



MYOPIA CONTROL

This is a handout to help you further understand Myopia, and ways that now exist to potentially control some of the impact it may have on your child's vision and eye health as they grow.

First, we would direct you to our website and click on the “Myopia Control” button. This page provides concise explanations of the concepts surrounding myopia control.

This is the direct link: <https://russellwestoptometry.com/specialty-service/myopia-control/>

Second, attached is some print resources with information on myopia, and the spectacle lens technology (MiyoSmart) that was likely discussed during your child's eye examination.

Third, with your consent, we may have enrolled you into the “Brilliant Futures” program. This is a program that supports the leading and only FDA approved contact lens (MiSight) for Myopia control. Its first step and focus is to get you informed. It will send you a text or email with links to many resources that you can check out on your own time.

If you have any questions, please reach out to us at anytime. We are here for you.

If you wish to book your child in for a full myopia control consultation that was outlined during your child's eye exam, please reach out via phone, email or our website.

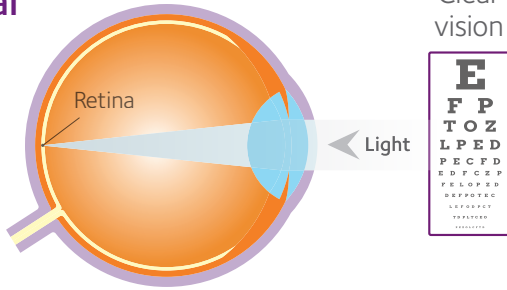
Please keep in mind, that we don't know everything about Myopia, and we can't eliminate it. However we now understand it enough that we can at least do something to perhaps minimize its impact and effects.

Could your child be nearsighted (myopic)?

'Nearsightedness' is a common term for **myopia** – an eye condition that makes distance vision blurry. It usually starts in childhood and gets progressively worse until the child stops growing.

Myopia explained.

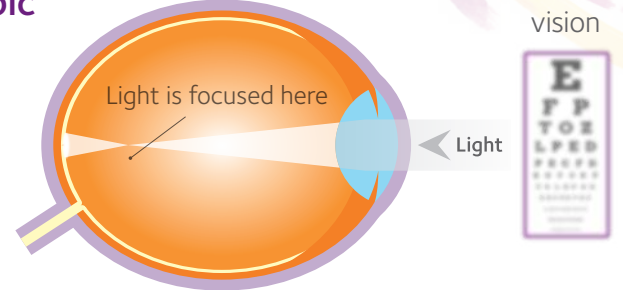
Typical Eye



Light focuses on the retina (the light-sensitive lining inside the eye) for clear distance vision.

Clear vision

Myopic Eye



If the eye grows too long, light is focused in front of the retina making distance vision blurry.

Blurred vision

The eye continues to grow throughout childhood which may make the retina vulnerable to future eye health issues, so it's important to treat myopia early to reduce this potential risk.¹

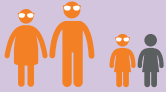
What causes myopia?

There are two main factors which can mean your child is more at risk of developing myopia:

Genetics

The risk of myopia in children increases when parents are myopic.² The risk is nearly:

1 in 2



When **both** parents are myopic.

1 in 3



When **one** parent is myopic.

1 in 4



When **neither** parent is myopic.

Lifestyle

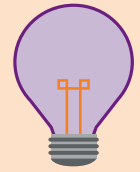
Modern lifestyles may influence the development of myopia:



Low levels of outdoor activity.^{3,4}



Prolonged near tasks such as reading and gaming on portable devices.^{3,1}



Poor lighting levels.^{3,1}

Signs to look out for.^{5,6,7}



Distance vision becoming blurry.



Moving closer to the TV.



Reduced performance at school.



Complaints of headaches or tired eyes.



Squinting.

In many cases, there will be no signs at all.

Options for managing myopia.

Regular glasses and contact lenses

These can help your child see clearly and will often need updating frequently as they have little or no effect on slowing down the speed of myopia progression.^{8,9}



Myopia management contact lenses

Introducing MiSight[®] 1 day, a soft daily disposable contact lens with a special optical design that allows children to see clearly, while slowing down myopia progression by more than half.*¹⁰



Regular eye examinations for young children are important to identify and treat myopia early. This may help to reduce the final prescription and the potential risk for future eye health issues.

