>.

#### Bifocal / Multifocal Eyeglasses

Worn at times distance vision needs correction.

Can control myopia progression during the first year of wear but has little effect on controlling the progression of myopia after that<sup>(11)</sup>.

#### Single Vision Eyeglasses

Worn at times distance vision needs correction.

No effect on controlling myopia progression<sup>(12,13)</sup>.

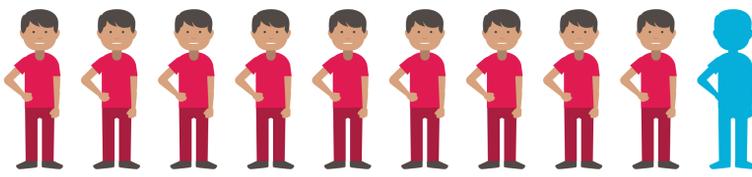
#### Orthokeratology ("ortho-k")

Rigid gas permeable contact lenses worn overnight to gently reshape the front surface of the eye (cornea). Lenses are removed in the morning allowing the wearer to see clearly that day.

Proven to reduce the rate of myopia progression by about 50%<sup>(4)</sup>.

### Can Kids Really Wear Contacts?

CooperVision conducted a study on children aged 8-15 wearing 1 day soft contact lenses. The results were impressive<sup>(16)</sup>:



9 OUT OF 10 CHILDREN were able to insert and remove their lenses on their own.



disposed of their contact lenses as instructed.



reported that they liked wearing their contact lenses and wore them for an average of 13 hours per day.



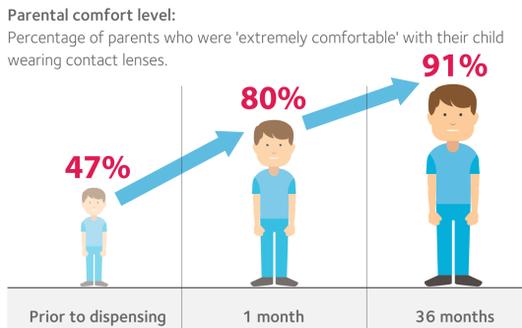
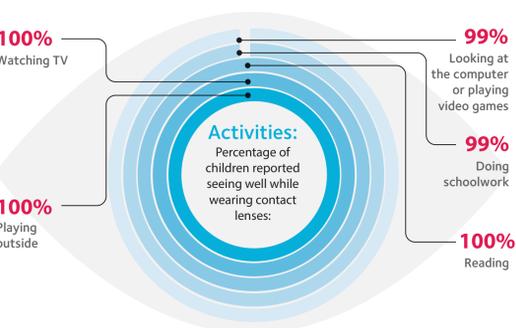
preferred wearing contact lenses to eyeglasses.



said they felt their contact lenses either "never" or "sometimes" while wearing them.



needed assistance from their parents to insert or remove their lenses (no more than twice a month).



### Prevention Measures

The following measures may help to prevent or delay the onset of myopia in your child:



Monitor eyesight and eye health with regular eye exams by qualified eye care professionals.



Spending more time outdoors. A recent study showed children who spent an additional 40 minutes outdoors each day were at less risk of developing myopia<sup>(17)</sup>.



Act early and seek treatment as soon as symptoms emerge.

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