



AGRABILITY CHIT CHAT

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EYE SPY!

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CARM'S COMMENTS: Carmen Schacht

As we grow older, it seems that we become more aware of the fact that our bodies change in many ways. One of the things that we often find happening is that we don't see nearly as well as we once did. Some people develop macular degeneration. This eye disease makes people unable to see things directly in front of them and a deteriorating retina that may affect their side vision. A good friend of mine has been affected by macular degeneration and started a support group for low vision people. Their meetings have included information from the Iowa Department for the Blind to assist people with visual impairments by teaching them how to complete everyday living tasks, which enable them to stay in their homes. Just a few of the topics taught include,

learning how to use devices that aid in writing checks, signing credit cards, knowing how to tell the difference in canned goods, what size measuring cups and spoons they are using, etc.

I know that many people are born with eye problems that are degenerative and they learn to live full lives through help from others or learning to cope in other ways. Hats off to all of you who have had to live with eye problems and have learned to deal with whatever it takes to overcome them. (CS)

LEARNING ABOUT EYES 101!: Marcy Thomas

You know the old saying, "beauty is in the eye of the beholder," but have you ever considered how the eye works to interpret this beauty? Eyes are made up of several layers that work together to create the vision that you may or may not be seeing. When one layer is unable to perform its function the rest of the eye cannot finish the job to give you the full picture.

The outer layer of the eye is made up of a curved and clear layer called the cornea. The whites of your eyes are called the sclera and consist of tough membranes that cover and shape the eyes. Most of you know the next layer, the colored part of your eye called the iris. The small black circle in the

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middle of the iris is the pupil and allows light into the eye. Lying directly behind the iris is the lens and behind the lens is the vitreous body, which is filled with a gel-like substance called the vitreous humor. And last, but definitely not least, is the retina, which is located in the very back of the eyeball.

So, how do all of these parts of the eye work in order for you to see? Well, for starters, light passes through your cornea and enters the pupil. Muscles that allow the pupils to either shrink or get bigger control the amount of light entering into the pupil. After entering the pupil, the light goes to the lens of your eyes, which changes shapes to help you see clearly. For instance, when you are looking at something close up, the lens gets thick and when you are trying to focus on something far away the lens becomes thin. This in turn helps the retina to focus on what you are seeing. Here is the interesting part; whatever you are looking at appears upside-down in the retina. It is the retina's job to process what you are looking at and turn the image into nerve impulses, which are sent to your brain through the optic nerve. At this point, the brain turns everything upright again so that you can see it. Now that you know the process it takes to be able to see, can you believe we see things as quickly as we do?

Some common eye problems are nearsightedness, farsightedness, and astigmatism. What does all of this mean, you ask? Nearsightedness, myopia, means that a person can see things that are near clearly. Things that are far away may be fuzzy or blurry. The reason for this is because the lens or the cornea is not refracting light properly. Focusing on the images occur right in front of the retina instead of on the surface of the retina. Farsightedness, hyperopia, is the opposite. You can see things far away, but things that are close are fuzzy or blurry. Unlike nearsightedness, focusing on the images

occurs behind the retina surface instead of right in front of it. Astigmatism means that the cornea is shaped unevenly and it bends the entering light in different directions making the images distorted and fuzzy.

The three most common eye conditions for seniors are cataracts, glaucoma, and macular degeneration. Cataracts, the most common and treatable, are cloudy areas in the transparent lens of the eyes. It can usually be corrected with eye surgery, on an outpatient basis. Glaucoma is when the pressure inside the eye is too high and usually has no symptoms. The optic nerve, which carries the images to the brain, becomes damaged and the pressure increases. It can lead to total blindness, if left untreated. Macular degeneration is the leading cause of blindness and by the year 2030, it is expected that twice as many people will be blind as are today. This eye condition, in the most common "dry" form, involves a part of the retina called the macula, which is responsible for central vision and allows us to do work close up. Over time the macula becomes thin with age and people will begin to experience dimming of vision while reading. At this point, there is no proven treatment.

So what can you do to help modify some of these eye problems? First and foremost, a healthy lifestyle does promote healthy eyes! A nutritious diet and regular exercise may help slow or prevent certain eye conditions, such as macular degeneration or cataracts. Make sure your body is getting the necessary vitamins and minerals. Wear eye protection when you are outside or when you are working. Too much sunlight can lead to cataracts. Be sure to have a complete eye exam every one to two years, along with a glaucoma test. Most eye diseases can be treated if detected early. See an eye doctor immediately if you experience loss or dimness of eyesight, eye pain, double vision,

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extreme redness or swelling of your eye or eyelid.

By following a few health and safety habits you may be able to maintain those beautiful peepers for a large majority of your life and enjoy a game or two of EYE SPY!

THE BETTER TO SEE YOU RESOURCES

For information on assistance with computers and technology, visit Microsoft's Accessibility website. Accessibility aids, step-by-step guides, and other resources for people with vision impairments can be found by logging onto

www.microsoft.com/enable/default.htm

As mentioned in Carm's Comments, the Iowa Department for the Blind is a program offering services for the blind and people with vision impairments. Services include information on blindness, tips on adjusting to vision loss, career counseling and job placement, computer training, and assistive devices and technology. For more information visit www.blind.state.ia.us/

Vision World Wide is a non-profit organization serving those who are totally blind and those with various degrees of vision loss. Multiple resources concerning assistive technology, medical information, living tips, and other services can be found by accessing the website at www.visionww.org

The U.S. National Library of Medicine and the National Institutes of Health have teamed up to offer a variety of information and resources specifically for those affected by vision problems or loss. Topics include information relating to different types of visual impairments, directories for services, and help with disability benefits and laws. The site address is

www.nlm.nih.gov/medlineplus/visiondisordersblindness.html

AGRICULTURAL NEWS AND RESOURCES

On March 21, 2003, National Agricultural Day will celebrate 30 years with producers, agricultural associations, corporations, universities, government agencies and countless others across America. National Ag Day is focused on educating Americans about the production and value that agriculture plays in our lives and economy. To learn more about National Ag Week and Day visit <http://agday.org/>

The Iowa State FFA is celebrating its 75th anniversary this year. The celebration will start with its annual conference, to be held April 7-8, 2003 at Hilton Coliseum in Ames. For more information and a list of activities, please visit www.agiowa.org/

Information and materials for the new manure management plans and matrix files are available through several DNR websites. For the new manure management plans go to www.state.ia.us/dnr/organiza/epd/wastewtr/feedlot/manure.htm A new version of the master matrix is also available at: www.state.ia.us/epd/wastewtr/feedlot/files/masterm.pdf

The new materials are being added to the Iowa Manure Management Action Group web page for your one-stop convenience. <http://extension.agron.iastate.edu/immag>

AGRABILITY FRIENDS AND FAMILY

AgrAbility Friends and Family Freewheelers will start the 2003-year off on Saturday, April 5th. Please join them at the New Hampton Public Library at 1:00 p.m. for pizza and socializing! For further information and to attend contact Carmen Schacht at (563) 547-2932 by April 1, 2003.

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QUOTE OF THE MONTH:

“Sooner or later, people who want to see are going to open up their hearts and their eyes, and they’re going to notice that a lot of incredible things can happen when people are given chances.” – Julieanne Krone

IOWA AGRABILITY - A joint effort of ISU Extension and the Farm Family Rehabilitation Management (FaRM) Program of Easter Seals Iowa. The program can help farm family members with a disability stay in farming.

This newsletter from the Iowa AgrAbility Project will be sent monthly to AgrAbility families and other interested individuals. Please send comments and suggestions to:

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Iowa AgrAbility Project

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