

LIFE

HITS & MYTHS

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Does a high-starch, high-sugar diet play a role in the development of myopia?

The straight answer: No

The facts: It's a common belief that a diet high in carbohydrates and sugar in childhood favours the development of myopia or short-sightedness.

As one theory goes, an excess consumption of refined sugars – as seen in the modern diet – leads to higher levels of insulin in the body, and this, in turn causes the liver to produce IGF-1 (insulin-like growth factor 1), leading to higher blood IGF-1 levels. The IGF is thought reach the eyes, where it then stimulates the growth of the eyeball. Stretched or elongated eyeballs are what distinguish myopic people from people who do not suffer from the condition.

While suggestions from many small-scale studies have found an association between myopia and high starch and sugar consumption, it is not possible to say for sure that such diets are responsible for a person developing myopia.

"There simply haven't been any large-scale, double-blinded randomised control studies that support or revoke this association," says Dr Orlando Chan, a specialist in ophthalmology from Matilda International Hospital.



There is not enough evidence to link diet with myopia.

"One thing we do know is that poor metabolic control of glucose, as seen in diabetic patients, can give rise to transient blurry vision, which may be due to refractive properties of the eye," Dr Chan says. "Studies also show that the prevalence of myopia in diabetic patients is considerably higher."

Myopia is thought to be the result of a complex interaction of a variety of factors, among them genetics, lifestyle habits and amount of time spent outdoors. Therefore, it's difficult to conclude that childhood diet alone can lead to the development of myopia.

"Some studies have found a positive correlation between the time spent outdoors in a child and myopia," says Dr Chan.

"Kids who spend more time outdoors during the day are

believed to be less likely to develop myopia. So, we cannot pinpoint diet in the development of this eye condition. In addition, Asians are thought to have an increased genetic susceptibility to insulin resistance than Caucasians – a trait that is believed to contribute to the development of myopia. This is why many population studies have shown that people of Asian descent – particularly Chinese people – tend to have higher rates of myopia."

You may have read that certain foods, such as carrots, leafy greens, eggs, fruits and berries can help improve one's vision. But Dr Chan is wary about recommending any one particular food for better eyesight. "It is best to consume a well-balanced diet for overall health," he says.