



# Natural Standard

The Authority on Integrative Medicine

Copyright © 2008 Natural Standard

June 2008

Natural Standard provides high quality, evidence-based information about complementary and alternative therapies, diets, exercise and nutrition. For more information, please visit [www.naturalstandard.com](http://www.naturalstandard.com).

[Genomics & Proteomics Database](#)  
[Gene Therapy for Erectile Dysfunction](#)  
[Herbal Cosmetics](#)  
[Integrative Medicine](#)  
[Summer Webinar Series](#)  
[Roselle for Kidney Stones](#)  
[Gotu Kola for Alzheimer's Disease](#)  
[Ginkgo and Aspirin](#)  
[Phytotherapy for Enlarged Prostate](#)  
[Inside Natural Standard](#)

## Genomics & Proteomics Database



Natural Standard is pleased to announce a new database designed to help professionals and educated consumers understand this rapidly evolving field of medicine.

The new database follows the completion of the Human Genome Project - an international research effort to sequence and map all of the genes - together known as the genome. The National Institutes of Health (NIH) followed the project with a new Catalog of Genome-Wide Association Studies, which lists all of the latest published studies by specific disease or trait as well as the detailed association data and p-values for the most promising single-nucleotide polymorphisms (SNPs) related to those diseases. NIH believes

that genome-wide association studies are an important advance in discovering the genetic variants that influence disease.

Advances in genetics research can be used to try to cure and diagnose hereditary illnesses, birth defects, etc., as well as eventually grow new organs and tissues using stem cells.

## Gene Therapy for Erectile Dysfunction



Two new studies suggest that a type of gene therapy may be a safe and effective treatment for erectile dysfunction.

Erectile dysfunction, or ED, is the repeated inability to maintain an erection. An estimated 15 to 30 million (20-40 percent) of American men suffer from ED. For every 1,000 men between 40 and 69 years of age in the United States, 26 new cases of ED are diagnosed every year. Worldwide, ED affects over 150 million men.

Although ED is more common in men older than 65, it can occur at any age. An occasional episode happens to most men and is normal. But as men age, it is also normal to experience changes in erectile function. Erections may take longer to develop, may

not be as rigid or may require more direct stimulation to be achieved. Men may also notice that orgasms are less intense, the volume of ejaculate is reduced and recovery time increases between erections.

ED may be a result of lifestyle choices, such as smoking, being overweight, eating unhealthy foods or avoiding exercise. It may also be psychological or result from physical conditions, such as diabetes, vascular disease, surgery or trauma, neurological conditions, hormone disorders and Peyronie's disease.

A wide variety of options exist for ED including psychological counseling, medications, mechanical devices and surgery. The cause and severity of the ED are important factors in determining the best treatment or combination of treatments for the individual. If ED is the result of a medical condition, the cost of treatment may be covered by insurance.

The researchers studied the effectiveness of a unique, locally-administered gene transfer technique for treating ED. The therapy consisted of a plasmid, or circular DNA construct, containing the gene for the Maxi-K protein.

This protein makes up the Maxi-K ion channel, which is a potassium channel; activation of this channel is critical for relaxing the vasculature and allowing an erection to take place.

The plasmid was designed to express Maxi-K in vascular smooth muscle cells and was injected into men with moderate to severe ED.

According to the study authors, human tests have primarily focused on safety. Animal tests have demonstrated that the therapy increases erectile function and other measures of sexual behavior.

The researchers suggested that men with ED could get the gene therapy treatment twice a year, based on human and animal research showing that the treatment lasts for up to six months.

They also observed that the gene therapy may work synergistically with drugs such as Viagra® and Cialis®, allowing patients to take lower doses of these medications.

The gene therapy appears safe; in humans no transfer-related adverse events were reported during two years of follow up. The study authors noted that unlike conventional oral therapies for ED, Maxi-K therapy does not require prior planning thereby enabling sexual spontaneity; also, it can be used by men taking heart medications.

The authors concluded that Maxi-K gene therapy may be a safe and effective future option for men whose ED is not treatable with oral therapy.

