



Could a Spice Help Prevent Alzheimer's Disease?

Study funded by Alzheimer's Disease Research boosts the anti-Alzheimer's disease properties of turmeric

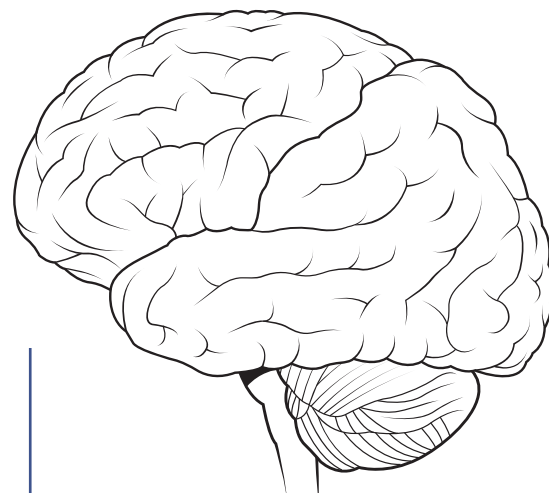
In India, the rate of occurrence of Alzheimer's in the general population is lower than in other nations. With the help of a grant from Alzheimer's Disease Research, Dr. Wolfgang Quitschke of the State University of New York is trying to find out why.

He believes that one of the reasons might be the high consumption of turmeric, a spice commonly found in curry. Turmeric has been used for thousands of years as a natural remedy in India. Its active compound, curcumin, has shown benefits in treating various diseases, and, when fed to laboratory mice, curcumin seems to reduce the development of beta-amyloid plaque, a hallmark of Alzheimer's disease.

However, the task of turning the compound into a therapy has been complicated by scientists' inability to deliver it in high enough concentrations. Dr. Quitschke, a biochemist, has devised a novel formulation that allows the compound to be concentrated 1,000 times over, "certainly much more than you can achieve by oral intake," he adds.

Dr. Quitschke will test this formulation by injecting it in mice with an Alzheimer's-like disease. "The next step," he says, "would be testing whether high concentrations can cause toxicity or adverse events, like immune reactions, in mice."

The benefit of curcumin in humans has not been conclusively proven, but Dr. Quitschke is optimistic. "I have great hopes for the study. It would be fantastic if the new formulation can completely inhibit plaque formation."



The study is expected to run until 2011.

Alzheimer's Disease Research has contributed more than \$100,000 to Dr. Quitschke's work.

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Exercise Plus Mediterranean Diet Boosts Brain Health

Healthy lifestyle reduces Alzheimer's disease risk

The combination of being more physically active and eating a Mediterranean-type diet can significantly lower the risk of developing Alzheimer's disease, according a report published in the *Journal of the American Medical Association*.

"Oftentimes people who exercise also follow a healthy diet and vice versa," says lead author Nikos Scarmeas, M.D., of Columbia University Medical Center. "We wanted to tease out which of these two behaviors may be associated with lower risk for Alzheimer's disease, or if the combination of the two is associated with decreased risk even further."

Researchers found that elderly subjects who were very physically active had a 33 percent lower risk of Alzheimer's disease, while those who followed a Mediterranean diet had a 40 percent lower risk. People who both exercised and maintained a healthy diet had a 60 percent lower risk.

"So it seemed that the more that they were doing in terms of both diet and exercise, the lower was their risk for the disease," says Dr. Scarmeas.

Encouragingly, researchers found that even a modest amount of exercise confers some protection against Alzheimer's disease.

"This study is important," concludes Dr. Scarmeas, "because it shows that people may be able to alter their risk of developing Alzheimer's disease by modifying their lifestyles through diet and exercise."

**Please visit our website
at www.ahaf.org/alzheimers**

Visit us online to learn more about what's new in the world of research, as well as important information about risk factors for Alzheimer's disease.



President's Corner Prevent AND Cure

An ounce of prevention, goes the old saying, is worth a pound of cure. To which I would add the following corollary: In the absence of a cure, let's aim for a ton of prevention.

As this issue of **Alzheimer's Disease Research Review** makes abundantly clear, the decisions we make about how we treat our bodies and what we put into them can be the key to long-term mental health.

We know, of course, that Alzheimer's disease is a complex pathology, with genetic factors that can be every bit as relevant as environmental ones. We know that people can do everything "right" and still develop this terrible disease. That's why Alzheimer's Disease Research continues to fund the work of scientists who are looking for both cures and effective treatments.

In the meantime, though, it behooves us to remember: The better we treat our bodies now, the more they will reward us down the line.

