



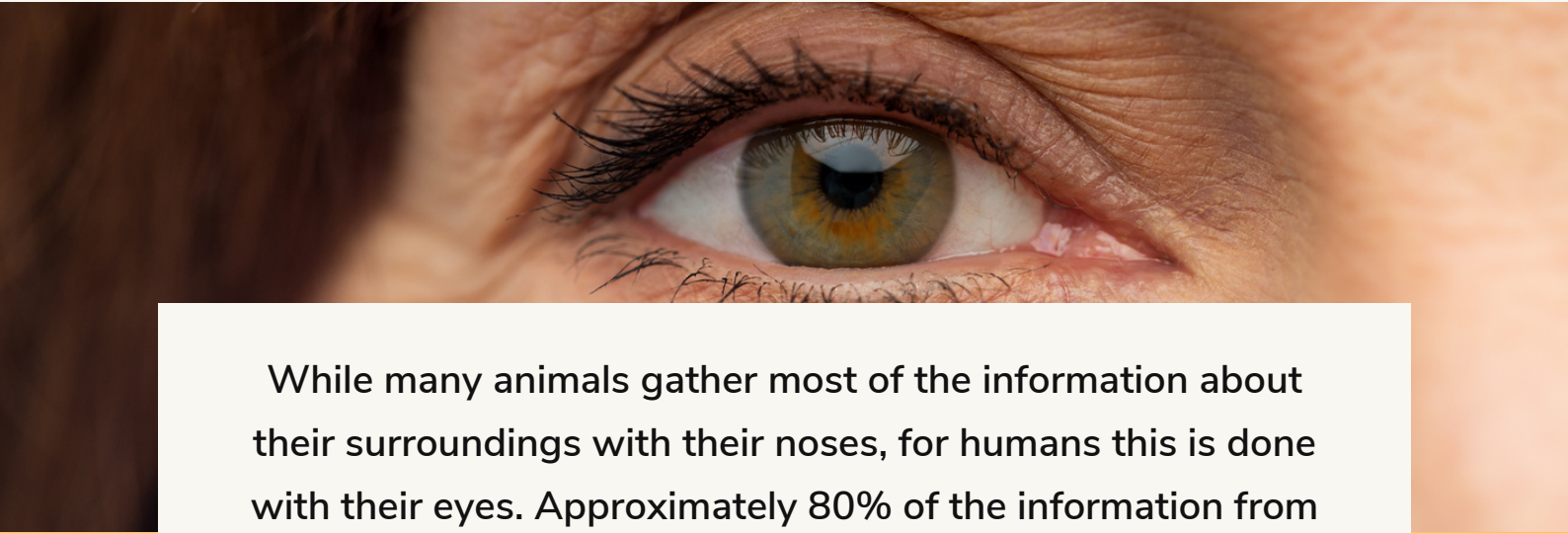
AUBURN EYE CARE



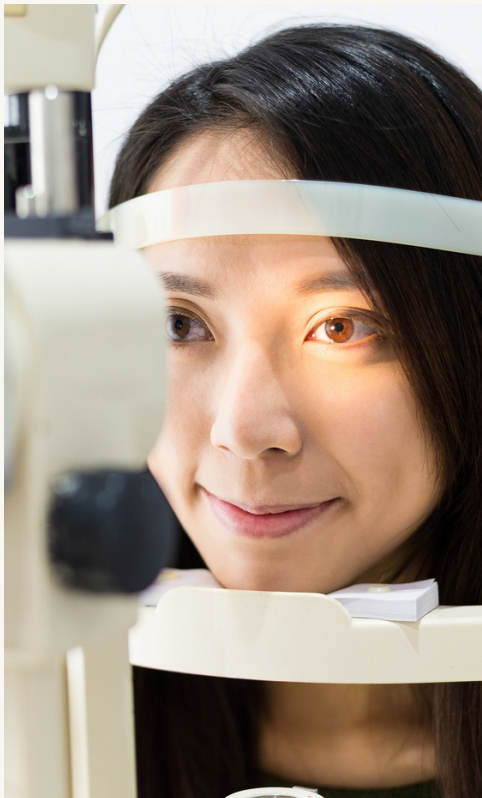
YOUR EYES & SENSE OF SIGHT

Did you know that your eye operates in much the same way as a camera? Just as the lens of a camera focuses entering light on a piece of film to produce a sharp image, the lens of your eye focuses light on the retina to form a picture that is then sent to the brain.

Our ability to see and to interpret visual images is an amazing process. Thanks to an exquisitely sophisticated organ, called the human eye, light is collected, focused, and then converted into electrical signals that the brain translates into images.



While many animals gather most of the information about their surroundings with their noses, for humans this is done with their eyes. Approximately 80% of the information from our environment is gathered and sent for processing by way of our eyes. Having healthy vision not only supports the enjoyment of our surroundings, it also enables us to carry out our daily routines.



With 70% of the body's sensory receptors located in the eyes, an abundant amount of visual information can be collected. "Seeing" the world is the process by which your brain interprets the reflected light from objects in your visual field.

Anatomically, your eyes are divided into three layers from front to back. The cornea, which is part of the outer layer, covers both the colored portion of the eye, known as the iris and the round dark pupil located in the center. Working together, the pupil and iris regulate the amount of reflected light entering the eye. As the cornea filters out some of the most damaging wavelengths of sunlight, the entering light is partially focused onto the lens.



At this point in time the lens sharpens, and projects the light onto the inner layer, which is known as the retina. Your retina acts in much the same way as film in a conventional camera, with millions of photoreceptors, which are known as rods and cones translating the focused light into full-color visual information. However, the information received by the retina is an upside down image requires uprighting.

The visual information is then sent to your brain via the optic nerve, setting a complex process in motion. Your brain not only combines the information received by each eye into a unified picture and turns the upside down data received from the retina into an image that is right-side-up, it also tells you and interprets what you are looking at. While there are many individuals who enjoy excellent vision, quite a number of us are affected by varying degrees of eye problems and impairments. Several issues, including structural problems in the anatomy of the eye, illness, injury, and aging can compromise our ability to see clearly and comfortably. In fact impaired vision is the most widespread disability in the world.

To protect the health of your eyes and to enjoy optimal vision, it's important to see your optometrist for routine exams and care.