Some tips for preventing ED include limiting or avoiding the use of alcohol and other recreational drugs (marijuana, cocaine), quitting smoking, exercising regularly (at least 30 minutes daily), reducing stress, getting enough sleep (eight hours a night), dealing with anxiety or depression (through counseling and medication) and seeing a doctor for regular checkups and medical screening tests. Although it may be uneasy to talk about, ED is a treatable condition and should be discussed with a healthcare professional.

For more information on erectile dysfunction, please visit **Natural Standard's** [Medical Conditions](#) database.

To comment on this story, please click [here](#) to enter the **Natural Standard** blog.

#### **References:**

1) Christ GJ, Andersson K, Williams K, et al. Restoration of erectile function and sexual behavior in atherosclerotic monkeys following maxi-k gene transfer with a smooth muscle-specific promoter. J Urol, suppl., 2008; 179: 425, abstract 1240. [View Press Release](#). Accessed May 21, 2008.

2) Melman A, Davies KP, McCullough AR, et al. Long-term safety follow up of a phase I trial for gene transfer therapy of ED with hMaxi-k. J Urol, suppl., 2008; 179: 426, abstract 1241. [View Press Release](#). Accessed May 21, 2008.

3) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008.

Two recent studies examined the growing popularity of cosmetics made from herbs and other natural products.

Researchers from India formulated and evaluated herbal cosmetic creams for their ability to improve elasticity and hydration of skin.

The cosmetic cream formulations used extracts of licorice (*Glycyrrhiza glabra*), turmeric roots (*Curcuma longa*), seeds of bembchi (*Psoralea corylifolia*), stinking cassia (*Cassia tora*), betel nut (*Areca catechu*) and pomegranate (*Punica granatum*), fruits of *Embelica officinale*, leaves of gotu kola (*Centella asiatica*), dried bark of cinnamon (*Cinnamom zeylanicum*) and fresh gel of aloe (*Aloe vera*) in varied concentrations.



The herbal extracts were incorporated in a cream base prepared with oil of *Prunus amagdalus*, sesame (*Sesamum indicum*), honey and other standard lotion ingredients.

The six-week study included 18 subjects (six males and 12 females, between 22 and 50 years); researchers applied the herbal cream to the back of their forearm.

The study found an increase in extensibility, firmness and improved skin hydration.

In a related study, researchers explained that nutraceuticals are an emerging class of health and beauty aid products that combine the benefits of nutraceutical ingredients with the elegance, skin feel and delivery systems of cosmetics.

They reported that herbs and spices have been used in maintaining and enhancing human beauty because of their many beneficial properties, including protecting individuals from sun damage, aging and dryness; they also have antioxidant, anticellulite and antimicrobial effects.

The authors observed that compared with synthetic cosmetic products, herbal products are mild, biodegradable and have low toxicity profiles.

Currently, research is focusing on the development of newer approaches that could improve both the aesthetic appeal and performance of a cosmetic product.

For more information on integrative beauty treatments, please visit [Natural Standard's Health & Wellness](#) database.

To comment on this story, please click [here](#) to enter the [Natural Standard](#) blog.

### References:

- 1) Ahshawat MS, Saraf S, Saraf S. Preparation and characterization of herbal creams for improvement of skin viscoelastic properties. *Int J Cosmet Sci.* 2008 Jun;30(3):183-93. [View Abstract.](#)
- 2) Chanchal D, Swarnlata S. Novel approaches in herbal cosmetics. *J Cosmet Dermatol.* 2008 Jun;7(2):89-95. [View Abstract.](#)
- 3) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008.

## FREE WEBINAR EVENTS

*Presenter: Chief Editor- Dr. Catherine Ulbricht,  
PharmD*



**June 10th at 2pm EDT**

**Training Session: Natural Standard Database  
Guided Tour of [www.naturalstandard.com](http://www.naturalstandard.com)**

To register, click: [www1.gotomeeting.com/register/866154399](http://www1.gotomeeting.com/register/866154399)  
Attendee call in number: (616) 883-8055, access code 202-611-968

**June 25th at 11am EDT**

**Lecture: Herbs and Supplements for Cardiovascular Health  
PowerPoint Presentation**

To register, click: [www1.gotomeeting.com/register/997010968](http://www1.gotomeeting.com/register/997010968)  
Attendee call in number: (616) 883-8055, access code 309-154-216