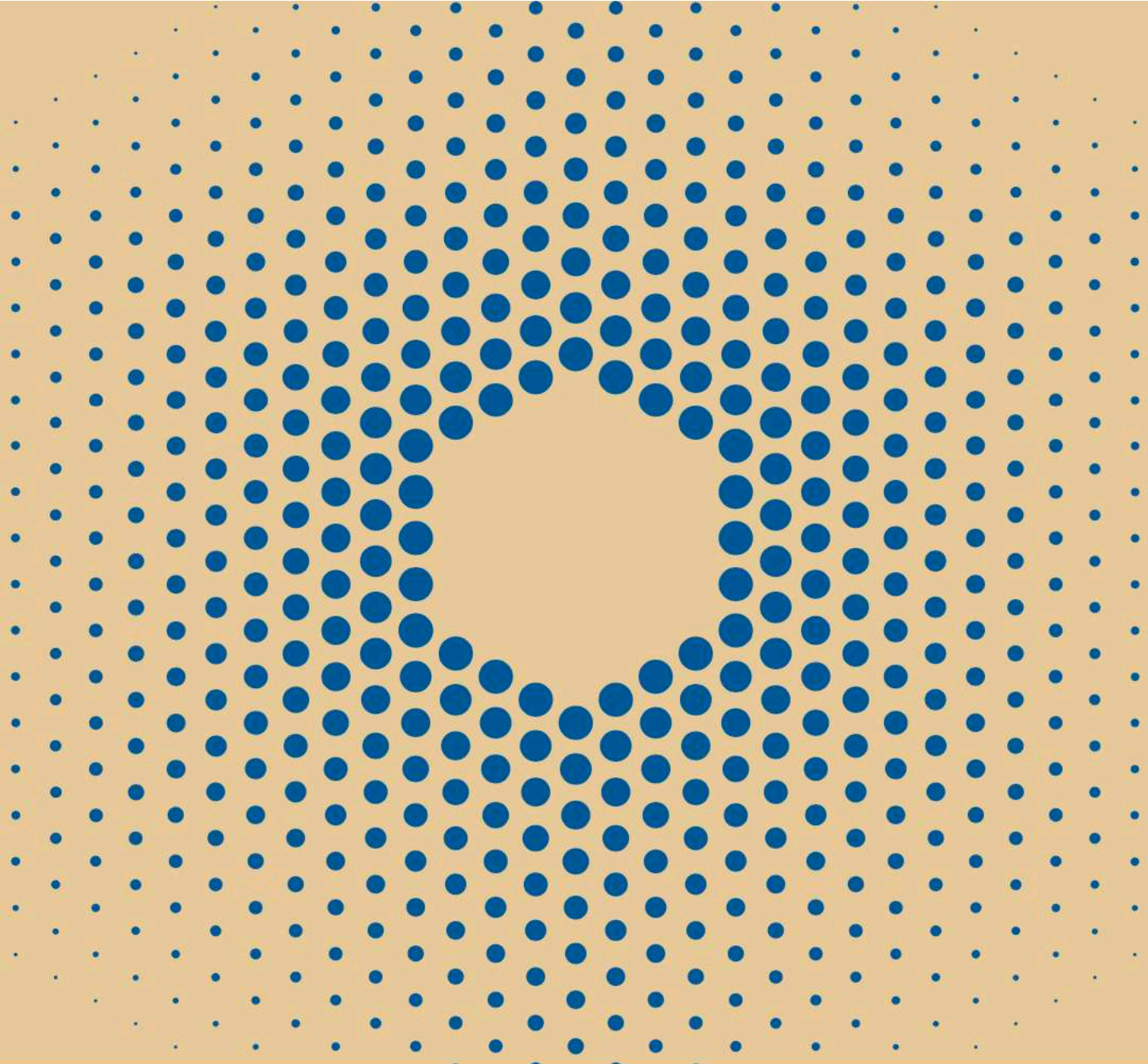
Contact your Eye Care Professional for an eye examination today.



