

<b>Recommendations for preventing or inhibiting the progression of myopia</b>	
<b>Recommendations from the optical side (mainly to compensate the negative effects of excessive near work)</b>	<b>Potential risks</b>
<ul style="list-style-type: none"> <li>• <b>For near work keep a reasonably large distance to your book / paper / computer screen, even when wearing plus additions.</b> <i>Note: Reading in bed leads mostly to a distance, which is too near.</i></li> <li>• <b>Do not use glasses or contact lenses, which are stronger than necessary,</b> i.e. avoid any overcorrection. You might use "main glasses / contact lenses" which are slightly under-correcting and you use additional glasses for perfect distant vision.</li> <li>• <b>If you are not myopic yet, better use plus glasses for extensive near work.</b></li> <li>• <b>If you are already myopic, use bifocal or progressive glasses or bifocal contact lenses, or use plus glasses additionally to your contact lenses for extensive near work.</b></li> <li>• <b>Interrupt your near work</b> every 30 minutes by focusing on distant objects and <b>relax your eyes especially in the evening before going to sleep.</b></li> <li>• <b>Wearing plus glasses for a short time every day may be of some help.</b></li> <li>• <b>Cold-color light</b> should be preferred to warm-color light.</li> <li>• <b>Do not read and don't do near work at bad light, 500 Lux</b> are the minimum, but substantially higher levels are recommended depending on the visual task (e.g., for detailed drawing work 1,500 to 2,000 lux).</li> <li>• Some <b>exercising of the accommodation</b> by alternating focusing near and far objects can be helpful (but don't expect miracles from classes which are offered about this issue).</li> <li>• <b>Take care to have enough sleep at the proper time</b> and in darkness. <b>Do not keep a light switched on in the kid's room at night</b> (there is a controversy in the literature about night lights, but better be on the safe side).</li> <li>• Perform regular <b>physical exercises, especially outdoors,</b> and use sunglasses in <b>rather bright sunlight only</b></li> </ul>	<p>No risk, but avoid a permanent and substantial undercorrection without the consultation of an ophthalmologist, as an inappropriate undercorrection or inappropriate bifocals may create, e.g., a deprivation effect<sup>191</sup>.</p>
<ul style="list-style-type: none"> <li>• Discuss with your ophthalmologist the application of <b>atropine drops.</b></li> <li>• Consider <b>rigid gas permeable contact lenses (RGP).</b> Soft contact lenses were not reported to show a positive effect, but soft bifocal contact lenses showed a positive effect, too.</li> <li>• Consider <b>orthokeratology.</b></li> </ul>	<p>None if properly and professionally applied.</p>

**Table 22** Optical recommendations for preventing myopia or inhibiting the progression of myopia

Recommendations for preventing, or inhibiting the progression of myopia	
Recommendations from the <b>behavioral and the nutritional side (mainly to reduce an elevated personal emmetropization factor)</b>	Potential risks
<p>Reduce negative mental <b>stress</b>, possibly by appropriate <b>physical and mental exercises, and playing</b>.</p> <p><b>Physical exercises</b> can as well have a positive impact on the blood circulation in the eye, and promote NO metabolism.</p> <p>Especially <b>Outdoor activities</b> were shown to be very effective to prevent myopia (preferably 2 to 3 hours a day).</p>	<p>Avoiding stress can prevent a potential risk for your professional career.</p>
<p>Keep a <b>healthy and balanced diet</b>, which is <b>low in sugar and low in refined carbohydrates</b> (incl. white wheat), <b>low in sodium</b>, low in fat except omega-3 (fish) oil, and have <b>plenty of (if possible unprocessed) vegetables and fruits</b>.</p> <p>There are many books for a healthy diet on the market, with tables showing the contents in specific nutrients<sup>1404</sup>.</p>	<p>None</p>
<p>If the progression of your myopia is worrying you, <b>additional supplements of multiple vitamins</b> (especially the vitamins <b>E, B2, B6, folic acid</b>), <b>minerals</b> (especially of <b>calcium, selenium, copper and zinc</b>) and especially also of <b>flavonoids</b> are recommended.</p> <p>Only for the <b>B vitamins</b> doses substantially higher than the recommended daily doses may be helpful<sup>931, 932</sup> (for flavonoids no recommended doses are available).</p> <p>Especially if your ancestors came from regions with plenty of sun, you may easily have an individual lack of <b>vitamin D. A 25(OH)D blood test is highly recommended</b>. In general, our ancestors spent by far more time outdoors, which gave them plenty of vitamin D. Therefore it is recommended to have your Vitamin D status checked and to take supplements in case the level is not optimal.</p>	<p>Do not take higher doses of <b>vitamin A</b> than the recommended daily allowance for it and keep the appropriate balance between <b>copper and zinc</b>, and <b>calcium and magnesium</b>.</p> <p>See section 4.6 for <b>maximum amounts</b>.</p>

**Table 23** Behavioral and nutritional recommendations for preventing myopia or inhibiting the progression of myopia