



Natural Standard

The Authority on Integrative Medicine

Copyright © 2006 Natural Standard

December 2006

Natural Standard provides high quality, evidence-based information about complementary and alternative therapies. For more information, please visit www.naturalstandard.com.

Integrative Therapies for Seizures



Non-conventional medical treatments may help treat and prevent epileptic seizures without the side effects associated with antiepileptic drugs (AEDs), a new study suggests.

Researchers at the Alder Hey Children's Hospital in Liverpool, England explained that in the past twenty or so years, there has been a rapid expansion in the number and types of AEDs available. However, with this rise in modern medicine there has been increasing concern among parents of their unwanted side effects.

According to researchers, seizure control is achieved in approximately 75 percent of children treated with conventional AEDs, but non-conventional medical treatments, surgical procedures, dietary approaches and other non-pharmacological approaches may have a role to play in those with intractable seizures or AED toxicity.

The study noted that many of the approaches are largely based on common sense and are currently integrated into common practice. Examples include avoidance techniques and lifestyle advice. Other alternatives require further investigation and may be impractical in children.

Several human studies report a reduction in the number of monthly seizures with the use of Sahaja yoga, when it is added to standard anti-seizure drug treatment, or a yoga meditation protocol. This research is preliminary, and better studies are necessary before a firm conclusion can be drawn.

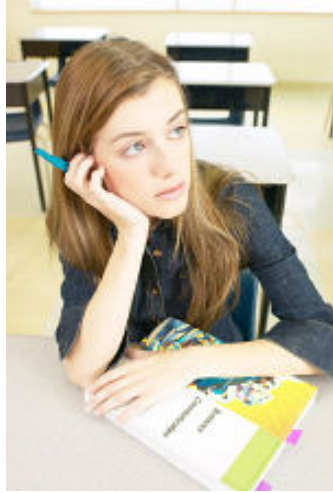
For more information on epilepsy, please visit [Natural Standard's Condition Center](#).

Reference: 1) Kneen R, Appleton RE. Alternative approaches to conventional antiepileptic drugs in the

[Integrative Therapies for Seizures](#)
[Alternative Treatment for Kids with ADHD](#)
[Komen Breast Cancer Foundation Accepting Research Proposals](#)
[Stretching for Foot Pain](#)
[Elderly Endurance Athletes and Heart Disease](#)
[New Frontiers 2007](#)
[Wild Wheat Gene](#)
[CDC: How to Prepare for the Flu](#)
[13th Annual Symposium on Complementary Health Care](#)
[Inside Natural Standard](#)

management of paediatric epilepsy. Arch Dis Child. 2006 Nov;91(11):936-41. [View Abstract](#).

Alternative Treatment for Kids with ADHD



Researchers may have discovered a new treatment for children with attention-deficit-hyperactivity disorders (ADHD).

In a German study conducted at the University of Tübingen, researchers investigated the effects of self-regulation of slow cortical potentials in children with ADHD.

The researchers explained that slow cortical potentials are slow, event-related direct-current shifts of the electroencephalogram. Slow cortical potential shifts in the electrical negative direction reflect the depolarization of large cortical cell assemblies, reducing their excitation threshold. In the study, training was aimed at regulation of cortical excitation thresholds considered to be impaired in children with ADHD. Electroencephalographic data from the training and the 6-month follow-up were reported, as were

changes in behavior and cognition.

Twenty-three children with ADHD between the ages of eight and 13 years old received 30 sessions each. In addition to the neurofeedback sessions, children exercised during the third training phase to apply the self-regulation strategy while doing their homework.

The study found that after training, significant improvements in behavior, attention and IQ score were observed. All changes were found to be stable at six months follow-up after the end of training.

The study concluded that slow cortical potential feedback may be efficacious and in the absence of a control group, no causal relationship between observed improvements and the ability to regulate brain activity can be made. However, it was shown that good performance in self-regulation may predict clinical outcome. Researchers suggested that regulation of frontocentral negative slow cortical potentials affects the cholinergic-dopaminergic balance and allows children to adapt to task requirements more flexibly.

