

teen who ate nothing but fries, chips and other junk food for years slowly went blind as a result of his poor diet, according to a new report of the case.

The case highlights a perhaps little-known fact about poor diets: In addition to being tied to obesity, heart disease and cancer, they "can also permanently damage the nervous system, particularly vision," according to the report, published today (Sept. 2) in the journal *Annals of Internal Medicine*.

The teen's problems began at age 14, when he went to the doctor's office complaining of tiredness.

The teen was reportedly a "fussy eater," and blood tests showed he had anemia and low levels of vitamin B12, the report said. He was treated with injections of vitamin B12 along with advice on how to improve his diet.

However, by age 15, he developed hearing loss and vision problems, but doctors couldn't seem to find the cause — results from an MRI and eye exam were normal.

Over the next two years, the teen's vision got progressively worse. When the boy was 17, an eye test showed that his vision was 20/200 in both eyes, the threshold for being "legally blind" in the United States.

Further tests showed the teen had developed damage to his optic nerve, the bundle of nerve fibers that connects the back of the eye to the brain. In addition, the teen still had low levels of vitamin B12, along with low levels of copper, selenium and vitamin D.

These deficiencies prompted doctors to ask the teen about the foods he ate. "The patient confessed that, since elementary school, he would not eat certain textures of food," the authors, from the University of Bristol in the United Kingdom, wrote in the report. He told doctors that the only things

he ate were fries, chips — specifically, Pringles — white bread, processed ham slices and sausage.

After ruling out other possible causes for his vision loss, the teen was diagnosed with nutritional optic neuropathy, or damage to the optic nerve that results from nutritional deficiencies. The condition can be caused by drugs, malabsorption of food, poor diet or alcohol abuse. "Purely dietary causes are rare in developed countries," the authors said.

It's known that the B vitamins are essential for many cellular reactions, and deficiencies in these vitamins can lead to the buildup of toxic byproducts of metabolism, and eventually to the damage of nerve cells, according to the University of Iowa.

Vision loss from nutritional optic neuropathy is potentially reversible if caught early. However, by the time the teen was diagnosed, his vision loss was permanent. What's more, wearing glasses would not help the teen's vision, because damage to the optic nerve cannot be corrected with lenses, said study lead author Dr. Denize Atan, a consultant senior lecturer in ophthalmology at Bristol Medical School and Bristol Eye Hospital.

The teen was prescribed nutritional supplements, which prevented his vision loss from getting any worse.

The teen was also referred to mental health services for an eating disorder. The researchers note that the teen's diet was more than just "picky eating" because it was very restrictive and caused multiple nutritional deficiencies.

A relatively new diagnosis known as "avoidant-restrictive food intake disorder" (previously known as "selective eating disorder") involves a lack of interest in food or avoidance of foods with certain

textures, colors, etc., without concern to body weight or shape. The condition usually starts in childhood, and patients often have a normal body mass index (BMI), as was the case for this patient, the authors said.