

Health Awareness

A County Health Pool Publication



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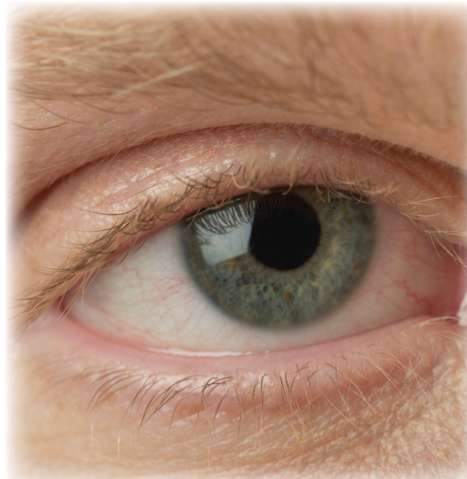
Vision - Understanding the Basics

Your eyes are your body's most highly developed sensory organs. In fact, a far larger part of your brain is dedicated to your vision than to those of hearing, taste, touch, or smell combined! We tend to take eyesight for granted, yet when vision problems develop, most of us will do everything in our power to restore our eyesight to normal.

The most common forms of vision impairment are errors of refraction -- the way light rays are bent inside the eye so images can be transmitted to the brain. Nearsightedness, farsightedness, astigmatism and eyestrain are examples of refractive disorders. The eyes are otherwise healthy. Refractive errors are correctable usually with glasses or contact lenses. Here are descriptions of common vision problems.

Nearsightedness, Farsightedness

Nearsightedness and farsightedness have to do with the way the eye brings images into focus on the back of the eyeball, where 10 layers of delicate nerve tissue make up the retina. Images that do not focus on the retina will appear blurry. The further away images focus from the retina, the blurrier they appear.



Nearsightedness, or myopia, affects about 40% of the population. It is the result of images being focused in front of the retina rather than on it, so distant objects appear blurred. An uncorrected nearsighted person holds a book closer to the eyes when reading and has to sit in the front of the classroom or movie theater to see clearly. The condition runs in families and affects men and women equally, usually appearing in childhood and stabilizing in the 20s.

Farsightedness, or hyperopia, is the opposite of nearsightedness. The hyperopic eye focuses images slightly behind the retina, making nearby objects appear blurry. Children often outgrow mild farsightedness as they mature and the eyeball reaches adult size. Did you know that the eye grows during childhood? The length of the eye (from front-to-back) elongates

nearly one-third between birth and age five, and the volume of the eye nearly doubles.

Astigmatism

Light rays entering the eye first cross the clear cornea. Surprisingly, nearly two-thirds of the eye's focusing power occurs along its front surface (tear film or cornea). The normal cornea should have a

(Over)



Vision - Understanding The Basics
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semi-spherical contour similar to a soup spoon. This permits the eye to create a single focused image. If the central cornea is not symmetrical or uniform we say it is "astigmatic."

Astigmatism often combined with nearsightedness or farsightedness, occurs when the clear cornea has a non-round curvature -- more like a teaspoon. Because of that, the eye lacks a single point of focus. People with astigmatism may have a random, inconsistent vision pattern, wherein some objects appear clear and others blurry. The next time you hold some shiny silverware, compare your reflection in a soup spoon to that produced by the teaspoon -- that's astigmatism.

Astigmatism is usually present from birth but is typically not recognized until later in life. Most astigmatism is fully correctable. It neither improves nor worsens over time.

Eyestrain

Eyestrain is discomfort due to an uncorrected refractive problem. This common vision problem may occur while performing distant visual activities like driving or watching a movie or during-close-up tasks.

Familiar symptoms of eyestrain include:

- Headache
- Brow-ache
- Eye fatigue
- A pulling sensation

Eyestrain quickly goes away if the refractive problem is resolved.

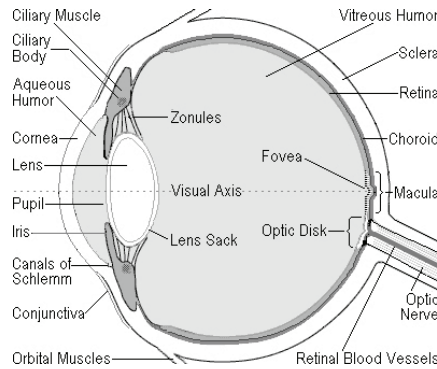
County Health Pool Word Search

Exercise Your Vision

See if you can find the following words in this month's hidden word puzzle:

- ANTHEM
- BENEFIT
- CARE
- CONTRIBUTIONS
- COUNTIES
- COVERAGE
- DEDUCTIBLE
- DENTAL
- HEALTH
- LIFETIME
- MAXIMUM
- MEDICAL
- MEMBERSHIP
- POOLING
- RESOURCES
- VISION
- WELLNESS

C X L F E J G H J S T G K L P
 O D T I J L H N E A G A C A I
 V L E Q F E B C I M M O Y C H
 E P B N A E R I M L U Z U I S
 R A H L T U T R T N O J I D R
 A H T C O A E I T C E O H E E
 G H V S C I L I M E U E P M B
 E W E L L N E S S E Z D Z X M
 P R M V M S M K A N V I E V E
 S N O I T U B I R T N O C D M
 R V I S M A X B E I E R A C S
 O U Y I A N T H E M J I U J G
 N W X O I W H Y I S S C Y P X
 E A Z N C R E I L A I H I G G
 M G T I F E N E B L Y E O U T



Other Eye Conditions That Lead to Vision Problems

There are other eye conditions that respond in varying degrees to medical and surgical treatment. The most common of these eye problems include:

- Cataracts
- Conjunctivitis
- Glaucoma
- Crossed or crooked eyes (strabismus)
- Lazy eye (amblyopia)
- Macular degeneration

These problems can lead to blurry or defective vision. The goals of treatment are to halt vision loss and preserve remaining eyesight.

Source: www.webmd.com

Prolonged focusing can lead to eyestrain, such as working at the computer for hours. Children have a far more flexible focusing capacity. How often do you ever hear a child complain of eyestrain while playing video games?

If you wear prescription glasses, recurring eyestrain may be an indication that you need updated glasses or a new prescription. Eye exercises or resting the eyes every 30 minutes helps relieve eyestrain, especially when working with computers.