A previous study found a correlation between low serum free fatty acids and zinc serum levels in children with attention deficit hyperactivity disorder. Two other studies found that zinc supplements reduced hyperactive, impulsive and impaired socialization symptoms, but did not reduce attention deficiency symptoms. Zinc supplementation may be a more effective treatment for older children with higher body mass index (BMI) scores.

For more information on complementary and alternative treatments for ADHD, please visit [Natural Standard's Condition Center](#).

Reference: 1) Strehl U, Leins U, Goth G, et al. Self-regulation of slow cortical potentials: a new treatment for children with attention-deficit/hyperactivity disorder. Pediatrics. 2006 Nov;118(5):e1530-40. Epub 2006 Oct 23. [View Abstract](#).

The Susan G. Komen Breast Cancer Foundation is currently accepting proposals on Environmental Research Methods. The application deadline is December 15, 2006.



Proposals in this category should address current environmental research challenges in laboratory or clinical settings relevant to breast cancer. Preferential consideration will be given to proposals that address specific challenges pertaining to research methodology, measurement standards and assessment instruments, research focusing on mammary-specific models or projects demonstrating potential to enhance clinical application or utility. All proposals should be related to the environment and breast cancer. Proposals will be accepted ranging from \$300,000-\$5,000,000, for two to five year periods.

All applications must be submitted through proposalCENTRAL, an e-grantmaking website. To view the application requirements, applicants must create a user profile, log on and select Apply Now for the Environmental Research Methods Request for Application.

For additional information, please visit www.komen.org/focusedgrants.

For more information on breast cancer, please visit [Natural Standard's Condition Center](#).



Stretching for Foot Pain

A new stretch could help ease the pain associated with plantar fasciitis, a painful condition caused by excessive wear to the plantar fascia of the foot.

The pain usually is felt on the underside of the heel, and is often most intense with the first steps of the day. It is commonly associated with long periods of weight bearing. Obesity and sudden weight gain are also associated with this condition.

The stretch, developed by researchers at the University of Rochester Medical Center, targets the plantar fascia and has a 75 percent success rate in relieving pain and enabling patients to return to full activity in three to six months.



In the study, complete data sets were obtained from 66 patients. The two-year follow-up results showed marked improvement for all patients after implementation of the plantar fascia-stretching exercises, with an especially high rate of improvement for those in the original group treated with the Achilles tendon-stretching program. In contrast to the eight-week results, the two-year results showed no significant differences between the groups with regard to the worst pain or pain with first steps in the morning.

Descriptive analysis of the data showed that 92 percent of the patients reported total satisfaction or satisfaction with minor reservations. Fifty-one patients or 77 percent reported no limitation in recreational activities and 62 patients or 94 percent reported a decrease in pain. Only 16 of the 66 patients reported the need to seek treatment by a clinician.

Researchers concluded that the tissue-specific plantar fascia-stretching protocol may be a key component

for the treatment for chronic plantar fasciitis. Long-term benefits of the stretch may include a marked decrease in pain and functional limitations and a high rate of satisfaction.

For more information on stretching and similar exercises, please visit [Natural Standard's Complementary Practices](#) database.

Reference: 1) Digiovanni BF, Nawoczinski DA, Malay DP, et al. Plantar Fascia-Specific Stretching Exercise Improves Outcomes in Patients with Chronic Plantar Fasciitis. The Journal of Bone and Joint Surgery (American). 2006;88:1775-1781. [View Abstract](#).

Elderly Endurance Athletes and Heart Disease

Elderly marathon runners and other healthy endurance athletes are at risk for cardiovascular disease and the symptoms of heart disease in these individuals may be difficult to distinguish from the effects of training on the heart, a new study reports.

Researchers at the University Hospital in Essen, Germany studied 100 males between the ages of 50 and 72 who had completed at least five marathons in the last three years. The study participants had no current symptoms or known history of cardiovascular disease or diabetes.

MRI scans revealed that, although cardiac chambers were not enlarged, left ventricular mass (LVM) in the marathon runners was significantly higher than in the general population. Researchers explained that LVM is the weight of the muscle of the left ventricle, the main pumping chamber of the heart. The marathon runners had an average LVM weight of 141 grams compared to a normal weight of approximately 77.5 grams.

