



By GRACE NAYAK | Illustration by COOPER DOZOIS

Myopia, without further explanation, probably sounds like an alien invasion. Myopia is actually just another term for nearsightedness, which occurs when the eye can no longer see things far away. It is usually caused by a person's eyeballs growing too long. Myopia is the most common eye condition in children ages six to 18. But cases are rising.

According to a study from the National Eye Institute, an estimated 25% of Americans were diagnosed with myopia in 1970. As of 2017, however, the National Eye Institute predicts that a whopping 42% have developed nearsightedness.

More and more people are starting to wear glasses. But why does this matter?

Although myopia itself may not overall be harmful to a person's health, severe cases can lead to serious complications, such as retinal detachment (when the portion of the eye that actually translates the images that we see into electrical signals that travel through the optic nerve to our brain detaches itself from the eyeball) and myopic degeneration (when the retinal cells that give you the central vision needed for reading and recognizing faces slowly start to die). It also increases the risk of the early development of glaucoma and cataracts. Ophthalmologists are also seeing more cases of younger children (such as elementary schoolers) who are developing myopia. When myopia develops in children that young, their vision is more likely to degrade faster.

Yet, despite myopia being so common and the fact that the numbers are growing at an alarming rate, it is hard to pinpoint the reason behind the eye elongation.

Dr. Gilbert Wong, a comprehensive ophthalmologist at Canyon Eye Center in Utah, remembers that when he was in medical school, "the general belief among eye doctors was that myopia was caused by a genetic predisposition alone." However, even in the past 15 to 20 years, things have changed. "During my ophthalmology residency training a few years later, a large study compared rates of myopia between Chi-

nese schoolchildren ages six to seven in Sydney, Australia vs Singapore and showed that the kids in Sydney had significantly lower rates of myopia," Dr. Wong said. "Interestingly, the rates of myopia among the parents were similar, indicating similar genetic predisposition. However, the kids in Sydney were reading fewer books, doing less indoor near work, and spending a lot more time outdoors."

Thus, it seems that spending less time focused on screens or books and more time outdoors may slow the progression of myopia. But can we, as Kent Denver high school students, really commit to this?

Dr. Wong also recognizes that dedicated students need to spend time studying. However, he recommends other ways we can take better care of our eyes. Trying to read or study outside and scheduling in time to play outdoor sports can slow progression. When we have to read for a long time, Dr. Wong suggests that we "take a 20 second break to look away and 'unfocus' every 20 minutes."

This isn't an issue students must battle alone; the school can help as well. One way is to recognize the ergonomics of the classroom. Enhancing classroom lighting and making sure that the chairs and desks support good posture (where the book is about 15 to 25 inches away from the eyes) would be the best for the schools themselves. Most importantly for high school students, is to try to educate their younger siblings. "Something that I have observed among my patients, though, is that myopia that

progresses quickly and ends up being more severe usually starts before the age of twelve," Dr. Wong points out. "Most kids whose myopia starts in high school typically end up with only mild myopia."

We spend the majority of our week at school. Yes, we are busy, but our health should be our top priority. Our school nurse, Shreka Thomas, reminds us, "It's important to schedule time to adequately sleep, eat nutritious foods, take brain breaks, exercise, get outside for fun and sun and spend time with family and friends" throughout our busy days. Kent Denver already puts an emphasis on student wellness, but it is time that we reevaluate our retinal health.

## TAKE CARE OF YOUR EYES