

NEWS

Macular Degeneration Research



BETTER HEALTH THROUGH RESEARCH

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Healthy Lifestyles Can Lower AMD Risk

New study confirms impacts of diet, exercise, smoking



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Women who exercise regularly, don't smoke and eat a healthy diet are three times less likely to develop age-related macular degeneration as they get older, according to a comprehensive study by the University of Wisconsin.

The study of 1,313 women from Oregon, Iowa and Wisconsin found that about 18 percent of women with unhealthy lifestyles went on to develop age-related macular degeneration (AMD), as opposed to 6 percent of women with healthy lifestyles.

"This is wonderful news because AMD does run in families and people worry about passing the condition on to their children," says lead investigator, Dr. Julie Mares, professor of ophthalmology and visual sciences.

"Because lifestyle changes improve our odds of having healthy eyesight as we age, we can model lifestyles for our children and grandchildren that could lower their risk of eventually getting this condition."

The study awarded high scores to women who consumed leafy green and orange vegetables, fruits, dairy, grains and legumes. Low scores were given to diets in which more than 20 percent of calories came from fats, alcohol and added sugar.

In addition to confirming the impacts of smoking on eye health, the Wisconsin study is the first to suggest that higher amounts of exercise also lower the likelihood of early AMD.

A variety of resources are available for people who suffer from macular degeneration. For a list of agencies that offer counseling, training and other special services, please call Macular Degeneration Research at **800-437-2423** or visit our website at www.ahaf.org/macular.

Chairman's Corner

An ounce of prevention



So much of the work supported by Macular Degeneration Research is focused on finding a cure for this terrible degenerative condition. But it's every bit as important to know how to slow or even prevent AMD from taking root.

In this issue of **Macular Degeneration Research News**, you'll learn that diet and exercise are an increasingly important part of the equation. A major new study has confirmed that women who live a healthy lifestyle are three times less likely to contract AMD as they get older. And another study has confirmed that a seafood diet rich in omega-3s may prevent seniors from developing advanced AMD.

This is good news because it means that, by making healthy choices day in and day out, we can begin to take charge of our destiny. The more we take care of ourselves now, the more our eyes will benefit down the road.

Brian K. Regan, Ph.D.

New Evidence for Effectiveness of Omega-3s

A fish and shellfish diet rich in omega-3s may help prevent older people from developing advanced age-related macular degeneration (AMD), according to a study by the Johns Hopkins School of Medicine that followed more than 2,000 seniors along Maryland's Eastern Shore.

“Our study corroborates earlier findings that eating omega-3-rich fish and shellfish may protect against advanced AMD,” said Dr. Sheila K. West, Ph.D. “While participants in all groups, including controls, averaged at least one serving of fish or shellfish per week, those who had advanced AMD were significantly less likely to consume high omega-3 fish and seafood.”

The study failed to find a similar health effect for zinc, but Dr. West pointed out that the levels of zinc obtained from seafood are low compared to supplement levels.

Avastin Update

Last December, the U.S. Food and Drug Administration recommended removing Avastin from the list of medications to treat advanced breast cancer, citing several studies which showed the drug was neither safe nor effective in treating this particular cancer. However, Avastin will continue to be approved for treating other types of cancer, and it will remain a widely prescribed treatment for AMD.

By blocking the growth of blood vessels, Avastin helps prevent retinal vessels from leaking and eliminates the pockets of fluid that impede vision. An ongoing National Eye Institute-sponsored clinical trial comparing the safety and efficacy of Avastin with that of Lucentis for treating AMD is projected to be completed in February 2012.



Macular Degeneration Research is a program of the American Health Assistance Foundation, a charitable organization that complies with the 20 rigorous BBB Wise Giving Alliance Standards.

Research Roundup

FDA gives go-ahead to embryonic stem cell technology clinical trial

The FDA has approved clinical trials for a new treatment that uses embryonic stem cells to treat dry age-related macular degeneration (AMD). The treatment, developed by Advanced Cell Technology, uses stem cells to create new retinal pigment epithelial cells, which are then transplanted into the damaged retina.

The first phase of the trial will determine whether the transplanted cells are safe and well-tolerated. For more information, patients and caregivers can contact www.clinicaltrials.gov.