**July 15th at 11am EDT**

**Training Session: Natural Standard Database  
Guided Tour of [www.naturalstandard.com](http://www.naturalstandard.com)**

To register, click: [www1.gotomeeting.com/register/143377997](http://www1.gotomeeting.com/register/143377997)  
Attendee call in number: (616) 883-8055, access code 139-714-984

**July 23rd at 2pm EDT**

**Lecture: Anti-Aging Herbs and Supplements  
PowerPoint Presentation**

To register, click: [www1.gotomeeting.com/register/689612538](http://www1.gotomeeting.com/register/689612538)  
Attendee call in number: (712) 432-1399, access code 646-716-897

**August 7th at 3pm EDT**

**Training Session: Natural Standard Database  
Guided Tour of [www.naturalstandard.com](http://www.naturalstandard.com)**

To register, click: [www1.gotomeeting.com/register/256712862](http://www1.gotomeeting.com/register/256712862)  
Attendee call in number: (641) 715-3222, access code 427-502-657

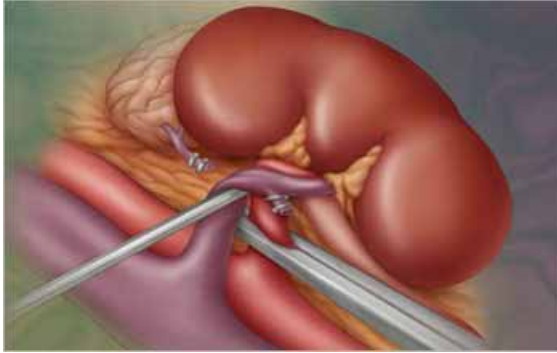
**August 26th at 3pm EDT**

**Lecture: Integrative Medicine Options for Chemotherapy Side Effects & Related Conditions  
PowerPoint Presentation**

To register, click: [www1.gotomeeting.com/register/438959499](http://www1.gotomeeting.com/register/438959499)  
Attendee call in number: (641) 715-3222, access code 299-184-261

**Contact for further information:**

## Roselle for Kidney Stones



A new study found that roselle (*Hibiscus sabdariffa*) may help treat kidney stones via uricosuric activity.

Uricosuric agents are used to lower the uric acid level in the blood and to prevent the formation of uric acid crystals in the joints and kidneys. These drugs are often used to treat gout, a disease in which uric acid crystals deposit in joints and cause pain. By decreasing plasma uric acid levels, these drugs decrease the deposition of crystals in joints, eventually decreasing inflammation and thereby reducing the pain of

gout.

Kidney stones, also called renal calculi, urolithiasis or nephrolithiasis, usually develop when the urine becomes too concentrated. As a result, minerals and other substances in the urine form hard crystals in the kidneys. Over time, these crystals may combine to form a small, hard mass or stone.

There are four types of kidney stones that can develop: calcium oxalate stones, struvite stones, uric acid stones and cystine stones.

Calcium stones are the most common type of kidney stones, accounting for 80 percent of cases. They develop when there are high levels of calcium and oxalate in the blood. Patients who consume excessive amounts of vitamin D or who have overactive thyroids may have high levels of calcium in the blood. Patients who consume large amounts of oxalic acid or undergo intestinal bypass surgery may have high levels of oxalate in the blood.

Struvite stones are usually caused by chronic urinary tract infections. The bacteria that cause these infections release enzymes that increase the amount of ammonia in the urine. This excess ammonia may form large, sharp stones that may damage the kidneys.

Uric acid is a byproduct of protein metabolism. Uric acid stones are usually caused by a cancer treatment called chemotherapy. They may also develop in patients who eat high-protein diets. Some patients are genetically predisposed to develop uric acid stones.

Cystine stones develop in patients who have an inherited disorder called cystinuria. This disorder causes the kidneys to release too many amino acids. The excess amino acids then form stones.

Researchers from Thailand conducted a study with nine subjects with no history of kidney stones and nine with a history of kidney stones. A cup of tea made from 1.5 grams of dry roselle was provided to subjects twice daily (morning and evening) for 15 days.

After taking the tea, both groups showed increases in oxalate and citrate. In the non-kidney stone group, increases in uric acid excretion and clearance were observed. In the patients with kidney stones, both uric acid excretion and clearance were significantly increased.