The change in the heart mass is both an effect of endurance training and an early sign of cardiac disease.

According to the the study, the number of older adults participating in marathon running has risen dramatically in the past decade. However, researchers are concerned that pre-training screening of new endurance athletes doesn't typically account for problems specific to advanced-age runners.

The study concluded that older hearts are effected by endurance sports and that they adapt with hypertrophy, but did not show any ventricular dilatation, which is a common finding in young athletes.

For more information on marathon running and other types of endurance training, please visit [Natural Standard's Complementary Practices](#) database.

Reference: 1) Barkhausen J, Nassenstein K, Hunold P, and Breuckmann F. Cardiac Volumes and Masses in Elderly Endurance Athletes. 2006 Radiological Society of North America, Inc. [View Abstract](#).



new frontiers

04th – 07th March 2007



New Frontiers 2007 is a unique business seminar aimed at helping companies who are keen to expand into the United Kingdom to fast track their business and understanding of the market.

The top ten pharmacy retailers in the United Kingdom have confirmed their attendance at New Frontiers 2007, including Boots the Chemists, Alliance Pharmacy and Tesco. Suppliers who attend this event will have 15-minute guaranteed appointments with all of these retailers to present their products.

New Frontiers is designed specifically to equip suppliers with the knowledge and contacts they need to do business with UK pharmacies. It is the largest gathering of chain retail pharmacy executives and buyers in the UK.

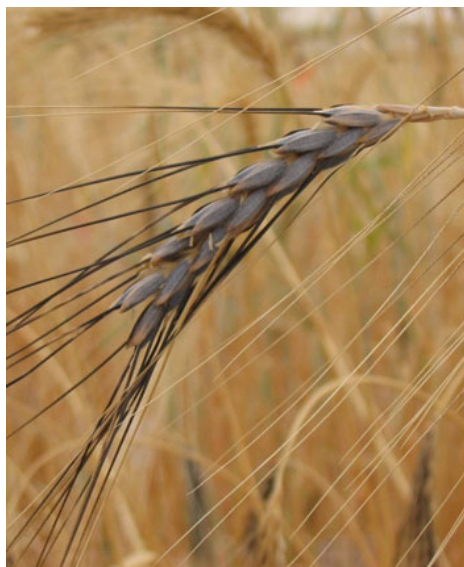
There will be access to exclusive New Frontiers value added services, including tailored market research and high profile coverage of companies and products in the UK's leading pharmacy trade publication.

Companies assessing the potential of the UK pharmacy market, companies planning a launch into the UK pharmacy market, companies newly established in the UK market who want to gain quick access to multiple pharmacy retailers and buying groups and companies based in the UK but new to the pharmacy channel are all welcome.

For more information, please visit www.thecca.org.uk.

If you would like us to post your event(s) online, please e-mail: news@naturalstandard.com.

Wild Wheat Gene



A new study may have found a solution to nutritional deficiencies affecting hundreds of millions of children around the world.

Researchers at the University of California, Davis, the U.S. Department of Agriculture and the University of Haifa in Israel have cloned a gene from wild wheat that increases the protein, zinc and iron content in the grain.

The researchers reported that wheat is one of the world's major crops, providing approximately one-fifth of all calories consumed by humans. Researchers asserted that even small increases in wheat's nutritional value may help decrease deficiencies in protein and key micronutrients. The lead researcher, Professor Jorge Dubcovsky, noted that the World Health Organization estimates that more than 2 billion people are deficient in zinc and iron, and more than 160 million children under the age of five lack an

adequate protein supply.

According to the study, the cloned gene, designated GPC-B1 for its effect on grain protein content, accelerates grain maturity and increases grain protein and micronutrient content by 10 to 15 percent in the wheat varieties studied so far. To show that all these effects were produced by this gene, the researchers created genetically modified wheat lines with reduced levels of the GPC gene by a technique called RNA interference.

