

eyefoods[®]

A Tasty Guide to Nutrition and Eye Health

for
kids



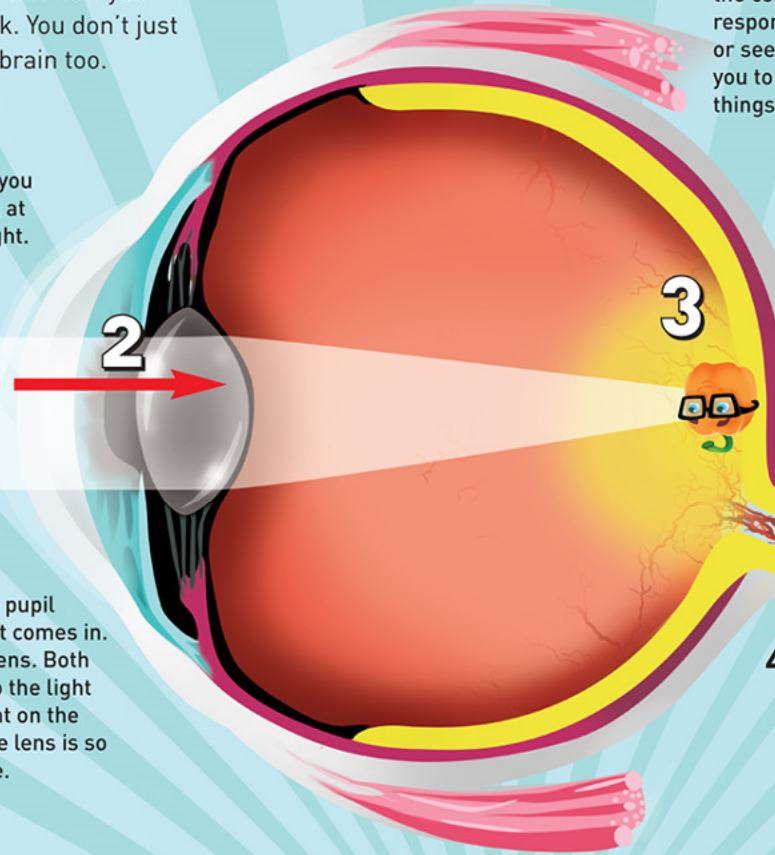
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How Does Vision Work?

Have you ever wondered how your eyes “see”? Sight is one of your most important senses. But how you see is not as simple as you might think. You don’t just see with your eyes. You see with your brain too.



1 The object you are looking at bounces light.



2 Light passes through the cornea. The pupil changes size to adjust how much light comes in. Light then passes through the clear lens. Both the cornea and the lens are curved so the light bends, helping it reach a specific point on the retina. The magnification power of the lens is so high that it inverts, or flips, the image.

3 Light focuses at the macula and the macula creates the vision signal. The macula is located in the center of the retina and is responsible for central vision, or seeing in front. It allows you to see in detail and do things such as reading.

4 The vision signal is passed through the optic nerve to the visual cortex.



5 Like a computer, the brain’s visual cortex “processes,” or sorts through, information. The information (an image) is received upside down through the visual cortex. The visual cortex flips it right side up.

The brain’s cells receive information from both your right eye and your left eye. Some brain cells see from the right eye and some from the left eye. Some see from both eyes together. This is why you see better with both eyes open. The brain matches and blends the image received from both eyes together.

Eye Health and Safety

Your eyes are important. You depend upon them for many things, but it is easy for you to take them for granted. Like the rest of your body, your eyes need **nourishment**, exercise, and rest to function best.

Healthy eyes are free from disease and injury. There are many eye diseases but some of the most common are blepharitis, conjunctivitis, glaucoma, cataracts, and diseases of the retina. Blepharitis is a condition where the eyelid becomes sensitive, red, or flaky. Conjunctivitis, sometimes called pink eye, is an **inflammation** of the lining that covers the eyeball. Glaucoma and cataracts are diseases that can lead to blindness if left untreated. Retinal diseases can also cause blindness as they damage the retina. Many eye diseases can be prevented or slowed by eating foods that are good for the eyes.

Eye injuries can be caused by sports or other accidents, or by unhealthy lifestyles. Some injuries can be prevented by wearing proper eye protection.



How a person with healthy vision sees.



How a person with cataracts sees.



How a person with a diseased macula sees.

Protecting Your Eyes: With Food

Did you know that some vegetables can help keep your eyes healthy? Dark green vegetables, such as kale and spinach, and orange vegetables, such as orange peppers, are especially good for vision health. These vegetables contain chemicals called carotenoids and other vitamins that help your eyes work. There are plenty of other foods that are important for the health of your eyes including fish, fruit, eggs, nuts, and even turkey.

"Green means go" when it comes to the color of foods that are good for eyesight.

