E P O REEL AND INFERENCE

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LOOK, FEEL AND LIVE BETTER

The Fitness Connection

Breaking down
Pycnogenol®'s sports
nutrition function

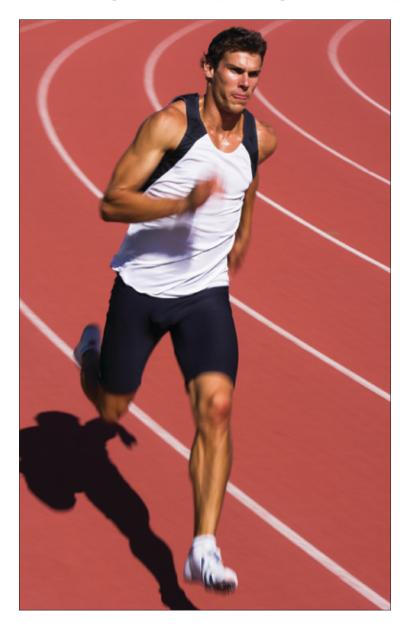
- Product Spotlight
- CorporateAnnouncements
- New Research



feature story

The Fitness Connection

Breaking down Pycnogenol®'s sports nutrition function



eflecting on this year's significant sporting events, World Cup Soccer is still a vibrant memory. Millions of people all over the world gathered to watch and cheer physically fit professional athletes compete for one of the most coveted titles you can earn in the world of sports.

It's just not the professionals that work on fine tuning their bodies for fitness. The recreational athletes are consistently engaging in workout routines to keep themselves healthy and in shape. Both types of athletes are seeking natural energy supplements that are effective in enhancing performance levels and stamina while reducing recovery time. As the sports nutrition category continues to gain momentum globally, Pycnogenol® is proving to be a competitive and viable choice in sports formulations.

With this in mind, researchers studied both recreational and high performance athletes in the latest Pycnogenol® study published in *The Journal of Sports Medicine and Physical Fitness*, showing that it improves overall fitness performance levels and muscle recovery in both. Athletes who supplemented with Pycnogenol® reported a boost in muscle performance, increased endurance and reduction in cramping by controlling oxidative stress.

Pycnogenol®'s rich research history covers other aspects of sports nutrition including endurance enhancement, improving blood flow to the muscles and hastening post exercise recovery by alleviating cramping and muscle pain.

What drives this botanical extract's significant health benefits to sports nutrition start with its basic properties to process nitric oxide (NO) through the bloodstream. Nitric oxide, a blood gas, enhances blood flow and plays a key role for the vascular response to exercise. Pycnogenol® restores healthy production of nitric oxide and consequently supports vascular function with enhanced adaptation to higher oxygen demand, such as muscles during physical exercise.

Another basic blueprint of Pycnogenol® is the extract's potent antioxidant properties which make it ideal to fight dangerous effects of free radicals. In this case, free radicals are caused by exercise which demands excess energy from the body. They can lead to aging and degenerative health conditions. According to research in *Lipids*, Pycnogenol® will significantly extend the antioxidant protection in a performing athlete.

Strenuous exercise is also known to involve muscle damage which may be followed by symptoms of inflammation. The anti-inflammatory effects of Pycnogenol® have been demonstrated in a number of clinical trials.

Physical exercise increases our body's need for oxygen. The blood flow characteristics play a key role for oxygen supply to muscle, return of carbon dioxide to the lungs and delivery of lactic acid to the liver. Pycnogenol® relaxes blood vessels which in turn improves blood flow. A study in *General Physiology and Biophysics* demonstrated Pycnogenol®'s ability to improve blood flow characteristics, helping the body achieve peak muscle performance and integrity.

Supplementation with Pycnogenol® improves cramping and speeds recovery after physical exercise by stimulating blood flow to the muscle tissue. Poor circulation in the muscle is known to cause cramps. Studies demonstrated that Pycnogenol® supplementation significantly reduces muscular pain and cramps in athletes by 13 percent, venous disorder patients experienced 40 percent reduction and healthy, normal individuals had a 25 percent reduction in the number of cramps.