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1. Gifford P, Gifford KL. The Future of Myopia Control Contact Lenses. Optom Vis Sci. 93:336-43. 2. Morgan P. Is Myopia Control the Next Contact Lens Revolution? The Optician 2016. 3. Wolffsohn JS, Calossi A, Cho P, et al. Global Trends in Myopia Management Attitudes and Strategies in Clinical Practice. Cont Lens Anterior Eye. 2016; 39:106-16. 4. Rose KA, Morgan IG, Ip J, et al. Outdoor Activity Reduces the Prevalence of Myopia in Children. Ophthalmology 2008; 115:1279-1285. 5. <http://visionsource.com>. 6. <http://aao.org>. 7. IMPACT OF INCREASING PREVALENCE OF MYOPIA AND HIGH MYOPIA. The impact of myopia and high myopia a Report of the Joint World Health Organization - Brien Holden Vision Institute Global Scientific Meeting on Myopia THE IMPACT OF MYOPIA AND HIGH MYOPIA University of New South Wales, Sydney, Australia 16-18 March 2015. 8. Gwiazda J, Hyman L et al. A Randomized Clinical Trial of Progressive Addition Lenses versus Single Vision Lenses on the Progression of Myopia in Children. IOVS, April 2003, Vol. 44, No. 4. 9. Heiting G. Myopia Control - A Cure For Nearsightedness? allaboutvision. 2016. 10. Back A, Chamberlain P, et al. Clinical Evaluation of a Dual-Focus Myopia Control 1 Day Soft Contact Lens - 2-Year Results. Paper presented at the annual meeting of The American Academy of Optometry, November 9, 2016; Anaheim, California USA. *Compared to single vision 1 day lenses. Individual results may vary and are not predictable.



The smart way to treat myopia in children.





60%
slow down
of myopia
progression.

An award-winning, breakthrough ophthalmic lens.

Through their research³⁻⁵ on myopic defocus theory, the Hong Kong Polytechnic University (PolyU) found that myopia can be controlled by simultaneously providing clear vision and constant myopic defocus.

Researchers found that the axial length of the eyeball is affected by the position of an image projected in relation to the retina. When the position of a well-defined portion of the projected image is located continuously in front of the retina, the axial length tends to become shorter and vice versa. **Thus, this indicates that projecting images in front and on the retina at the same time can control axial growth and myopia progression.**

Tapping into PolyU's expertise in myopia control, HOYA joined forces with them in 2012 and began to develop a technology to control myopia progression using ophthalmic lenses.

This technology is known as the Defocus Incorporated Multiple Segments (D.I.M.S.), which is the basis of MiYOSMART.

An award-winning and clinically proven solution for myopia control.

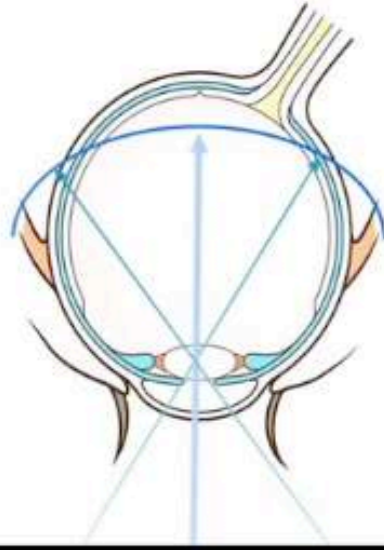
MiYOSMART is a non-invasive lens engineered specifically to correct myopia and slows its progression.

2 years of data shows a 60% slowdown of myopia progression on average—myopia progression (SER) slowed by 59% and axial elongation (AL) decreased by 60% compared with those wearing single vision lenses. Myopia progression was completely stopped in 21.5% of those wearing MiYOSMART.

The 2 year randomized controlled trial involved 160 children aged 8 to 13.⁶

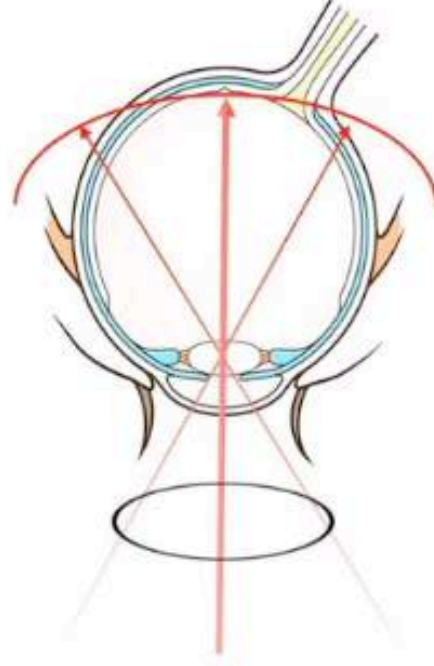
In 2018, the MiYOSMART lens won the Gold Prize, Grand Award & Special Gold Award Int'l Exhibition of Inventions, International Exhibition of Inventions of Geneva, Switzerland.⁷ In 2020, it won the Silmo d'Or Award in the Vision category at the Silmo Paris Optical Fair.⁸

