



# The Magnifier

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## AAO Announces JULY as UV Protection Awareness Month

From the American Academy of Ophthalmology on UV Safety

“Ultraviolet radiation is composed of high-energy rays from the sun. Long-term exposure to ultraviolet radiation may contribute to the development of various eye disorders, such as MD, the leading cause of vision loss among older Americans; and cataracts, a major cause of visual impairment and blindness. Everyone is at risk for eye damage that can lead to vision loss from exposure to the sun.



It's important to protect your eyes from acute damage caused by even a single outing on a very bright day. Intense, excessive exposure to ultraviolet light reflected off sand, snow, or pavement can damage the eye's surface.

To ensure your eyes are protected, wear sunglasses and a broad-rimmed hat. When selecting sunglasses, make sure they block 99 – 100 percent of UV-A and UV-B rays. But don't be deceived by color or cost. The ability to block UV light is not dependent on the darkness of the lens or the price tag.” **Note:** Having trouble finding sunglasses that meet the AAO standard for protection? Call 800-924-4393 to get more information on the right product for the right price.

## UV Protection Is Now Available For Ophthalmic Equipment

If you are concerned about UV protection during your dilated eye exam, ask your ophthalmologist if their equipment is updated to include a blue light filter lens.

If you are interested in learning more, a “Blue Light Special” presentation will soon be broadcast to all International Macular Degeneration Support Groups. To be part of the IMDSG, go to this link <http://www.mdsupport.org/nsg.html>. If you do not have internet access, you may call Dan Roberts, Director of MD Support ([mdsupport.org](http://mdsupport.org)), at (816) 761-7080 to become part of this international organization.

## Update From the National Library Service

Eight Libraries Participate In Prelaunch of Digital Talking- Book System

“After years of research, testing, and planning; months of contract

## Macular Degeneration Foundation

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review and awards; and weeks of production and quality-assurance evaluations, the NLS has begun the pre launch of its digital talking-book system. 'We are now able to place the digital talking books and players directly in the hands of several thousand of our patrons,' said NLS director Frank Kurt Cylke. More than 5,000 digital players and 17,500 books have been delivered to 8 NLS network libraries. Patrons, libraries, and machine-lending agencies will provide input to an independent consultant, who will analyze the data to identify any issues to be resolved before mass production begins". For more information, call (800) 424-9100 and your name will be referred to your cooperating library. If you are an electronic subscriber, go to this link for the NLS number in your state <http://www.loc.gov/nls/>.



## **Bilateral Injections of Anti-VEGF Drugs for Treatment of Bilateral Macular Degeneration Appear Safe And Convenient: Presented at ARVO**

Cameron Johnston, Reporter

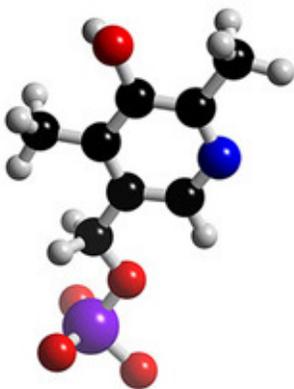
FORT LAUDERDALE, Fla — May 5, 2009 — "There is no particular increase in risk for patients with bilateral macular degeneration treated with bilateral injections of intravitreal anti-vascular endothelial growth factor inhibitors (VEGF), according to a study presented at the Association for Research in Vision and Ophthalmology (ARVO) 2009 Annual Meeting. In addition, there was a strong patient preference for the ease and convenience of having bilateral rather than unilateral injections, researchers said in a poster presentation on May 3.

'Overall, this study demonstrates that it is safe to offer bilateral injections of anti-VEGF drugs to patients who have active choroidal neovascularisation in both eyes', concluded Dr. KariAnne Galler, MD, University of Iowa, Iowa City, Iowa".

## **Charles Bonet Syndrome: A Report from the UK**

"Most people who have CBS have it as a side-effect of macular degeneration. It is thought that up to 60 per cent of patients with severe vision loss develop CBS. CBS is caused by lack of visual stimulation rather than mental dysfunction.

Usually, upon opening our eyes, the nerve cells in the retina send a constant stream of impulses to the visual parts of the brain. If the retina is damaged, the stream of impulses are reduced which causes other parts of the brain to become hyperactive. So when the brain isn't receiving as many pictures as it is used to, it builds its own artificial images from the areas we use every day to process faces, objects, landscapes and colors. What you hallucinate depends on which part of the brain these increases are located".



## **Vitamin B Newsflash**

Want to prevent macular degeneration? Make sure you're getting enough vitamin B12, vitamin B6, and folate. A study funded by the National Eye Institute involved over 5,200 women over the age of 40. After 7 years, the women who took a daily supplement of the three B vitamins enjoyed a 41% reduced risk of MD, compared to the women in the placebo group.

## Neurotech Pharmaceuticals Phase 2 Trials Demonstrate Consistent Biological Effect on Photoreceptors: Product NT0501

<http://www.neurotechusa.com/> Lincoln, Rhode Island

“Neurotech’s core technology platform is Encapsulated Cell Technology (ECT), a unique technology that allows for the long-term, sustained delivery of therapeutic factors to the back of the eye. ECT implants consist of cells that have been genetically modified to produce a specific therapeutic protein and are encapsulated in a semi-permeable hollow fiber membrane. The diffusive characteristics of the hollow fiber membrane are designed to promote long-term cell survival by allowing the influx of oxygen and nutrients while simultaneously preventing direct contact of the encapsulated cells with the cellular and molecular elements of the immune system. The cells continuously produce the therapeutic protein that diffuses out of the implant at the target site. ECT thereby enables the controlled, continuous delivery of therapeutic factors directly to the retina, bypassing the blood-retina barrier”.