We continue to expand our research efforts in this area and collaborate with partners to offer a number of sports nutrition powders, supplements and functional beverages on the market. Visit www.pycnogenol.com for more sports related news and research.

Mirtogenol[®] Premium Eye Health Formula

ankintatukku has launched **Mirtogeno**l® in Finland, a premium eye health formula.

Mirtogenol[®] is a proprietary eye health combination product comprised of 40 mg Pycnogenol[®] and 80 mg of Mirtoselect[®], standardized bilberry extract. The ingredients work synergistically together to help protect vision and provide normal intraocular pressure support, which helps maintain eye health and sight.

Scientific research on Mirtogenol® demonstrated that it supports normal intraocular pressure by reducing aqueous humor secretion



and supports normal blood flow to the eye. Additional research on active ingredients Pycnogenol® enhances endothelial function and Mirtoselect® improves ciliary function.

Recommended dosage is 1 capsule a day. For more information, visit www.hankintatukku.fi

Introducing PycnoBrain[™] Complex

octor's Best introduces **PycnoBrain™ Complex** featuring 50mg of Pycnogenol® in the United States. The innovative

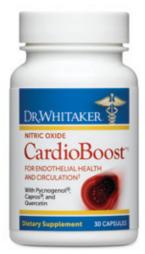
memory formula combines main active ingredient Pycnogenol® with Taurine, an amino acid also recognized for benefitting the brain.

Clinical research has firmly established the brain benefits of Pycnogenol®, an antioxidant rich in procyanidins. It enhances attention, concentration, memory and other cognitive functions in children, students and the elderly. It supports nerve cell development, maintenance, communication and promotes blood vessel integrity and brain circulation.

Take 1 capsule once or twice daily with meals. For more information www.drbvitamins.com



Nitric Oxide CardioBoost[™] with Pycnogenol[®]



ealthy Directions, LLC launches Dr. Whitaker's **Nitric Oxide Cardio-Boost™** with 50 mg of Pycnogenol® developed for overall cardiovascular health.

Nitric Oxide CardioBoost™ addresses the body's natural decline in nitric oxide as a result of aging with a powerful trio of clinically studied nutrients, Capros® Amla, Pycnogenol® and Quercetin. Each plays a specific role in supporting nitric oxide production and synthesis, with powerful antioxidant properties to support endothelial health. The product helps relax and dilate arteries and blood vessels, optimizes blood flow and supports overall vascular health.

Learn more www.drwhitaker.com.

Betoretol Eye Health Formula with Pycnogenol®

atro Vision launches the innovative formula **Betoretol** with 80mg Pycnogenol® for eye health in Germany.

Betoretol was formulated for the management of diabetic retinopathy. The main active ingredient, Pycnogenol®, has been studied extensively for eye care including research involving more than 1,300 patients with diabetic retinopathy and has demonstrated that it may stop the progression of the disease if caught in the early stages.

Learn more http://diabetische-retinopathie.com/betoretol.php

Pycno[®] Sight for Eye Health

Pycno®sight for eye health, with an emphasis on diabetic retinopathy. The formula includes 75mg of Pycnogenol® per tablet and will be distributed through pharmacies, drug stores and other outlets.

The benefits of Pycnogenol® for eye health have been studied for decades. It offers potent anti-

oxidant protection to the eyes and protects and strengthens retinal capillaries. Clinical research on more than 1,300 diabetics suffering from retinopathy showed that Pycnogenol® slows down the progression of this disease where blood leaks into the retina causing irreversible vision loss.



corporate announcements

NEW COLLEAGUE WELCOME



oel Jankow joins Horphag Research Geneva as Director Sales Latin American and Mediterranean Countries. His responsibilities include contributing to the overall growth and visibility of the company and its products, both commercially and scientifically. He manages mutually rewarding customer relationships, ensuring needs are met and expectations exceeded. A major focus for Joel is introducing Horphag's

products into new countries and further developing existing markets.

With more than 16 years of experience in the drug development industry, his career spans from pre-clinical research to drug commercializa-

tion, where he held a number of positions with contract research organizations, biotechs and traditional pharmaceutical companies in the U.S. and Europe.

