

Macular Degeneration
Foundation, Inc.

P.O. Box 531313
Henderson, Nevada
89053

FREE MATTER FOR THE BLIND

Macular
Degeneration
Foundation

The Magnifier

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Seahorse Study

Researchers in Australia recently found that seahorses' eyes share similarities with the human eye.

If they can discover how to imitate the development of the seahorse's fovea, the science could translate to possible regeneration therapies to this vital region of the eye.

Drug Research

Visual Cycle Modulation:

The FDA recently granted fast-track approval to Acucela for the development of ACU-4429, which slows the rod visual cycle to prevent accumulation of harmful deposits. It is thought that by slowing the visual cycle, accumulation of lipofuscin precursor and retinal fluorophore A2E may be slowed or obviated, thus preventing downstream retinal degeneration.

In phase 1 studies, the drug was proven to be safe, and a phase 2 trial has been launched. A similar mechanism of action is being explored with fenretinide, a drug that prevents binding of retinol to the retinal binding protein in the bloodstream, blocking its passage into the retinal pigment epithelium, thus slowing the visual cycle.

<http://www.acucela.com/pipeline-candidates.html>

Best Light Position for Reading

The proper positioning of lighting is important and possibly the deciding factor in whether a person will be able to read using regular (or strong) glasses.

To get the most benefit from lighting, you should try and minimize glare and maximize the light on what you are looking at. The best way to do this is:

Have the light on your better side. This minimizes reflected light into your better eye.

DO NOT let the light hit your glasses. This causes much glare, and you will rapidly become uncomfortable and stop trying to read.

To keep the light from hitting your glasses, have the light low over your better side (see picture).

Have a light with a solid cover, not a lamp with a translucent cover that will allow light to spill out and hit your eyes/glasses.

Try light bulbs of varying intensity and see which strength is most comfortable for you.

For most people, a bulb that gives off white light (rather than the yellowish light of standard incandescent bulbs) will work best. A white light increases the contrast between standard black print and white paper.

Note: a new desk lamp has been developed specifically for low vision users. Contact Mike Ju at (408) 966-2438 for more information



Clinical Trial Information

Call the National Eye Institute at:

800-411-1222 or
301-496-5248

www.nei.nih.gov

News Alert

Reader's Digest and News Week are now available in audio format (free) from The American Printing House for the Blind.

They will soon have the digital format that can be used with the new player from the Library of Congress.

For more information call 1-800-223-1839 and press #3 to speak to the Magazine Department.

Resource Consultant

For assistance identifying agencies in a specific area, call Lee Boncher, Resource Consultant at 1-888-866-6148



Information for Veterans with Vision Loss

Vision loss may be covered even if not service connected (such as most cases of macular degeneration) and you do not have to be totally blind.

Eligibility

The best way to establish eligibility is to find your discharge papers (DD214) and go to your closest Eligibility Center. All VA hospitals, and many outpatient clinics, have Eligibility Centers. To find one near you, call your local VA facility or 1-877-222-9387 or go to: <http://www2.va.gov/directory>

Eligibility is established by filling out a form -the VA 10-10EZ form and providing your DD214. You can obtain a

10-10EZ form by going to <https://www.1010ez.med.va.gov/sec/vha/1010ez>. You can also register online, beginning at this site. To be eligible, veterans must have served on active duty for any length of time before September 1980 or for 24 months continuously after that date.

Coordinators

The VA has special counselors, called VIST coordinators (Visual Impairment Service Team) to help the blind and visually impaired. They may be contacted through your local VA facility, and will help and guide you in obtaining benefits from the VA. To find the VIST

coordinator nearest you, call 1-202-461-7317 or go to <http://www.va.gov/BLINDREHAB/VIST.asp>.

Priority 4

Some VA services are subject to income requirements. However if you are legally blind (visual acuity of less than 20/200 or visual field 20 degrees or less)

"find your DD214 discharge papers"

the income requirements may be waived by claiming "Priority 4" or "Catastrophic Disability". To find out about this, talk to your VIST coordinator, call 1-877-222-8387. The VA form for this is VA10-0383.



