

Sight Matters

FAQ Sheets

Short-Sightedness (Myopia)

Short-sighted people can see clearly up close, but not in the long distance. They generally can see to read a book, but not a road sign.

Cause

Short-sightedness is vision that is out-of-focus because the eye shape is too long. The focal point therefore occurs in front of the retina and is thus blurred when it reaches the retina.

The cause of short-sightedness is not known for certain, but the factors involved do include hereditary and visual stress.

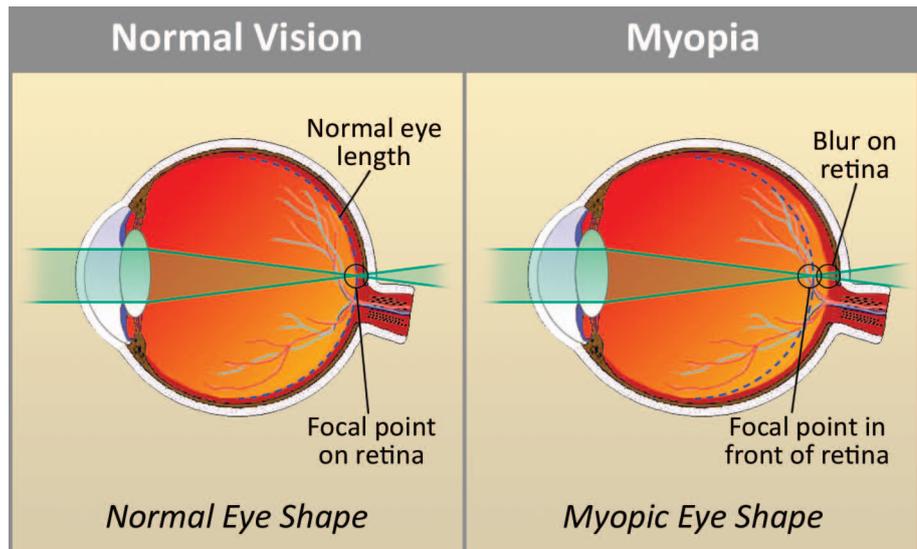
To demonstrate hereditary causes, one study showed that 85% of all short-sighted children have at least one short-sighted parent. Illustrating visual stress, another study of Eskimos found that two-thirds of the children developed myopia after starting school, while their illiterate parents had no short-sightedness. This type of short-sightedness related to environmental stress factors is often controlled with specialty lens types such as bifocals or progressive lenses. Once again, early intervention is critical.

Symptoms

The main symptom of short-sightedness is blurred long distance vision. People often notice this as an inability to see things or read signs that their friends or family can see.

Another common symptom is a “screwing up” of the eyes in an attempt to make things clearer. This is the origin of the originally Greek word myopia meaning “I close my eyes to see”. Like photography, this is related to the optical principle of an improved focus through a smaller aperture.

Parents should be alert for early warning signs of short-sightedness. These include squinting when looking at distant objects like road signs and movie screens; less clear vision at night; or constantly sitting close to the TV set.



Correction

Prescription lenses provide good vision for people who are short-sighted; either in spectacles or contact lenses.

However, periodic lens changes are often needed during the adolescent years when the problem is usually progressive. It affects only 3% of 5 to 9 year olds; increases to 8% of those aged 10 to 12 and then more than 17% of teenagers.



Blurred distance vision is corrected with a myopic prescription

Most short-sighted people are ideal candidates for soft contact lenses and they usually also do well with laser refractive surgery.