Subretinal implants able to restore some vision to blind people

A light-sensitive, externally powered microchip, surgically implanted beneath the retina, has permitted previously blind people to see shapes and objects.

The device, developed by Retinal Implant AG and the Institute for Ophthalmic Research at Germany's University of Tuebingen, allowed three blind patients to locate bright objects on a dark table. In addition, one of the patients was able to walk around a room by himself, name objects like a fork or knife, read large letters and differentiate among shades of gray.

The results, according to Dr. Eberhart Zrenner, "provide strong evidence that the visual

functions of patients ... can, in principle, be restored to a degree sufficient for use in daily life." He cautions, however, that "the ultimate goal of broad clinical application will take time to develop."

Prosthetic retina could open up new fields of vision

A newly developed prosthetic retina has enabled blind mice to see everything from faces to Central Park vistas, according to scientists at Weill Cornell Medical College in New York, and might one day restore vision for people with AMD and other retinal diseases.

Currently, artificial retinas require surgery to implant electrodes deep in the eye, and they must be powered by outside batteries. By contrast, the technology devised by Weill Cornell scientists will require no surgical implant, only gene therapy and a pair of high-tech spectacles. Embedded in the glasses is a tiny camera or encoder chip that translates images into retinal code, allowing the eye's ganglion cells to relay the images to the brain.

"It's a pretty novel strategy," MIT bioengineer Ed Boyden told *Technology Review*. "I haven't seen anything out there like that yet. The data looks as if they could do certain things that could be quite powerful, stimulating the retina in a way that can cause neurons to more accurately simulate normal vision."

New Educational Website for Kids!

Macular Degeneration Research has created a new educational website, Children's Corner™ for Macular Degeneration, to teach children about the disease through stories, interactive games and sharing activities.

"We are pleased to launch this unique and innovative approach to helping family members better understand this difficult disease," said Stacy Pagos Haller, president of Macular Degeneration Research. "This disease affects 11 million Americans, and the Children's Corner provides a much-needed resource to bring about increased sensitivity."

This inaugural site will provide kids with a general understanding of the disease and ways to help friends or family members. The Children's Corner (www.childrenscorner.org) includes age-appropriate content that enables learning through stories, games, and collaborative features such as an e-scrapbook and message board. Educational resources are also provided for students, teachers and health-care professionals.



A Retirement Plan that Gives Back



Charitable gift annuities benefit givers and receivers alike

If you want to advance the work of Macular Degeneration Research and ensure a steady stream of income for yourself or others, then consider a charitable gift annuity.

A charitable gift annuity is a contract under which you transfer cash or other assets, such as stocks or bonds, to Macular Degeneration Research. In exchange, you receive a fixed sum of money, paid out over a lifetime period.

An annuity can be made for a single party or for two parties – for example, a husband and wife, an aunt and a niece, or a father and a daughter. Many times, a married couple will choose an annuity to ensure that both parties enjoy an income for life.

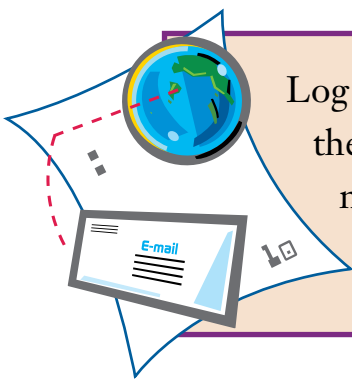
A charitable gift annuity is considered a particularly good investment for people 60 years of age or older. Annuitants receive:

- Guaranteed lifetime income;
- The option of receiving payments annually, semi-annually, quarterly or monthly;
- Income tax benefits; and
- Competitive annuity payment rates

The minimum amount to establish a gift annuity is \$10,000.

For more information on this unique way of giving, contact Barbara Russell of Macular Degeneration Research at 800-437-2423.

Thank you for thinking of Macular Degeneration Research!



Log on to our website at www.ahaf.org and click on the Macular Degeneration Research link to learn more about what's new in the world of research, as well as important information about risk factors for macular degeneration. You can also follow us on Twitter (@macular) or become a fan on Facebook!

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