VisionCue Introduces Touch Memo

The new Touch Memo is a digital voice labeler that will record personal descriptions of items such as groceries, cosmetics, medicines, files, keys, etc. for later playback. The Touch Memo is used together with specialty labels that are placed on objects. The labels have a unique identification that the Touch Memo uses

to reference a vocal "tag" associated with that object. For instance, a user may place a label on a pill bottle and records the vocal tag, "Vitamin C, take 2 pills a day." Later, to play back that vocal tag, just "touch" the label with the Touch Memo to hear the prerecorded "memo". Priced at only \$179.00 this device would take the guess work out

of the identification process for countless products and items in the cupboard or medicine cabinet. Designed for simplicity, even the technologically impaired will enjoy the benefits of identifying what they need quickly.

Call 888-318-2582 or visit visioncue.com for more information

We Appreciate Your Support

Donations

The Macular Degeneration Foundation, Inc. is a tax-exempt, non-profit organization.

Please visit our website at eyesight.org to make a tax deductible donation. Checks may be mailed to:

Macular Degeneration Foundation, Inc.,
P.O. Box 531313,
Henderson, NV 89053

Call: 888-633-3937 (USA)
Call: 702-450-2908 (Intl)
Email: liz@eyesight.org

Microbot May Provide New Drug Delivery for AMD

"A tiny magnetic robot that holds a drug reservoir is injected into the eye, and then can be manipulated via an electromagnetic system. Since it can stay in the eye for months, it can deposit drugs over time, and in specifically targeted places. It can be removed via a magnetic needle. Microbots would obviate the need for multiple eye injections for a condition like macular degeneration. Animal studies are expected to begin soon in Zurich, Switzerland."

Dr. Risa Schulman

eyedocnews.com



How to Overcome Low Vision

Self-Help Guide

People who are in the intermediate to late stage of vision loss may consider making the transition from visual to nonvisual practices in some daily activities.

A free guide is available from MD Support that features a self evaluation of 21 personal daily living activities.

It is available for download at www.mdsupport.org/guide.pdf

Patients often pursue clinical trials in an effort to be part of new cutting-edge therapy. The value clinical trials offer can be disappointing. The reality is efficacy for a new drug is based on less vision loss over a year's time, not necessarily on a cure.

Patients will go to one university hospital after another to pursue professional expertise that can bring the disease to a halt. The reality is that treatment options are limited. Retinal specialists have basically the same method of operation and standard treatments based on published data and FDA approved therapies.

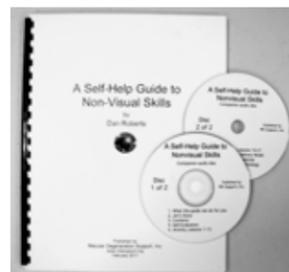
Ultimately, patients must become interested and knowledgeable about ways to overcome low vision. Ophthalmologists and Retinal Specialists are trained to do surgery, prescribe pills, or injection-specific therapies. The next logical step is to find ways to successfully transition into low vision.

For concise information to help patients with low vision, you may call our toll-free number 1-888-633-3937 to request the booklet (plus two audio CD's), **"Transition to Low Vision"**. The information was compiled by Dan Roberts, author of "The First Year: Age-

Related "Macular Degeneration".

Dan's amazing ability to organize a great deal of information makes this self-help booklet an incredible resource for any patient that needs suggestions and ways to be successful.

To learn about support group opportunities or how to get a copy of his best selling book, Dan can be reached at 816-761-7080.



iPad2 Offers Practical Features

The most common complaint about low vision technology is the high price of assistive devices.

With government assistance available only to veterans, many people simply cannot afford to purchase the products that can make their lives so much easier. With this year's introduction of Apple's new iPad2, however, that has almost become

a non-issue. For less than half the cost of most electronic magnifiers, visually impaired people can now own virtually every low vision gadget all wrapped up in a device no larger than a thin book.

The iPad2 can read to you in 21 languages, magnify images and text, tell you what color your shirt is, guide you across town,

magnify the face of your grandchild, call a friend, shop online, manage your finances, identify currency, help you type a letter, read Braille, tell the date and time, and so much more. And it can all be done using tactile buttons or touch screen controls. Apple also offers a year of personal training on the iPad2 for \$99.

Mother Makes Good Use of iPad

Mrs. O'Brien realized she could read her daughter's iPhone. Her children brought her an iPad and she calls it an 'eye opener.'

The bigger display allows her to zoom in on text and images.

She's now able to read, browse the web and zoom in on her kids' faces.