Joel earned his Master's degree in biochemistry and biophysics from the Swiss Federal Institute of Technology in Zurich (ETHZ) and received a Master's in management of technology from McCombs School of Business, University of Texas, Austin & Swiss Federal Institute of Technology in Lausanne (ETHL). He is fluent in Spanish, Portuguese, German, French and English.

Please join us in extending a warm welcome to Joel. He can be reached at Joel.jankow@horphag.com.

HORPHAG ASIA HOSTS CUSTOMERS

or the 12th year in a row, Horphag Asia welcomed more than 85 customers, researchers and partners from 15 countries in Siem Reap, Cambodia this spring.

The three day meeting emphasized significant Pycnogenol® research breakthroughs and offered a platform for discussions. Horphag awarded its inaugural Lifetime Achievement Award to Mr. Yuji Matsushita of Tradepia Corp., Japan for his contributions to the development of Pycnogenol®. Yuji, affectionately known as Mr. Pycnogenol®, was instrumental in making Pycnogenol® a well-known name in the health food industry as well as the medical community. Together with Horphag, both companies were the founding members of the Japanese Complimentary & Alternative Medicines.

Pycnogenol® data was presented by distinguished speakers Dr. Gianni Belcaro of the University of Chieti-Pescara, Italy, Prof. Petra Högger, University of Würzburg, Germany and Prof. Peter Rohdewald, Horphag Research. New research on women's health, physical fitness and joint care was reviewed. Victor Ferrari, Horphag Research CEO, announced an exciting new product launching and the initial research and applications surrounding the formula.

Ferrari, and EVP and general manager Kenneth Tham of Horphag Asia, led the annual meeting while colleague Dr. Jeff Strong, director of scientific communications, led a discussion on Pycnogenol®'s benefits for woman with endometriosis.



Pycnogenol[®] Found to Resolve Endometriosis-Related Pain



study published in the *International Journal of Women's Health* found that Pycnogenol® significantly minimizes pain and inflammation associated with endometriosis and may help eliminate dysmenorrhea when paired with oral contraceptives.

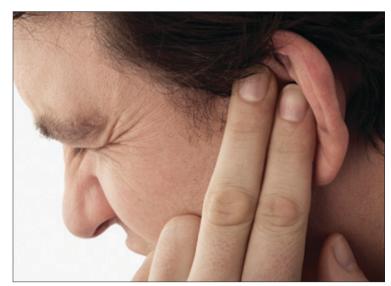
Pycnogenol[®] Found to Improve Psoriasis Symptoms



ycnogenol® research published in *Panminerva Medica*, found the super-antioxidant to significantly improve symptoms of psoriasis including flaking, redness and skin hardening by reducing inflammation, increasing skin hydration and fighting free radicals.

Pycnogenol[®] Effective in Improving Meniere's Disease and Tinnitus

he most recent study on Pycnogenol® in *Minerva Medica* confirms that the extract significantly improves cochlear hypoperfusion and symptoms of Meniere's disease such as dizziness, ringing in the ear, hearing loss, inner-ear pressure and unsteady balance in 90 percent of patients supplementing with Pycnogenol®.



welcome

reetings from Geneva! Pull on your favorite team jersey as we navigate through Pycnogenol®'s application for sports nutrition and highlight new research.

You will notice a significant product showcase as you peruse this issue, a nod to our exceptional customers on product formulations that continue to push the innovation envelope.

Best Regards,



Victor Ferrari Chief Executive Officer Horphag Research

featuring...

PYCNOGENOL®: THE FITNESS CONNECTION

THE LATEST PRODUCTS USING PYCNOGENOL®

PYCNOGENOL® RESOLVES ENDOMETRIOSIS-RELATED PAIN

PYCNOGENOL® FOUND TO IMPROVE PSORIASIS SYMPTOMS

PYCNOGENOL® EFFECTIVE IN IMPROVING MENIERE'S DISEASE AND TINNITUS

Pycnogenol,® French maritime pine bark extract, is a registered trademark of Horphag Research Ltd and is protected by U.S. patents #5,720,956 and #6,372,266 and other international patents.

www.pycnogenol.com