MANAGING MYOPIZATION WITH MYOPIC DEFOCUS



Uncorrected myopia

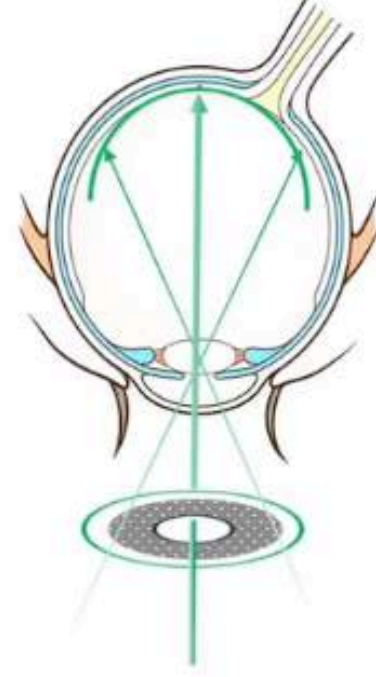
Light rays focuses front of retina and partially in the very periphery, "behind" the retina.



Traditional single vision correction

Central vision focal point is on the retina, however majority of rays focuses "behind" the retina creating hyperopic defocus.

Eye reacts on this by increasing axial length and accommodation.



Ideal correction

Current theories suggests that creating myopic defocus slows down myopia progression.



MIYOSMART

A patented technology for your young patients.

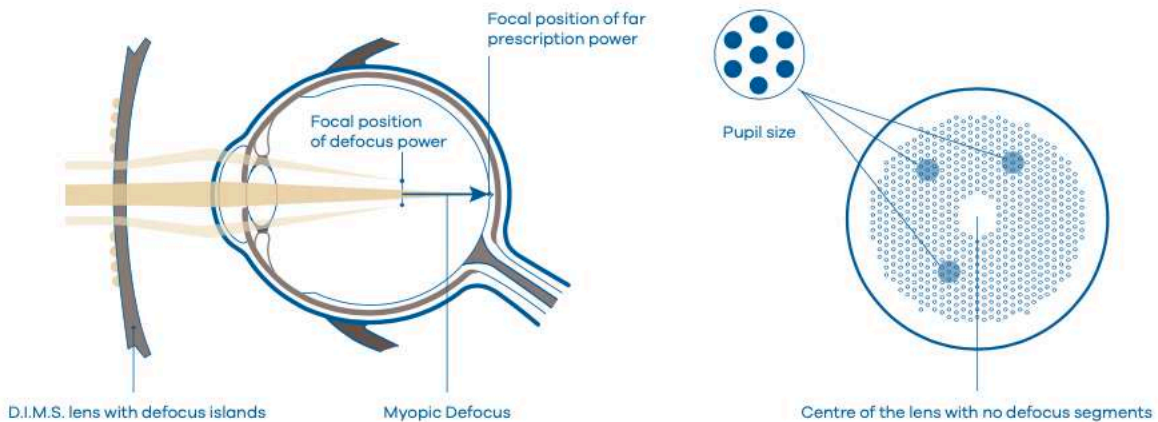


D.I.M.S. technology slows down myopia progression on average by 60% and proven to halt myopia progression in 21.5% of children through controlling eye growth.⁶

