

From product concept


[HEADLINES](#) [TOPICS](#) [PRODUCT NEWS](#) [HEALTH CONDITIONS](#) [PRODUCTS](#) [JOBS](#) [EVENTS](#)
[HEADLINES > RESEARCH](#)
[Subscribe to the Newsletter](#)
[Text size](#) [Print](#) [Forward](#)

 5 [Tweet](#) 22 [Like](#) 0 [Share](#)

CoQ10 boosts power in German athletes: Study


 By [Shane Stirling](#)
27-May-2013
[Post a comment](#)Related tags: [CoQ10](#), [Ubiquinol](#), [Athletes](#)Related topics: [Research](#), [Antioxidants](#), [carotenoids](#), [Vitamins & premixes](#), [Energy & endurance](#)

A study of 100 German athletes has found daily supplementation with 300mg of CoQ10 form Ubiquinol significantly boosted their power performance.

The Capsugel and Kaneka Pharma Europe part-funded study split 100 young German athletes into Ubiquinol (Kaneka) and placebo groups for a six-week period. Using watts per kilogram of body weight (watts/kg bw) readings, the double-blind, placebo-controlled study found the Ubiquinol group increased power over the placebo group by more than 2.5%, although athletes in both groups increased power over the study period leading up to the 2012 London Olympic games.

Power was measured for the 53 male and 47 female athletes using lactate threshold testing on a cycling ergometer after three and six weeks.

The researchers/nutrition consultants – Dietmar Alf, Michael E Schmidt and Stefan C Siebrecht – concluded: “While adherence to a training regimen itself resulted in an

RELATED NEWS:

[CoQ10 may boost 'semen parameters': Study](#)
[Kaneka hikes CoQ10 prices as Mitsubishi exits market](#)
[CoQ10 can boost heart function in heart failure patients: Meta-analysis](#)
[Kaneka oils CoQ10 market without heart health claims](#)
[Grapefruit juice may boost CoQ10 uptake: Study](#)

Search

[Follow @NutraEurope](#) 3,494 followers

[Like](#) 570 people like this. Be the first of your friends.


MOST POPULAR NEWS

- 1 High dose B vitamins help prevent Alzheimer's, says researchers
- 2 Vitamin D and ginger show potential in reducing asthma symptoms, new studies suggest
- 3 Omega-3 may minimise damaging effects of junk food on brain: Research review
- 4 EU health claims evolution: A submission rethink
- 5 DSM launches dry powder tomato extract for food supplements

If you think you know
PHARMACHEM
It's time for another look.



Did you know we have a **fully integrated aloe vera production**

improvement in peak power output, as observed by improvement in the placebo group, the effect of Ubiquinol supplementation significantly enhanced peak power production in comparison to placebo.”

Vitamin-like

CoQ10 has properties similar to vitamins, but since it is naturally synthesised in the body it is not classed as such. With chemical structure 2,3-dimethoxy-5-methyl-6-decaprenyl-1,4-benzoquinone, it is also known as ubiquinone because of its 'ubiquitous' distribution throughout the human body.

The coenzyme is concentrated in the mitochondria - the 'power plants' of the cell - and plays a vital role in the production of chemical energy by participating in the production of adenosine triphosphate (ATP), the body's so-called 'energy currency'.

There is an ever-growing body of scientific data that shows substantial health benefits of CoQ10 supplementation for people suffering from angina, heart attack and hypertension. The nutrient is also recommended to people on statins to off-set the CoQ-depleting effects of the medication. Other studies have reported that CoQ10 may play a role in the prevention or benefit people already suffering from neuro-degenerative diseases.

But in Europe at least, heart and other health associations have not been positively assessed by the European Food Safety Authority (EFSA).

Weekend warriors

Over the six-week period in the current study the placebo group increased W/kg bw from 3.64 to 3.94 – an increase of 0.3 W/kg bw or 8.5%.

The ubiquinol group increased from 3.70 W/kg bw to 4.08 – an increase of 0.38 W/kg bw or 11.0%.

