

Recommendations for preventing or inhibiting the progression of myopia	
Recommendations from the optical side (mainly to compensate the negative effects of excessive near work)	Potential risks
<ul style="list-style-type: none"> • For near work keep a reasonably large distance to your book / paper / computer screen, even when wearing plus additions. <i>Note: Reading in bed leads mostly to a distance, which is too near.</i> • Do not use glasses or contact lenses, which are stronger than necessary, 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. • If you are not myopic yet, better use plus glasses for extensive near work. • 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. • Interrupt your near work every 30 minutes by focusing on distant objects and relax your eyes especially in the evening before going to sleep. • Wearing plus glasses for a short time every day may be of some help. • Cold-color light should be preferred to warm-color light. • Do not read and don't do near work at bad light, 500 Lux 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). • Some exercising of the accommodation by alternating focusing near and far objects can be helpful (but don't expect miracles from classes which are offered about this issue). • Take care to have enough sleep at the proper time and in darkness. Do not keep a light switched on in the kid's room at night (there is a controversy in the literature about night lights, but better be on the safe side). • Perform regular physical exercises, especially outdoors, and use sunglasses in rather bright sunlight only 	<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 effect¹⁹¹.</p>
<ul style="list-style-type: none"> • Discuss with your ophthalmologist the application of atropine drops. • Consider rigid gas permeable contact lenses (RGP). Soft contact lenses were not reported to show a positive effect, but soft bifocal contact lenses showed a positive effect, too. • Consider orthokeratology. 	<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 behavioral and the nutritional side (mainly to reduce an elevated personal emmetropization factor)	Potential risks
<p>Reduce negative mental stress, possibly by appropriate physical and mental exercises, and playing.</p> <p>Physical exercises can as well have a positive impact on the blood circulation in the eye, and promote NO metabolism.</p> <p>Especially Outdoor activities 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 healthy and balanced diet, which is low in sugar and low in refined carbohydrates (incl. white wheat), low in sodium, low in fat except omega-3 (fish) oil, and have plenty of (if possible unprocessed) vegetables and fruits.</p> <p>There are many books for a healthy diet on the market, with tables showing the contents in specific nutrients¹⁴⁰⁴.</p>	<p>None</p>
<p>If the progression of your myopia is worrying you, additional supplements of multiple vitamins (especially the vitamins E, B2, B6, folic acid), minerals (especially of calcium, selenium, copper and zinc) and especially also of flavonoids are recommended.</p> <p>Only for the B vitamins doses substantially higher than the recommended daily doses may be helpful^{931, 932} (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 vitamin D. A 25(OH)D blood test is highly recommended. 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 vitamin A than the recommended daily allowance for it and keep the appropriate balance between copper and zinc, and calcium and magnesium.</p> <p>See section 4.6 for maximum amounts.</p>

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