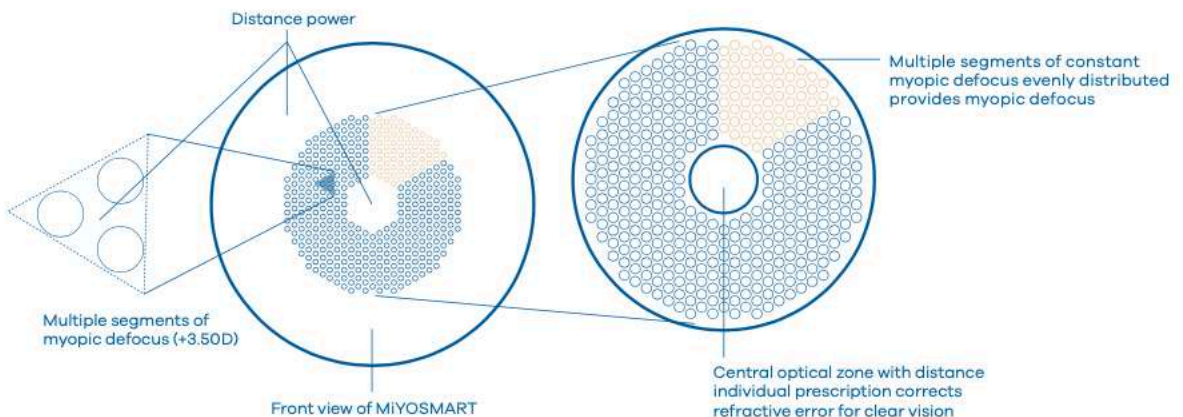
MiYOSMART with D.I.M.S. technology is a single vision corrective lens with a front surface that is comprised of hundreds of small segments, each providing myopic defocus. When the eye sees through a pupil-sized area, shown in the illustration below, there is a defocus zone in the eye.

This lens structure makes it possible to simultaneously slow the growth of the eyeball and provide clear vision. Within the 9.4 mm diameter circle area in the center of the lens, there are no defocus segments. This is designed to make it possible to measure lens power and correct refractive error to meet clear vision needs.

How D.I.M.S. technology works in MiYOSMART



To effectively control myopia progression, myopic defocus has to be experienced by the wearer constantly, even during eye movement. This requires a significant quantity of defocus segments to be evenly distributed on the lens surface. With its decades of experience in ophthalmic lens production and development, HOYA incorporated the D.I.M.S. technology and successfully produced smooth-surfaced lenses with multiple defocus segments. Due to the excellent concept and innovative production technology, MiYOSMART's cosmetic appearance is highly similar to regular single vision lenses.



With MiYOSMART's features and your care, we can give children better vision and better protection.



Eye Shield is an impact-resistant material with UV protection.


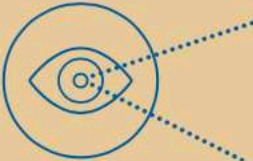


Since children are active, there is a need for the lens material to be impact-resistant to offer their eyes the protection they need. MiYOSMART uses polycarbonate 1.59 which is a highly impact-resistant material that has passed the high velocity impact drop ball test.*

Eye Shield also comes with UV protection for an all-round protective solution.

MiYOSMART's Eye Shield

- ✓ **Impact resistant**
- ✓ **Thin and light**
- ✓ **Comes with UV protection**

Strength/Durability ANSI Z87.1 High-velocity impact test*

Standard plastic	Polycarbonate 1.59	High and ultra-high index	
Fail	Pass	Fail	
 Strong and safe	 Optical clarity	 Thin and light	 UV protection

*ANSI Z87.1 High Velocity Impact Test: The American National Standards Institute (ANSI) has established the most stringent impact and projectile penetration standards for ophthalmic lenses. The standard specifies that high impact lenses must pass "high velocity" testing where 1/4" steel pellets are "shot" at the lens at a velocity of 150 feet-per-second. Polycarbonate passes ANSI Z87.1- the industry's highest standards for high-impact resistance ensuring full protection to every children wearer.



A child-friendly, safe, easy to use, effective non-invasive method to manage myopia.

This user guide identifies what new MiYOSMART wearers should take note of during the adaptation period.

Adaption to new glasses.

1. It always takes time to get used to new glasses. While the time to adjust to your lenses may vary, patients may sometimes require up to 2 weeks to adapt.
2. Patients should contact their eye care professional if any discomfort is experienced while wearing their new lenses.
3. Patients should schedule follow-up visits every 6 months to monitor myopia progression.
4. During the adaptation period, the patient should avoid:



Intensive sport activities e.g. playing soccer.



Operating any kind of vehicle e.g. cycling, scootering, driving a car.



Wearing the new lenses in physical activities or physical education lessons at school.



Wearing them on high staircases or in other places with different heights, e.g. climbing.

Taking care of eyesight.



1. Children should spend more time outdoors, minimum 2 hours a day.



3. It's important to keep your eyes healthy while doing near-work, so take note of proper lighting, posture and recommended working distance.



2. Take breaks from long intensive screen time or near-work.⁹



4. Get regular eye check-ups to ensure that myopia or other vision problems are detected and treated early, reducing the worsening of vision, myopia progression and potential complications of high myopia.