The researchers noted the increases in performance in the ubiquinol group were, “statistically significant for absolute differences and in multivariate analysis but slightly missed the significance level using percentage values.”

They said while the results were particular to elite athletes ubiquinol benefits could be broader.

“Older athletes and ‘weekend warriors’ might profit even more from CoQ10 supplementation than young, well-trained athletes. Aging reduces the number of mitochondria and the level of Q10 in all tissues decreases with age.”

“Increasing the Q10 content of remaining mitochondria might at least partly compensate for the lower number of mitochondria. Untrained athletes’ muscles are not as adapted to changing energy needs during exercise as are those of elite athletes. Other supplements have elicited stronger effects in increasing physical performance in recreational athletes and CoQ10 might be another such example.”

Of the mechanisms of action they observed: “In this study, CoQ10 supplementation resulted in increased short term maximum performance, which implies anaerobic output, perhaps via an increase in ATP and creatinine phosphate synthesis.”

“An alternative explanation is that CoQ10 supplementation could work via a direct increase in muscular Q10 levels, suggesting that aerobic energy conversion might be improved by inhibiting ammonia production from AMP.”

Source:

Journal of the International Society of Sports Nutrition

doi:10.1186/1550-2783-10-24

‘Ubiquinol supplementation enhances peak power production in trained athletes: a double-blind, placebo controlled study’

capability—from farming operations—to facilities that convert the leaves to powder or liquid forms for a variety of applications?



PHARMACHEM
LABORATORIES

pharmachemlabs.com

201-246-1000 800-526-0609

KEY INDUSTRY EVENTS

Round table Discussion: Probiotic marketing in 2013 and beyond 26-Mar-2013
Online conference
[read more](#)

The global pre- and probiotic overview: Europe flatlines; Asia-Americas shine 26-Mar-2013
Online conference
[read more](#)

[Access all events listing](#)

PRODUCTS

Seagreens® Certified Organic Food Quality Seaweeds
Pathway International

Salt reduction with SODA-LO™ Salt Microspheres
Tate & Lyle Food Ingredients

Akonino® - The natural choice for healthy development
AAK

Naturecaps - HPMC Capsules - Brochure
ACG Worldwide

Omega 3 Qualitysilver-Ubiquinol Licaps
POLARIS

Pycnogenol® Helps Reduce Metabolic Syndrome Risk Factors
Horphag Research (USA) Inc.

[View All Products](#)

Live Supplier Webinars

Differentiate your Omega 3 products with Croda 18-Jun-2013
Croda

On demand Supplier Webinars

Probiotics: The Path to Better Digestive Health through Quality Clinical Trials
DuPont Nutrition & Health

Probiotic marketing in 2013 and beyond
GoodBelly/NextFoods/DuPont Nutrition and Health

The microbiome revolution

[All supplier webinars](#)

Get more articles like this in your mailbox:

Your email

Sign up

Post a comment

Comment title *

Your comment *

Your name *

Your email *

We will not publish your email on the site

I agree to [Terms and Conditions](#)

POST YOUR COMMENT

When submitted, your comment will be moderated and, once approved, will appear on the site shortly after.

RELATED PRODUCTS



On-Demand Supplier Webinar

Probiotic marketing in 2013 and beyond -

GoodBelly/NextFoods/DuPont Nutrition and Health

18-Mar-2013 - Regulatory pressure has forced the probiotic sector to think hard about how its products are presented to world. The alignment between the vast body of science and regulatory parameters varies greatly with regions and countries so what marketing tools are...

WATCH NOW!



On-Demand Supplier Webinar

The microbiome revolution -

15-Mar-2013 - Phase two of a gigantic project studying the human microbiome is just beginning. Many think the microbiome can unlock the mystery of just how pre- and probiotics work. Question is: Where will phase two go, can it help win claims...

WATCH NOW!



Live Supplier Webinar

Differentiate your Omega 3 products with Croda -

09-May-2013 - Omega 3's are growing rapidly in the Asia Pacific market. How can you ensure growth in this industry? Join Croda's Omega 3 experts as they demonstrate ways to differentiate your products targeting lifestyle solutions, rather than condition-specific solutions. To thank...