Researchers found that the grains from the genetically modified plants matured several weeks later than the control plants and showed 30 percent less grain protein, zinc and iron without differences in grain size confirming that this single gene was responsible for the changes.

The research team noted that it was surprised to find that all cultivated pasta and bread wheat varieties analyzed have a non-functional copy of GPC-B1, suggesting that this gene was lost during the domestication of wheat.

Researchers believe that the reintroduction of the functional gene from the wild species into commercial wheat varieties may have the potential to increase the nutritional value of a large proportion of the current cultivated wheat varieties. Additionally, this discovery provides an example of the value and importance of conserving the wild germplasm, the source of genetic diversity of crop species.

The study is part of a consortium of 20 public wheat-breeding programs known as the Wheat Coordinated Agricultural Project, which is rapidly introducing GPC-B1 and other valuable genes into U.S. wheat varieties using a rapid-breeding technique called marker-assisted selection.

The study concluded that through the positional cloning of Gpc-B1, a wheat quantitative trait locus associated with increased grain protein, zinc, and iron content, the nutritional value of food crops can be enhanced as a means of improving human nutrition and health. The ancestral wild wheat allele encodes a NAC transcription factor (NAM-B1) that accelerates senescence and increases nutrient remobilization from leaves to developing grains, whereas modern wheat varieties carry a nonfunctional NAM-B1 allele. Reduction in RNA levels of the multiple NAM homologs by RNA interference delayed senescence by more than three weeks and reduced wheat grain protein, zinc and iron content by more than 30 percent.

For more information on nutrition supplements, please visit [Natural Standard's Herbs & Supplements](#) database.

Reference: 1) Uauy C, Distelfeld A, Fahima T, Blechl A, and Dubcovsky J. A NAC Gene Regulating Senescence Improves Grain Protein, Zinc, and Iron Content in Wheat. *Science* 24 November 2006: Vol. 314. no. 5803, pp. 1298 - 1301. [View Abstract](#).





The Centers for Disease Control and Prevention, part of the U.S. Department of Health and Human Services, has launched an information campaign designed to help U.S. residents prepare for a possible flu epidemic.

According to the CDC website, plans to contain a possible influenza outbreak are being made on the federal and state level. Officials also recommend that individuals and families be prepared.

For more information, please visit www.pandemicflu.gov.

13th Annual Symposium on Complementary Health Care

The 13th Annual Symposium on Complementary Health Care will be taking place December 12-14, 2006 at the University of Exeter, UK.



This annual symposium, organized by Professor Edzard Ernst's Complementary Medicine unit in Exeter, is aimed at providing a forum for all individuals with a research interest in CAM. With an emphasis on original research, it offers a unique opportunity to discuss key issues such as effectiveness, safety and costs in critical yet open-minded debate.

The main program of the symposium consists of two days of platform and poster presentations complemented by pre-symposium workshops. All those interested in attending are encouraged to register immediately to secure the last few remaining places.

For more information, please visit www.pms.ac.uk, or contact Barbara Wider or Kate Boddy, Complementary Medicine Peninsula Medical School, Universities of Exeter & Plymouth, UK by phone, +44 (0)1392-424872, or e-mail: B.Wider@exeter.ac.uk.

Abstracts will be published in the [Journal of Herbal Pharmacotherapy](#).

If you would like us to post your event(s) online, please e-mail: news@naturalstandard.com.

Inside Natural Standard



Natural Standard wishes you and your loved ones a happy and safe holiday season and wonderful new year!!!

Natural Standard would like to welcome Jessica Thrasher to our Client Services Department.

Coming soon: Look for our new Advanced Interactions Checker and Allergy Database!

Quick Links:

- [Natural Standard Homepage](#)
- [Journal of Herbal Pharmacotherapy](#)
- [Natural Standard PDA](#)
- [Natural Standard Books](#)

news@naturalstandard.com

[Forward email](#)

SafeUnsubscribe®

This email was sent to news@naturalstandard.com, by news@naturalstandard.com
[Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Natural Standard 617.758.4270 | 1 Broadway 14th Floor | Cambridge | MA | 02142

Powered by

