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# **Pupils with Health Issues**

# Myopia



















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# Myopia



# Classroom-based tips (focus on instructional methods)

- 1. **Be vigilant when interpreting a pupil's behaviour.** If undiagnosed, pupils may exhibit some or all of the following: holding a book too close; squinting or tilting the head to see better; frequent eye rubbing; losing her/his place while reading; complaining of headaches or tired eyes; avoiding activities which require near vision; sensitivity to light; excessive teariness of the eyes; receiving lower grades than usual.
- 2. Offer pupils with myopia the opportunity to sit in the front of the class as close to the board as possible.
- 3. Reduce glare from windows or seat the pupil with her/his back to the window.
- 4. **Bear in mind that pupils with myopia might need extra support or time** to copy things down from the blackboard, read from a distance, or complete an assignment.
- 5. When using printed materials consider contrast, print style, and spacing of letters as these can be more important than print size.
- 6. Focus on instructional methods that include auditory as well as visual stimuli.
- 7. Avoid drawing attention to the pupil's eye problem in front of the class and discussing or commenting on a pupil's myopia condition.

[References: http://www.allaboutvision.com/parents/schoolage.htm

Texas School for the Blind and the Visually impaired

http://www.tsbvi.edu/program-and-administrative-resources/3277-considerations-for-low-vision-students-in-a-classroom]



# School-based practical tips (focus on instructional methods)

# **Curricular Adaptations**

- 1. Increase time spent outside during breaks or the frequency of outdoor activities.
- **2. Organise a larger number of field trips**, which will allow pupils to spend time outside and be exposed to sunlight.

[References: http://www.allaboutvision.com/parents/myopia-causes.htm]





http://www.nature.com/news/the-myopia-boom-1.17120

3. Make provisions for different modalities of assessing a pupil's performance where appropriate.

[Reference: http://www.allaboutvision.com/parents/schoolage.htm]

**4.** Encourage physical activity and sports as part of a plan to reduce myopia risk and progression. Ask parents for their permission to include pupils in all sports activities, including pupils who wear glasses.

[Reference: <a href="http://eyewiki.aao.org/Myopia">http://eyewiki.aao.org/Myopia</a>]

# Educational Visits / Field Trips / Camps / School Exchanges / Trips Abroad

**Organise a larger number of field trips**, which will allow pupils to spend time outside and be exposed to sunlight.

[References: <a href="http://www.allaboutvision.com/parents/myopia-causes.htm">http://www.nature.com/news/the-myopia-boom-1.17120</a>]

#### Homework

Make provisions for different modalities of assessing a pupil's performance where appropriate.

[Reference: http://www.allaboutvision.com/parents/schoolage.htm]

### Parents / Parents' Associations

Following consent from parents of pupils with myopia, discuss the subject in Parents' Association and Staff meetings. This will help open up the dialogue on the management of myopia in the school setting, and discuss issues like diversity and bullying.

[Reference: http://thinkaboutyoureyes.com/articles/kids-vision]

#### Safety

Encourage physical activity and sports as part of a plan to reduce myopia risk and progression. Ask parents for their permission to include pupils in all sports activities, including pupils who wear glasses.

[Reference: <a href="http://eyewiki.aao.org/Myopia">http://eyewiki.aao.org/Myopia</a>]

#### **School Breaks**

Increase time spent outside during breaks or the frequency of outdoor activities.





# **Pupil Support**

Make provisions for different modalities of assessing a pupil's performance where appropriate.

[Reference: <a href="http://www.allaboutvision.com/parents/schoolage.htm">http://www.allaboutvision.com/parents/schoolage.htm</a>]

# **Teacher Professional Development**

Following consent from parents of pupils with myopia, discuss the subject in Parents' Association and Staff meetings. This will help open up the dialogue on the management of myopia in the school setting, and discuss issues like diversity and bullying.

[Reference: <a href="http://thinkaboutyoureyes.com/articles/kids-vision">http://thinkaboutyoureyes.com/articles/kids-vision</a>]

# **Supportive literature**

#### **Definition of Myopia**

Near-sightedness, also known as short-sightedness or myopia, is a condition of the eye where light focuses in front, instead of on the retina. This causes distant objects to be blurry while close objects appear normal (NIE). The underlying cause is believed to be a combination of genetic and environmental factors. Risk factors include doing work that involves focusing on close objects, greater time spent indoors, and a family history of the condition. Children rely on their vision in their learning processes. If they have difficulty seeing, this handicap affects academic performance. Near-sightedness can be corrected with eyeglasses, contact lenses, or surgery. The prevalence of myopia has been reported as high as 30–40% in Europe. Indeed, the prevalence of myopia has profoundly increased since 1983 in children aged between 11 and 13 years (Dolgin, 2015). As children spend a lot of time at school, an intervention from the educational system is a direct approach to tackle myopia, a growing public health concern (NIE).

Recent studies suggest that increased outdoor activities and reduced long-term near work activities could help to reduce myopia onset and progression. Further studies show that exposure to sunlight can protect against myopia. (Wu et al, 2013; Jin et al, 2015).

#### **Websites and EU Reports**

American Academy of Ophthalmology: <a href="http://eyewiki.aao.org/Myopia">http://eyewiki.aao.org/Myopia</a> American Optometric Association

http://www.aoa.org/patients-and-public/eye-and-vision-problems/glossary-of-eye-and-vision-conditions/myopia?sso=y

Think about your eyes: http://thinkaboutyoureyes.com/articles/kids-vision

National Eye Institute: <a href="https://nei.nih.gov/">https://nei.nih.gov/</a>

# References

Wu, P. C., Tsai, C. L., Wu, H. L., Yang, Y. H., & Kuo, H. K. (2013). Outdoor activity during class recess reduces myopia onset and progression in school children. *Ophthalmology*, *120*(5), 1080-1085.







Jin, J. X., Hua, W. J., Jiang, X., Wu, X. Y., Yang, J. W., Gao, G. P., ... & Tao, L. M. (2015). Effect of outdoor activity on myopia onset and progression in school-aged children in Northeast China: the Sujiatun eye care study. *BMC ophthalmology*, 15(1), 1.

Dolgin, E. (2015). The myopia boom. *Nature*, *519*(7543), 276-278.

National Eye Institute: https://nei.nih.gov/