REGISTER NOW!



Technical / white paper

So much more to Olive than oleuropein -

01-May-2013 - The highly beneficial properties of new ingredients highly concentrated in the triterpenes and phenolic compounds contained in olive oil, explained by Natac, the global leader in innovative olive tree-derived ingredients.

DOWNLOAD NOW!



Technical / white paper

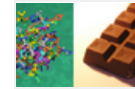
Cranberry or trimethoprim - Proprietary Nutritionals

18-Apr-2013 - Cranberry or Trimethoprim for the treatment of recurring urinary tract infections? A randomized, controlled trial in older women. Urinary infection is the most common bacterial infection

TODAY'S HEADLINES



CoQ10 boosts power in German athletes: Study



Protein chocolate: Sources, market and trends



Health may not be dependent on wealth in old age, suggests study



Vitamin Angels: We could reach 100 million kids tomorrow if we had the funding



Industry cannot be complacent, says FDE president



Combating 'hidden hunger' with Vitamin Angels



in older people and recurrent urinary tract infection (UTI) is particularly common in older women....

[DOWNLOAD NOW!](#)



 [Research study](#)

Pycnogenol® Improves Perimenopause Symptoms - Horphag Research

01-Apr-2013 - A study published in the Journal of Reproductive Medicine found that a low dose of Pycnogenol® minimizes climacteric symptoms in menopausal women including hot flashes, night sweats and heart palpitations among others. Visit booth 717 at SupplySide Marketplace and learn...

[DOWNLOAD NOW!](#)



 [Application note](#)

Feel good with us! Every day, at every age - Faravelli Group

04-Mar-2013 - Discover Faravelli Group's ingredients & solutions promoting a global wellness effect. From head to toe; from infancy to elderly; for women and men. A wide range of highest quality and functionality proposals from the best global producers, including fibres, minerals, yeasts,...

[DOWNLOAD NOW!](#)



 [Data sheet](#)

Phytosome®: increase the power of your products. - Indena

15-Oct-2012 - The oral bioavailability of many botanical extracts is erratic and poor, but it can be improved by using new delivery systems. The Indena's Phytosome® technology can optimize the bioavailability of selected phytochemicals.

[DOWNLOAD NOW!](#)



 [Technical / white paper](#)

Effects of Food & Drink on Cognitive Performance - Leatherhead Food Research

06-May-2013 - The global functional foods market, which encompasses food and drink products that bear a specific health or physiological claim, grew rapidly between 2003 and 2011. Following this steep rise in product sales, strict legislation and guidelines have been put in...

[DOWNLOAD NOW!](#)



 [Technical / white paper](#)

VitaCholine: An Essential Nutrient for Fitness - Balchem Encapsulates

25-Apr-2013 - VitaCholine is the key to enduring advantages in power and performance. Choline, working on the cellular level, promotes and regulates proper metabolism for increased energy and endurance. Choline enhances the sending of messages between the brain and muscle fibers, is...

[DOWNLOAD NOW!](#)



 [Data sheet](#)

Seagreens® Certified Organic Food Quality Seaweeds - Pathway International

22-May-2013 - Seagreens® sets the standard for sustainable wild seaweed harvesting and production, offering a unique and comprehensive nutrient profile. Seagreens® seaweed ingredients are suitable for nutritional fortification, salt replacement and flavour enhancement in a wide variety of food applications including baked goods,...

[DOWNLOAD NOW!](#)



 [Technical / white paper](#)

Marinol® Omega-3 Emulsion for Beverages - Stepan Lipid Nutrition

01-May-2013 - Marinol® Omega-3 Emulsion concentrates blend seamlessly into liquids so you can create milk, juices or any beverage with optimal levels of EPA and/or DHA. Shelf-stable Marinol Emulsion saves processing time and does not alter the



sensory profile of products. Learn...

