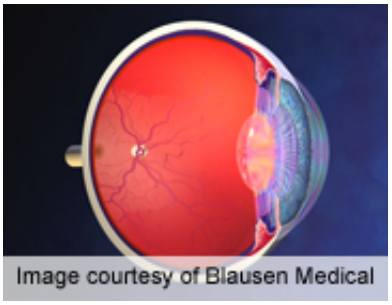
Medical Xpress

Outdoor activities, day length tied to myopia onset, progress

June 27 2013



Exposure to outdoor activities correlates with less new onset of myopia and myopic shift, and the number of hours of daylight is associated with eye elongation, myopia progression, and corneal power change, according to two studies published in the May issue of *Ophthalmology*.

(HealthDay)—Exposure to outdoor activities correlates with less new onset of myopia and myopic shift, and the number of hours of daylight is associated with eye elongation, myopia progression, and corneal power change, according to two studies published in the May issue of *Ophthalmology*.

Pei-Chang Wu, M.D., Ph.D., from the Kaohsiung Chang Gung Memorial Hospital and Chang Gung University College of Medicine in Taiwan, and colleagues examined myopia changes in a cohort of 571 elementary school students, aged 7 to 11 years, recruited from two schools. In one school (333 students), children were encouraged to

participate in outdoor activities during recess, while in the control school (238 students), there were no special programs during recess. The researchers found that, after one year, new onset of myopia was significantly lower in the intervention school (8.41 percent) than in the control school (17.65 percent). Myopic shift was also significantly lower in the intervention group.

Dongmei Cui, M.D., Ph.D., from the SunYat-sen University in Guangzhou, China, and colleagues examined whether axial eye growth, myopia progression, or corneal power change in Danish myopic children varies with the length of day in a cross-sectional study involving 235 children aged 8 to 14 years with myopia. The researchers observed significant correlations between the hours of daylight and eye elongation, myopia progression, and corneal power change, with decreased axial eye growth and myopia progression and increased corneal power change seen with exposure to more daylight hours.

"These findings support experimental and epidemiologic results pointing to a protective role of light and of staying outdoors on the development of myopia," Cui and colleagues write.

More information: Abstract - Wu
Full Text (subscription or payment may be required)
Abstract - Cui
Full Text (subscription or payment may be required)

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Citation: Outdoor activities, day length tied to myopia onset, progress (2013, June 27) retrieved 23 April 2024 from
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