### High Fiber Cuts Risk of MD

Eating oatmeal, high-fiber cereals, and whole-grain breads cuts the risk of macular degeneration by about 39 percent, shows a recent study. Complex carbs prevent blood sugar swings that can damage delicate cells in the center of the retina.



### Vigorous Exercise May Help Prevent Vision Loss

Two new studies analyzed the data from the National Runners Health Study. The studies tracked approximately 41,000 runners for a period of almost eight years. They found that engaging in physical activity reduced the risk of both cataracts and age-related macular degeneration. The studies are published in the January 2009 issue of Investigative Ophthalmology and Visual Science. It was supported by grants from the National Heart Lung and Blood Institute.

### New Technology Reaches Rural Patients in Tennessee

OAK RIDGE, Tenn. “In the blink of an eye, people at risk of becoming blind can now be screened for eye diseases such as diabetic retinopathy and macular degeneration.

Using a technology originally developed at the Department of Energy’s Oak Ridge National Laboratory to understand semiconductor defects, three locations in Memphis have been equipped with digital cameras that take pictures of the retina. Those images are relayed to a center where they are analyzed and the patient knows in minutes whether he or she needs additional medical attention.

‘Once we’ve taken pictures of the eyes, we transmit that information to our database, where it is compared to thousands of images of known retinal disease states,’ said Ken Tobin, who led the ORNL team that developed the technology. From there, the computer system is able to determine whether the patient passes the screening or it provides a follow-up plan that includes seeing an ophthalmologist.

In coming weeks, cameras will be installed at four rural and urban health care centers serving the Mississippi Delta, and another camera is planned for a federally funded health center in Chattanooga. Eventually, the goal is to have hundreds of cameras throughout the United States and beyond. If disease can be detected early, treatments can preserve vision and significantly reduce the occurrence of debilitating blindness.

Leading the medical portion of the project is Edward Chaum, an ophthalmologist and Plough Foundation professor of retinal diseases at the University of Tennessee Health Science Center

(<http://www.eye.utmem.edu>) Hamilton Eye Institute in Memphis. Chaum, the lead researcher on the National Eye Institutes grant that has funded much of this research, is especially excited about the number of people, particularly the indigent and underserved communities, that this technology will help”

## **The Tomato: A Fruit or a Vegetable?**

Author: lyabo Ayandare

“Though technically a fruit, tomato is used as a vegetable for cooking purposes. Whatever its use, the tomato is known to provide a number of nutritional benefits to its users. It is well known for its high Vitamin C content, but also contains significant amounts of vitamin A, B, including niacin and riboflavin, magnesium, phosphorous and calcium. Tomato is also a good source of chromium, folate and fibre.



Free radicals in the body can be flushed out with high levels of Lycopene, and the tomato is so amply loaded with this vital anti-oxidant that it actually derives its rich redness from the nutrient.

Lycopene is not a naturally produced element within the body and the human body requires sources of Lycopene in order to make use of this powerful anti-oxidant. While other fruits and vegetables do contain this necessary health ingredient, no other fruit or vegetable has the high concentration of Lycopene that the tomato takes pride in.

Researchers introduced Lycopene into pre-existing cancer cell cultures and the Lycopene prevented the continued growth of these cultures. This is pretty powerful evidence that the health benefits of eating a tomato are really quite phenomenal. It takes as little as 540 millilitres of liquid tomato product to get the full benefits of Lycopene. This means that a daily glass of tomato juice has the potential to keep a person healthy for life.

Research is now slowly proving that there is a high likelihood that the consumption of tomatoes and tomato based products actually may prevent serum lipid oxidation and reduce the risk of macular degenerative disease. The two main components of tomatoes, coumaric acid and chlorogenic acid, fight against nitrosamines, which are produced in the body and are the main carcinogens found in cigarette smoke. Vitamin A, present in tomato aids, aids in improving vision, preventing night-blindness and macular degeneration. Tomato keeps the digestive system healthy by preventing both constipation and diahorrea. It also prevents jaundice and effectively removes toxins from the body.

A study conducted by Journal of the American Medical Association shows that daily consumption of tomato reduces the oxidative stress in type 2 diabetes.”

### **Always Remember This:**

You don't stop laughing because you grow old,  
You grow old because you stop laughing!

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### **CONTACTING MDF**

To speak to a support representative directly, you may call 1-888-633-3937. If you reach our voice mail, please speak slowly and distinctly.

**MAKING CONTRIBUTIONS:**

Please make checks payable to Macular Degeneration Foundation, Inc., P.O. Box 531313, Henderson, Nevada 89053, or you may use your credit card on our web site <http://www.eyesight.org>. Your contributions make our services available as a support system for macular degeneration patients in the following ways:

1. We provide toll-free lines for personal contact assistance.
  2. We mail brochures and other printed materials upon request.
  3. We support an award-winning web site that provides the latest up-to-date information.
  4. We fund research proposal grants to provide therapies for both the wet and dry form of AMD.
- Contributions marked "research" are used 100% for research.

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MDF was founded in 1992 by Edmund J. Aleksandrovich Ph.D (a victim of macular degeneration). It provides MD patients and their families with the information necessary to understand the disease, the latest news concerning ways to cope with the disease, and supports the efforts of researchers to find a cure.