[DOWNLOAD NOW!](#)



Technical / white paper

Whey Protein Hydrolysates - an athlete's secret weapon - Arla Foods Ingredients

22-Apr-2013 - Athlete's looking to optimise their recovery should be choosing Whey Protein Hydrolysates as their choice of protein source. With Lacprodan HYDRO.365 performance nutrition manufacturers can integrate a gold standard protein into all their applications.

[DOWNLOAD NOW!](#)



Technical / white paper

OptiMSM® a new approach to exercise recovery - Gee Lawson Ltd.

08-Apr-2013 - Methylsulfonylmethane (MSM) has documented evidence as an effective agent to reduce resting oxidative stress in both animal and man. Recent evidence suggests attenuation in exercise-induced oxidative stress following MSM use, which has the potential to be associated with improved exercise...

[DOWNLOAD NOW!](#)



Technical / white paper

Give your nutritional products a powder boost with Marinol® Omega-3 and NEOBEE® MCT! - Stepan Lipid Nutrition

04-Apr-2013 - Our new powders, Marinol® Omega-3 and NEOBEE® MCT, offer ease of processing for your nutritional formulations. Apply them to your food, beverage and supplement offerings in the following powder forms: Marinol DHA 20% powder and NEOBEE MCT 50% and 70% powders.

[DOWNLOAD NOW!](#)



Clinical study

IMPROVE YOUR RECOVERY WITH PLX® - Monteloeder

28-Mar-2013 - Physical exercise may have either beneficial or injurious effects on the joints. The harmful effects of intensive physical exercise on joints and cartilage are well documented. Several studies have also detected an elevation in oxidative stress biomarkers following strenuous exercise,...

[DOWNLOAD NOW!](#)



Research study

Ecologic® Performance: The first probiotic product aimed to reduce exercise - Winclove Bio Industries BV

27-Mar-2013 - Regular exercise has many known health benefits. However, athletes who are exposed to high-intensity exercise frequently experience gastro-intestinal complaints. Probiotic supplements are well known for reducing gastrointestinal complaints and common infectious illnesses. The multispecies probiotic Ecologic® Performance, has been specifically...

[DOWNLOAD NOW!](#)



Case study

Case Study RTD Products - more choices for sports nutrition - Uelzena

07-Mar-2013 - nutrineo, the health food unit of Uelzena eG is a full service & solution provider and health food contract manufacturer for clients selling diet and sports nutrition products. The company is part of the Uelzena Group founded in 1952. Backed by...

[DOWNLOAD NOW!](#)



Technical / white paper

Marinol® Omega-3 for Nutrition Bars - Stepan Lipid Nutrition

01-Mar-2013 - Naturally-concentrated Omega-3 triglycerides in oil and powder form, make it easier to boost your consumers' daily intake of EPA and/or DHA to optimum levels. Incorporate Marinol Omega-3 into your nutrition bar products. Download recipes here.

[DOWNLOAD NOW!](#)





Go-Luo® , non-caloric natural sweetener with better taste for great health - Guilin Layn

15-Apr-2013 - As the global leader of botanical extracts and being core competent in cultivation and manufacturing of Go-Luo® (luo han guo; monk fruit), with GRAS Affirmation (FDA GRN 359), and Stevia Rebaudioside A, with GRAS Affirmation (FDA GRN 354), Layn recently...



ACCESS NOW!



Naturecaps - HPMC Capsules - Brochure - ACG Worldwide

07-May-2013 - Naturecaps are high-performance HPMC (hydroxypropyl methylcellulose) capsules ideal for dietary supplement industry. Derived from 100% natural source, HPMC is a widely-used alternative for gelatin capsules. Available in natural colors and various sizes, these capsules ensure optimum delivery even for highly...



DOWNLOAD NOW!



Discover how daily low dose Carnipure™ supplementation can help lose body weight - Lonza Ltd

16-Apr-2013 - Carnipure™ supplementation combined with healthy lifestyle education can support weight management programs, suggests a new pilot study published online in Food and Nutrition Sciences. 24 overweight adults were supplemented with either 500mg L-carnitine or placebo, and half of the subjects in...



DOWNLOAD NOW!

