



# The Magnifier

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## COMPUTER SOFTWARE

CDESK - A unique and inexpensive screen reader/magnifier with a desktop interface connecting to seven most commonly-used applications.

On October 28th, the software firm, AdaptiveVoice, announced that they have released a new product addition to the existing CDesk software product line. The new product named CDesk For Media, is designed to allow low vision and blind clients to easily download books and periodicals from the National Library Service, BARD system in THREE SIMPLE STEPS.

With CDesk For Media, the client can locate and download their chosen book in THREE SIMPLE STEPS.

- 1) Enter the book title or author
- 2) Choose from the vocalized results list
- 3) Press ALT + G to start the download process

The CDesk For Media software will login into BARD, find the books or content, download the content, and decompress the downloaded content onto your USB storage drive or Victor Reader device.

The CDesk for Media software utilizes high contrast screen, user controlled magnification, simplistic keyboard shortcuts and is fully speech enabled.

The full retail price for CDesk For Media is \$39. The software is available for purchase on the website at <http://www.cdeskforbooks.com/>.

Email: [info@adaptivevoice.com](mailto:info@adaptivevoice.com)  
 Website: <http://www.adaptivevoice.com/>  
 Phone: (949) 436-7760

## Macular Degeneration Foundation

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P.O. Box 531313  
 Henderson, NV 89053

Website:  
[www.eyesight.org](http://www.eyesight.org)

Telephone:  
 1-888-633-3937

## RETINAL IMPLANT UPDATE

Second Sight Retinal Implants, a leader in this field of technology, is located in Sylmar, California. Since 1998 they have invested an enormous amount of research into a retinal implant that would restore vision.

Second Sight states: "There are several different ways to build a retinal implant, but all of them use the same underlying mechanism. By electrically stimulating remaining healthy nerve cells in the retina using an electrode, sensations of light can be elicited in the person's visual field, thus mimicking the action of light-sensitive photoreceptors that were damaged by disease. The more electrodes you have, the more dots the person sees (the Argus II has 60). And so if you place enough of them in a rectangular array, and zap them according to signals fed wirelessly from a camera mounted in a pair of spectacles worn by the subject, blocky images start to take shape.

The first such device is about to be granted clinical approval in Europe and will then go on sale. Call Second Sight at 818-833-5000 for more information.

### More Information on Retinal Implants



Retina Implant AG is a German-based company that is developing an electronic retinal prosthesis. Dr. Eberhardt Zrenner is the director of the Institute for Ophthalmic Research at the University of Tübingen in Germany. Retina Implant's technology consists of a microchip with 1500 electrodes and does not require external equipment, such as a camera, to function.

The chip is designed to be implanted subretinally, specifically in the macular region, which is believed to be the ideal location because it is the most sensitive area responsible for producing clear images in sighted people.

During the company's first human clinical trial involving 11 patients, several were able to recognize foreign objects and combine letters to form words, or essentially, read at a basic level.

The second human clinical trial began in May 2010 and will involve up to 50 patients in multiple sites across Europe including the UK, Germany and Italy.

Pending positive results from the second trial, Retina Implant's microchip will have met the requirements for CE Mark making the technology commercially available in Europe. In the future, patients who suffer from blindness due to other conditions like age-related macular degeneration (AMD) may also be candidates for retinal implants.

For more information, call (781) 684-0770 to talk with Kirsten M. Fallon, Senior Account Executive, Schwartz Communication, in Waltham Ma.

## VEGETABLES: TO COOK OR NOT TO COOK

Studies have shown for many years that many vegetables have beta-carotene trapped within the fibre of the vegetable. When these vegetables are cooked the beta-carotene is released and is easily assimilated by the body. Cooking vegetables also releases calcium, lutein, lycopene, magnesium and iron from vegetables that would otherwise not be available to the body.

However, water is the enemy when it comes to cooking. Cooking dry by grilling, roasting or stir-frying will ensure your body is capturing the necessary nutrition from your vegetables. Steaming is also a great way to prepare food that is tasty and easily absorbed nutritionally. Did you know you could triple the amount of calcium from 3 cups of spinach by steaming vs. raw?

That said, some vegetables are healthier when eaten raw. Cruciferous vegetables such as cabbage, broccoli, cauliflower, bok choy and kale contain glucosinolates that are converted to anti-cancer compounds called isothiocyanates.

An enzyme in cruciferous vegetables converts glucosinolates to isothiocyanates when they're chopped or chewed. But this enzyme is easily destroyed by heat. That means that heating cruciferous vegetables reduces the conversion of glucosinolates to their active isothiocyanates, which may reduce their cancer-fighting potential. You will preserve more phytochemicals in these vegetables if you steam them rather than boil or microwave. (Leslie Beck, "Is Spinach More Nutritious Raw or Cooked"?)

We can't ignore the benefit of fibre from vegetables. A balanced diet always recommends having a raw vegetable salad as well as a steamed vegetable as part of your daily menu choices.