The study authors concluded that roselle has a uricosuric effect and they suggested that the chemical constituents exerting this effect should be identified.

For a list of integrative therapies studied in the treatment of kidney stones, please visit **Natural Standard's** [Comparative Effectiveness](#) database.

To comment on this story, please click [here](#) to enter the **Natural Standard** blog.

#### References:

1) Prasongwatana V, Woottisin S, Sriboonlue P, et al. Uricosuric effect of Roselle (*Hibiscus sabdariffa*) in normal and renal-stone former subjects. *J Ethnopharmacol.* 2008 May 22;117(3):491-5. Epub 2008 Mar 14. [View Abstract](#).

2) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008.



## Gotu Kola for Alzheimer's Disease

A new study investigated and found positive results regarding the memory-enhancing effects of gotu kola (*Centella asiatica*).

The most popular use of gotu kola in the United States is for the treatment of vascular disorders and infections, such as varicose veins and cellulitis. Although the evidence is sufficient to suggest efficacy, further research is necessary before a strong recommendation can be made.

Gotu kola has a long history of use dating back to ancient Chinese and Ayurvedic medicine. It is mentioned in the Shennong Herbal, compiled in China roughly 2,000 years ago, and has been widely used medicinally since 1700 AD. It has been used to treat leprosy in Mauritius since 1852, to treat wounds and gonorrhea in the Philippines and to treat fever and respiratory infections in China.

While quality human evidence on the efficacy of gotu kola is still lacking, it can now be found worldwide as a component of skin creams, lotions, hair conditioners, shampoos, tablets, drops, ointments, powders and injections.

Gotu kola is not related to the kola nut (*Cola nitida*, *Cola acuminata*). It is not a stimulant and does not contain caffeine.

Researchers from the University of Maryland in Baltimore, MD, explained that an extract from the leaves of gotu kola has been used as an alternative medicine for memory improvement in the Indian Ayurvedic system of medicine.

The study found a possible molecular mechanism for the memory-enhancing property of gotu kola extract.

Alzheimer's disease (AD) is an irreversible, progressive disorder in which brain cells deteriorate resulting in the loss of cognitive (thought) functions, primarily memory, judgment, reasoning, movement coordination and pattern recognition. In advanced stages of the disease, all memory and mental functioning may be lost.

It is estimated that about five million Americans suffer from Alzheimer's disease and about 360,000 people are newly diagnosed every year. Alzheimer's affects about 10 percent of people ages 65 and up, and the number doubles roughly every 10 years after age 65. Half of the population ages 85 and up may have Alzheimer's. There are an estimated 24 million people with general dementia worldwide.

There is no known cure for Alzheimer's disease, although researchers have made progress on determining the causes of Alzheimer's.

For more information on gotu kola, please visit [Natural Standard's Foods, Herbs & Supplements](#) database. For more information on Alzheimer's disease and/or dementia, please visit [Natural Standard's Medical Conditions](#) database.

To comment on this story, please click [here](#) to enter the **Natural Standard** blog.

## References:

- 1) Xu Y, Cao Z, Khan I, et al. Gotu Kola (*Centella Asiatica*) Extract Enhances Phosphorylation of Cyclic AMP Response Element Binding Protein in Neuroblastoma Cells Expressing Amyloid Beta Peptide. *J Alzheimers Dis.* 2008 Jun;13(3):341-9. [View Abstract.](#)
- 2) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008



## Ginkgo and Aspirin

A new study found that the combined use of ginkgo and aspirin is becoming more popular.

Researchers from Taiwan explained that although interactions between aspirin and *Ginkgo biloba* have been documented, the extent to which these two drugs are used in combination remains unclear.

The study investigated the combined prescriptions of aspirin and ginkgo extract in Taiwan based on an analysis of a nationwide database.

A sample of 200,000 National Health Insurance (NHI) beneficiaries showed an increase in the number of aspirin prescriptions of 1.2 percent in 1997 to 2.0 percent in 2003.

Aspirin was mostly prescribed to patients over 50 years old. The percentage of prescriptions with aspirin increased from 57 to 84 percent among those over 50 years old. The number of prescriptions with ginkgo extract also increased; it doubled.