RELATED SUPPLIERS

AstaReal | Ajinomoto NaturalSpecialities | Aker BioMarine | Arla Foods Ingredients | Beneo GmbH | BerryPharma | Biofortis | Cambridge Commodities | Changsha NutraMax INC | Cosucra | Faravelli Group | Fine Foods & Pharmaceuticals N.T.M. S.p.A. | Flavoutech | Fortitech Inc. | Gee Lawson Ltd. | Glanbia Nutritionals | Indena | KMC | KinOmega Biopharm Inc. | Lehmann & Voss & Co. | Lonza Ltd | Natac | Network Nutrition | New Francisco Biotechnology | Nexira | Olympic Seafood AS | PUREXTRACT DRT | Pharmanager Innovation | Prinova | Roquette | Stepan Lipid Nutrition | Tate & Lyle Food Ingredients | Vitae Naturals | Wild | ppm.Ingredients

WEEKLY / DAILY FREE NEWSLETTER

- FoodNavigator.com**
Food & Beverage Development - Europe
- FoodNavigator-USA.com**
Food & Beverage Development - North America
- FoodNavigator-Asia.com**
Food, Beverage & Supplement Development - Asia Pacific
- NutraIngredients.com**
Supplements & Nutrition - Europe
- NutraIngredients-USA.com**
Supplements & Nutrition - North America
- FoodProductionDaily.com**
Food Processing & Packaging
- FoodQualityNews.com**
Food Safety & Quality Control
- DairyReporter.com**
Dairy Processing & Markets
- BeverageDaily.com**
Beverage Technology & Markets
- ConfectioneryNews.com**
Confectionery & Biscuit Processing
- BakeryAndSnacks.com**
Industrial Baking & Snacks
- GlobalMeatNews.com**
Global Trading and Meat Processing
- FoodManufacture.co.uk**
The Information Resource for Food and Drink Processing

OTHER NEWSLETTERS

- Science & Nutrition Research
- Food legislation
- Food Finance
- Innovations in Food Ingredients
- Innovations in Food Processing and Packaging
- Innovations in Food Safety & Instrumentation
- Food Industry & Consumer Trends
- Food Marketing and Retailing

FREE E-MAIL ALERTS

- Antioxidants, carotenoids
- Fibres and carbohydrates
- Probiotics and prebiotics
- Bone & joint health
- Diabetes
- Immune system
- Weight management
- Cosmeceuticals
- Minerals
- Proteins, peptides, amino acids
- Cancer risk reduction
- Energy & endurance
- Maternal & infant health
- Women's health
- Dairy-based ingredients
- Nutritional lipids and oils
- Soy-based ingredients
- Cardiovascular health
- Eye health
- Respiratory health
- Dosage forms
- Phytochemicals, plant extracts
- Vitamins & premixes
- Cognitive and mental function
- Gut health
- Skin health

Free subscription now! Your email

RELATED SITES FROM OUR TEAM

Food & Beverage: Food & Beverage Development - Europe | Food & Beverage Development - North America | Food, Beverage & Supplement Development - Asia Pacific | Food Marketing and Retailing | Food and Beverage Processing and Packaging | Food Safety & Quality Control | Industrial Baking & Snacks | Beverage Technology & Markets | Confectionery & Biscuit Processing | Dairy Processing & Markets | Global Trading and Meat Processing | Food jobs - Europe **Nutrition:** Supplements & Nutrition - Europe | Supplements & Nutrition - North America **Pharmaceuticals:** Global Pharmaceutical Technology & Manufacturing | Contract Research, Manufacturing & Clinical Trials **Cosmetics:** Cosmetics Formulation & Packaging in North America | Cosmetics Formulation & Packaging in Europe | Cosmetics Formulation & Packaging in Asia-Pacific

[About us](#) | [Site map](#) | [All sites](#) | [Recommend this Site](#) | [Advertise](#) | [Contact the Editor](#) | [Terms & Conditions](#) | [Privacy and Cookie Policy](#)

© William Reed Business Media SAS 2013, All rights reserved.