VA Contact Information

1) The main phone number for VA Healthcare is 1-877-222-8387. The main VA home page is www.va.gov

2) Web address of VA services in the US <http://www2.va.gov/directory/guide/home.asp?isflash=1>

3) To obtain 10-10 EZ form or start registration online: <https://www.1010ez.med.va.gov> or call 1-877-222-8387

Complement Inhibition

Scientists are pursuing a line of research involving complement inhibition, which essentially seeks to reduce inflammation. The current theory is that complement plays a role in drusen formation. By blocking complement, drusen may be prevented or possibly reversed. Complement may also play a role in premature cellular death of the retinal pigment epithelium cells which can promote formation of geographic atrophy.

Anti-factor D, is being studied by Genentech. Factor D is a known activator of the cascade. Genentech thinks that complement factor D is the most important upregulator of complement effect or molecule production and that blocking factor D can be a very powerful therapy.

See: gene.com



Can You Eat Your Way to Better Eye Health?

Subscribers are interested in what foods they should eat and why. We have published many articles through the years and the “tried and true” way to select what goes into your grocery cart is to pick the most colorful fruits and vegetables.

The most obvious benefit from a colorful diet is ample antioxidant protection. Oxidation causes premature cellular death of the photoreceptors. By eating right we can combat this risk factor. Greens have lutein and zeaxanthin which have been known to decrease the risk of cataracts and AMD. The yellow or orange colors provide beta-carotene, carotenoids, vitamin C and minerals. Foods with Beta-

carotene improve the immune system. Foods with vitamin C improve circulation, prevent inflammation and can repair DNA. When DNA is damaged, you run the risk of cancer, heart disease, and AMD.

Most red fruits and vegetables contain lycopene. Lycopene is an antioxidant that helps fight heart disease and some types of cancer. Tomatoes are the best source of lycopene. When tomatoes are processed or cooked the body can actually assimilate lycopene more easily than when eaten raw.

For more protection add all the blue and purple foods. Blueberries are well known for antioxidant properties. The anthocyanidins in blueberries help

to recycle the rest of the vitamins in your body. Anti-inflammatory properties of blueberries work to strengthen blood vessels. Just a quarter of a cup serving will do the job.

We must add omega-3 oils either in a supplement or by eating salmon or trout 2-3 times a week to bring full value to our nutritional plan.

Fiber is important in many vegetables when eaten raw. Though fiber is essential, the beta carotene is trapped in the fiber. The fibrous veggies must be steamed for the full antioxidant protection.



2 New UK Radiation Treatment Trials

Oraya Therapeutics

recently announced that its 20-minute non-invasive procedure called “IRay”, which delivers precise low energy radiation to the eye structures affected by wet AMD (about the same amount of radiation as a dental x-ray), is being used as part of a clinical trial at King’s College Hospital in London.

If proven to be a success, the IRay will help reduce the need either partially or entirely for eye injections to treat AMD. Preliminary evidence suggests

that the IRay can close the blood vessels that cause loss of vision. Treatment occurs in a clinic, eradicating the need for surgery. Patients sit at the machine with their chin placed on a chin rest. A contact lens is then placed on the surface of the eye to help maintain eye position and tracking. A robot tracks any eye movement and maintains stability, so that the controlled dose of radiation can be precisely delivered.

Neovista Study

Another King’s College trial takes a

different approach. This study tests a new surgical device that delivers an invasive focal dose of radiation (epimacular brachytherapy) to the macula to reduce or eliminate the need for ongoing eye injections.

The trial compares epimacular brachytherapy to ongoing standard treatment with ranibizumab. It is hypothesised that epimacular brachytherapy will reduce the frequency of Lucentis® (ranibizumab) re-treatment that patients require, while maintaining visual acuity.

Astaxanthin

Astaxanthin has been described as the most powerful nutrient ever discovered for eye health ([Magnifier, Dec 2010](#)).

Dr. Mercola, author of the article, recommended taking astaxanthin in sup-

plements because it is only found in two prime dietary sources – microalgae and sea creatures that consume the algae. For more information call 1-800-924-4393.

[See Video](#): Antioxidant Cell Protection - Egg & Apple Experiment

VEGF TRAP EYE Submitted to FDA

An application has recently been submitted to the FDA by Regeneron for VEGF TRAP EYE. Leonard S. Schliefer, M.D., Ph.D., President and CEO of Regeneron stated, “We are extremely proud to have conducted the largest global Phase 3 clinical program in patients with wet AMD, which demonstrated that patients treated with VEGF Trap-Eye 2 mg every two months, following three loading doses, were able to be dosed with fewer injections over one year without compromising efficacy. We look forward to working closely with the FDA to bring this potentially important new medicine to patients with wet AMD “.

regeneron.com