## JOHNS HOPKINS SCHOOL OF MEDICINE STUDY

Eating more fish and shellfish rich in omega-3 fatty acids appears to slow progression of advanced macular degeneration, a common cause of age-related blindness. Researchers from the Wilmer Eye Institute at Johns Hopkins School of Medicine studied the diet habits of 2,390 people on Maryland's Eastern Shore. Those who had the highest weekly intake of fish such as oysters, crabs, and tuna were significantly less likely to have advanced disease, said study author Bonnielin Swenor. Although the researchers theorize that the positive effects are from omega-3 fatty acids, as suggested from previous studies, they say that it is important to keep in mind that there may be other factors, including lifestyle habits that affect eye health, such as not smoking and controlling blood pressure.

## YOU GOTTA START SOMEWHERE: ATTITUDE OF GRATITUDE

If you haven't got all the things you want, be grateful for the things you don't have that you don't want!

## SHORT-TERM SAFFRON SUPPLEMENTATION AMELIORATES EARLY AMD

Invest Ophthalmol Vis Sci. 2010;51:6118-6124.



Short-term supplementation of saffron, an antioxidant, was shown to improve retinal function in patients with early macular degeneration, a study found.

“Saffron’s major constituents, the compounds crocin and crocetin, which are derivatives of carotenoids, are powerful antioxidants, with antiapoptotic characteristics,” the study authors said. These properties, together with preclinical evidence, provide a strong rationale for testing the effect of saffron supplementation in early AMD.”

The prospective study included 25 patients with bilateral early AMD. Mean patient age was 65 years.

Eleven patients received a daily dosage of 20 mg oral saffron. A comparator group of 14 patients received placebo for 90 days. Treatment regimens were crossed over after a 15-day washout period and continued for 90 days.

Investigators conducted focal electroretinography and clinical examinations at baseline and 3 months after initialization of treatment or placebo. Primary outcome measures were focal electroretinogram amplitude, phase and modulation. Study results showed that electroretinogram modulation thresholds decreased a mean 0.26 log units in the saffron group and 0.003 log units in the placebo group. Visual acuity improved by one line in 20 patients in the saffron group and was unchanged in the placebo group.

Saffron can be found in some grocery/healthfood stores. It is very expensive and the most effective way to use it is as a spice in cooking.

## ASTAXANTHIN

Dr. Joseph Mercola, M.D., best-selling author and osteopathic physician, called astaxanthin “the most powerful nutrient ever discovered for eye health” in his most recent newsletter. He said this carotenoid is “leaps and bounds more powerful” than beta-carotene, alpha-tocopherol, lycopene and lutein, and exhibits “very strong” free radical scavenging activity.

Calling it, “in a league of its own”, he said astaxanthin is different from other nutritional elements because it is far more effective than other carotenoids at singlet oxygen quenching, which reduces the damaging effects of sunlight and various organic; crosses the blood-brain barrier and the blood-retinal barrier (beta carotene and lycopene do not), which increases eye health; is soluble in lipids, so it incorporates into cell membranes; is a potent UVB absorber; and is not associated with any adverse reactions.

Mercola specially called out astaxanthin’s benefits to eye health saying it “may be the ultimate carotenoid for eye health and prevention of blindness.” He said astaxanthin supplementation could be effective in preventing or treating a whole host of eye diseases, including macular degeneration. He recommended taking astaxanthin in supplements because it is only found in two prime dietary sources—microalgae and sea creatures that consume the algae (e.g. salmon, shellfish and krill) which are lacking in most diets.

**ATTENTION: AARP MEMBERS**

AARP has a discount program for eye exams with participating optometrists. Exams are \$45.00. There is a 30% discount on glasses and 10% discount on contact lenses. The participating vendors are: JC Penney, Pearl Vision, LensCrafters, Sears, and Target. If you are using an optometrist with one of these companies, check to see if they accept the AARP discount.

**EYE PROTECTION IS IMPORTANT SUMMER AND WINTER**

Cocoons brand sunglasses offer specific protection from the sun and glare from the snow. It is extremely important to protect your eyes all year around. In addition to the product for outdoors, Cocoons are also available as indoor protection. Wearing anti-glare glasses inside your home or out in public gives your eyes extra protection. In the home we are bombarded by UV rays from computer, TV, and from the sun coming through the windows. Many of our subscribers who were previously complaining about eye discomfort found that by wearing the anti-glare in the home made their eyes more comfortable. Anti-glare Cocoons worn in the mall or public places offer a first line of defense for the eye against many airborne and environmental risk factors. To get more information on these products, call Optogon Corp. at 800-924-4393.



Researchers find no difference in drugs for macular degeneration

**RESEARCHERS FIND NO DIFFERENCE IN DRUGS FOR AMD**

(Boston) – Researchers from Boston University School of Medicine (BUSM) and the VA Boston Healthcare System have conducted a study that failed to show a difference in efficacy between Bevacizumab (Avastin) and Ranibizumab (Lucentis) for the treatment of age-related macular degeneration (AMD). The study, which appears currently on-line in Eye, is believed to be the first study to describe one-year outcomes of a prospective, double-masked, randomized clinical trial directly comparing Bevacizumab to Ranibizumab. Last October, these same researchers published early, six month outcomes of the same study, which also failed to show a difference in efficacy between these two drugs for treating AMD.

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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.