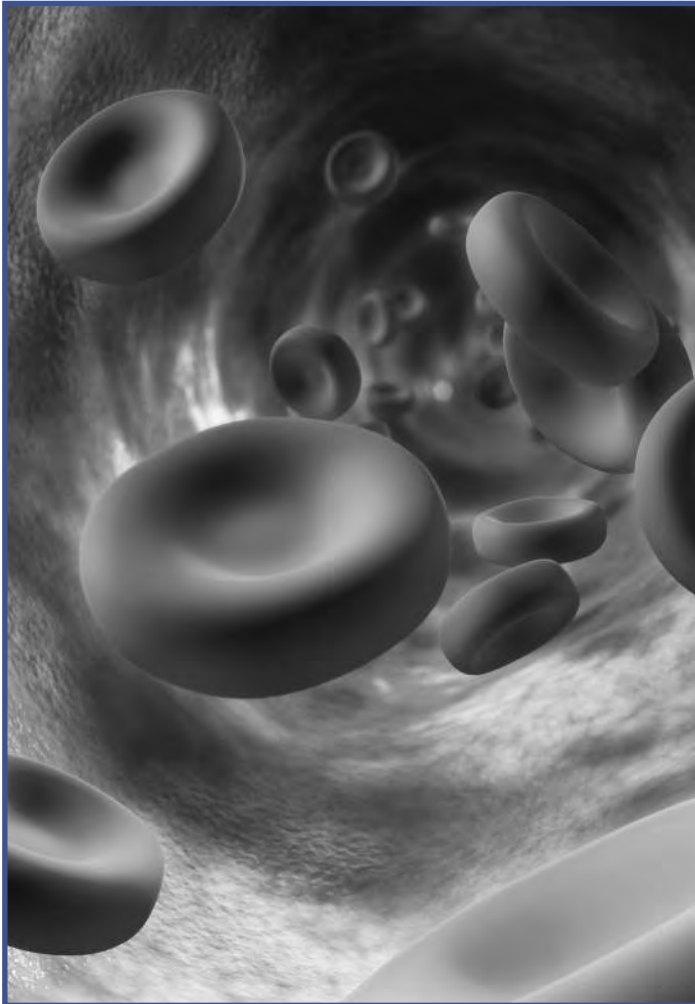
Brian K. Regan, Ph.D.

Reminder!

The Pension Act of 2006 will expire on December 31, 2009. This means that, beginning next year, IRA owners who are 70½ or older will no longer be able to make tax-free charitable gifts of up to \$100,000 per year from their IRAs. Please keep that in mind as you make your end-of-the-year charitable donations.

Antibodies May Also be Anti-Alzheimer's Disease

Studies suggest our own bodies can help stave off dementia



Antibodies found within the human body may markedly lower the risk of Alzheimer's disease and other forms of dementia, two separate studies have recently confirmed.

Researchers with the Stanford University School of Medicine found that many healthy people already have, in their blood and cerebrospinal fluid, antibodies to the beta-amyloid plaque that attacks the brains of Alzheimer's disease patients. Although levels of these antibodies decline with age and with the onset of Alzheimer's disease, the findings suggest that the body's own natural defenses can be harnessed in the fight against the disease.

In another study, scientists with the Mount Sinai School of Medicine in New York found that injecting antibodies directly into the blood stream could lower the risk of Alzheimer's disease and dementia.

Researchers looked at the medical records of people who had been receiving intravenous immunoglobulin (IVIg), a common antibody treatment for immune deficiencies, leukemia, anemia and other diseases. The study found that people treated with IVIg for other conditions also had a 42 percent lower risk of developing Alzheimer's disease.

The study raises the possibility that antibodies could one day be used to inoculate people against Alzheimer's disease and other forms of dementia. "The current Alzheimer's disease drugs on the market treat the symptoms of the disease," says Howard Fillit, M.D. "Immunization could treat the underlying cause."

Researchers caution that large-scale clinical trials are necessary before determining whether IVIg is a safe and effective treatment for Alzheimer's disease.

Please share this newsletter with someone you know who might be interested in learning about some of the latest advancements in research to prevent, treat and cure Alzheimer's disease. The *Alzheimer's Disease Research Review* is published by Alzheimer's Disease Research, a program of the American Health Assistance Foundation, a nonprofit organization located at 22512 Gateway Center Drive, Clarksburg, Maryland 20871, 301-948-3244, 800-437-2423, www.ahaf.org.

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Alzheimer's Disease 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

Cuppa joe good for memory

Start the beans brewing. A recent study found that giving the equivalent of five cups of coffee a day to aged mice with symptoms of Alzheimer's disease actually reversed their memory loss.

After two months, researchers report, caffeinated mice performed much better on memory and cognitive tests than mice who drank plain water – and performed almost as well as mice without dementia.

“The new findings provide evidence that caffeine could be a viable ‘treatment’ for established Alzheimer’s disease, and not simply a protective strategy,” says the study’s lead author, Gary Arendash, of the University of South Florida. “That’s important because caffeine is a safe drug for most people, it easily enters the brain, and it appears to directly affect the disease process.”

Please contact your health care provider before making any significant changes to your diet.

Easy does it

People who are happier and more easygoing may be at lower risk for dementia than their stressed-out peers, according to a study from Sweden’s Karolinska Institutet.

The study surveyed 506 people aged 78 years or older and found that people who were active, outgoing and relaxed were half as likely to develop dementia as people prone to distress.

“In the past, studies have shown that chronic distress can affect parts of the brain, such as the hippocampus, possibly leading to dementia,” says study leader Dr. Hui-Xin Wang. “But our findings suggest that having a relaxed and outgoing personality in combination with an active lifestyle may decrease the risk of developing dementia even further.”

Eat your fruits and veggies (and drink your cocoa)

Chemicals found in fruits and vegetables, as well as in cocoa, tea and red wine, can protect the human brain from Alzheimer’s disease, says a biochemist at Kings College London.

Dr. Robert Williams found that a particular flavonoid called epicatechin can protect brain cells from damage and can, in some cases, improve cognition. Dr. Williams cautions that, before embarking on clinical trials, researchers must identify which flavonoid or combination of flavonoids – and in what quantity – will have the most positive effects.

A Retirement Plan that Gives Back

Charitable gift annuities benefit givers and receivers alike

If you want to advance the work of Alzheimer’s Disease 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 Alzheimer’s Disease 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 55 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 \$5,000.

We are not able to accept annuities from parties in Hawaii, North Dakota or Arkansas.

For more information on this unique way of giving, contact Gayle Handiboe of Alzheimer’s Disease Research at 1-800-437-2423.

Thank you for thinking of Alzheimer’s Disease Research!