During the study period, combined prescriptions of aspirin and ginkgo extract dramatically increased four times. Most prescriptions were longer than 14 days and 42.4 percent of combined prescriptions were found to be at the same ambulatory care visit.

The authors concluded that there is an increasing trend in co-prescription of aspirin and ginkgo extract. This is alarming because both substances have blood thinning effects. Combined use may increase the risk of bleeding. Based on several case reports of spontaneous bleeding, caution is advised in patients using ginkgo as a monotherapy or concomitantly with warfarin or aspirin.

For more information on interactions between herbs, supplements, foods and labs, please visit [Natural Standard's Interaction Checker](#).

To comment on this story, please click [here](#) to enter the **Natural Standard** blog.

## References:

- 1) Chang LC, Huang N, Chou YJ, et al. Patterns of combined prescriptions of aspirin-Ginkgo biloba in Taiwan: a population-based study. *J Clin Pharm Ther.* 2008 Jun;33(3):243-9. [View Abstract.](#)
- 2) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008.



## Phytotherapy for Enlarged Prostate

A new study investigated the effectiveness of botanicals in the treatment of urinary tract symptoms secondary to enlarged prostate.



Phytotherapy is the study of the use of extracts from natural origin as health-promoting agents. It is usually regarded as alternative medicine in the West, but is considered part of mainstream medicine in many Eastern countries.



Researchers from Northwestern University, Chicago, Illinois, examined the available data from clinical trials for certain botanicals used for lower urinary tract symptoms associated with enlarged prostate including saw palmetto (*Serenoa repens*), African plum (*Pygeum africanum*), rye pollen (*Secale cereale*) and South African star grass (*Hypoxis rooperi*).

Two systematic reviews and three clinical trials were examined in the evaluation of saw palmetto. Data from the systematic reviews showed an improvement in flow rates and symptoms. The results of one clinical trial were mixed and the remaining two trials clearly showed no effect compared to placebo.

Systematic reviews used in the evaluation of African plum, rye pollen and South African star grass showed an improvement in flow rates and symptoms compared to placebo, while rye pollen showed an improvement in symptoms but not flow rates compared to placebo.

The authors concluded that most clinical trials investigating the efficacy of botanicals suffer from well-documented methodological flaws. Saw palmetto has been clearly shown as comparable to placebo in a trial of sound methodology. They found that although preliminary results appear promising, many botanicals have yet to be evaluated in a trial of similar quality.

For more information on any of the herbs and plants listed above, please visit [Natural Standard's Foods, Herbs & Supplements](#) database.

To comment on this story, please click [here](#) to enter the **Natural Standard** blog.

#### References:

- 1) Dedhia RC, McVary KT. Phytotherapy for lower urinary tract symptoms secondary to benign prostatic hyperplasia. J Urol. 2008 Jun;179(6):2119-25. Epub 2008 Apr 18. [View Abstract](#).
- 2) Natural Standard Research Collaboration: The Authority on Integrative Medicine. [www.naturalstandard.com](http://www.naturalstandard.com). Copyright © 2008.

## *Inside Natural Standard*



### **Natural Standard Partners with Skyscape!**

**Natural Standard** and Skyscape are proud to announce our partnership to deliver high-quality handheld references to healthcare providers and researchers. Together via this collaboration, all professional **Natural Standard** database subscribers receive a free one year handheld version plus 15% discount on 500+ clinical, drug & diagnostic references offered by Skyscape.

To benefit from this collaboration, simply contact us and provide a complete email address list of authorized subscribers who are interested in taking advantage of this special offer. Eligible handheld users will receive personal codes to activate their own free one year handheld download.

To receive 15% discount on additional Skyscape references, please visit [www.skyscape.com/naturalstandard](http://www.skyscape.com/naturalstandard) and enter discount code 93821.

### **Welcome!**

**Natural Standard** would like to welcome Jen Megaloudis and Ryan Stark to our team.

## Quick Links:

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

Contact: [news@naturalstandard.com](mailto:news@naturalstandard.com)

## [Forward email](#)

### ✉ **SafeUnsubscribe®**

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

Email Marketing  
by



Natural Standard 617.444.8629 | 245 First Street, 18th Floor | Cambridge | MA | 02142