

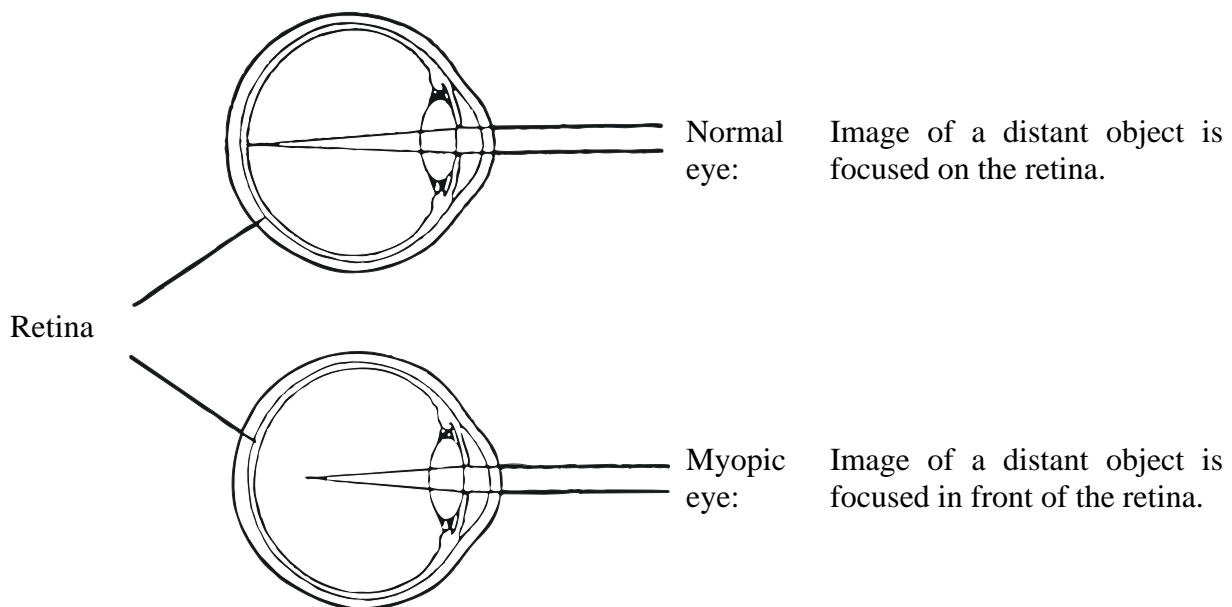
Myopia

Symptom

The symptom of myopia (short-sightedness) is that distant objects appear blurred while near objects appear clear. More severe the myopia is, a distant object will appear more blurred and the closer you have to get near the object in order to see it clearly.

Pathogenesis

Myopia results from elongation of an eyeball. The image of a distant object is focused in front of instead of onto the retina, resulting in a blurred image.



Causes

Causes for myopia can be classified into congenital and acquired factors. Congenital factors include genetic and racial factors. Acquired factors are mainly poor reading habits, inappropriate lighting, poor quality printed materials, reflective papers, malnutrition and poor physical health, etc.

Prevalence

In Hong Kong, the prevalence of myopia in children is much higher than that of hyperopia (long-sightedness) or astigmatism. About 17% of primary one students have myopia. However, this rate surges to about 53% among the primary school graduates. Myopia also increases with age and becomes stable around the age of twenty.

Preventive Methods

As congenital factors cannot be changed, we can only prevent myopia or slow down the deterioration by changing environmental factors:

1. Cultivate a good reading habit
 - Keep a distance of at least 30cm from the book you are reading or when you are performing some delicate work
 - Don't lie on the bed when you read because you may unconsciously put the book closer to your eyes
 - Don't read in a poorly-lit place
 - If you need to read for a long time, you should take a short break every 30 minutes and rest your eyes by looking at distant objects or closing your eyes
 - When you play video games, keep a distance of at least 30cm from the screen and do not play more than one hour each day
2. Appropriate lighting
 - When you read, use a ceiling-mounted light if possible. Lighting should be even, sufficient and without glare
 - If you use a reading lamp and you are right-handed, you should let the light cast down from your upper left corner instead of shining into your eyes directly
 - When you watch TV, turn on the light in the room. Keep a distance of at least 6 times the size of the TV screen
3. Choose appropriate printed materials
 - Eyes get tired easily when reading poor quality printed materials. The font should be clear with appropriate font size. There should be adequate spacing between words and between rows
 - Reflective paper may generate glare and cause fatigue to the eyes if reading for a long time
 - Dark coloured paper may affect the clarity of the font and makes it difficult to read
4. Keep healthy
 - Keep a balanced diet. Eat more grains and cereals, vegetables and fruits, and a moderate amount of meat. Eat less fat
 - Eat food that is rich in vitamin-A, such as tomatoes and carrots, which are helpful to the development of the eyes
 - Outdoor activities relieve eye strain
 - Sufficient sleep can provide rest for your eyes
5. Have your vision checked regularly and wear glasses if necessary
 - Have a vision check every year. Wear glasses if you have myopia which affects your studies or daily life
 - Although glasses can correct your vision, they cannot cure myopia nor prevent its progression. However, not wearing glasses or wearing glasses with a lower prescription will not slow down the progression of myopia. On the contrary, you will have blurred vision which may affect your studies