



**FOR IMMEDIATE RELEASE**

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**NUTRITION 21, LLC ANNOUNCES THE PRESENTATION OF THE EFFECTS OF  
NITROSIGINE® ON COGNITIVE FUNCTION AT THE RENOWNED  
AMERICAN COLLEGE OF NUTRITION'S 56<sup>TH</sup> ANNUAL CONFERENCE**

***Nitrosigine® significantly improves focus and mental clarity***

**PURCHASE, NEW YORK – NOVEMBER 12<sup>th</sup>, 2015** – Nutrition 21, LLC (“**Nutrition 21**”) is proud to announce the presentation of new clinical study results that support the efficacy of Nitrosigine® bonded arginine silicate, showing significant improvement on focus and mental clarity, titled, “The Effects of Inositol-stabilized Arginine Silicate (Nitrosigine®) on Cognitive Function.” The study will be presented today to nutrition science researchers, clinical nutritionists and other professionals at the premier American College of Nutrition’s (ACN) 56<sup>th</sup> annual conference, “Translational Nutrition: Optimizing Brain Health.”

Nitrosigine®, bonded arginine silicate is a novel complex previously shown to significantly enhance blood levels of arginine and silicon, and increase nitric oxide levels. To confirm reports of enhanced focus and mental clarity, Nitrosigine® (1,500 mg/day) was tested in two double-blind placebo-controlled crossover-design (DBPC-X) studies using the clinically validated Trail Making Test (TMT) as the cognitive outcomes measure. TMT A involves connecting a sequence of numbers, whereas TMT B involves connecting an alternating sequence of numbers and letters. Faster times in TMT B are associated with enhanced visual search, speed of processing, mental flexibility, and executive functions under pressure.

The presented findings show that daily doses (1,500 mg) of Nitrosigine® significantly improved Trail Making Test (TMT) B times versus placebo, with effects seen in as little as 10 minutes after dosing and continued improvement over 14 days. Reductions in completion times seen with Nitrosigine® supplementation were greater than would be expected from simple practice effects alone. Improvement in TMT B test times preliminarily suggests enhanced complex processing speed associated with cognitive processes, including working memory, reasoning, task flexibility, and problem solving as well as planning and execution.

- In one of the studies, approximately 10 minutes after taking the first dose, TMT B time decreased by 17.6 seconds in the Nitrosigine® group (p=0.001) from a baseline time of 52.7 seconds (a 33% improvement), compared to a decrease of 4.9 seconds in the placebo group (p=0.384). The changes in TMT B times after 10 minutes were statistically significant between groups (p=0.024).
- In that same study after 3 days of Nitrosigine® dosing, TMT B time decreased 18.5 seconds compared to baseline (p<0.0005) a 35% improvement, whereas the placebo group decreased 5.1 seconds (p=0.517).
- In the second study, TMT B time significantly decreased after 14 days of treatment by 13.4 seconds in the Nitrosigine® group (p=0.045) from a baseline time of 47.3 seconds (a 28% improvement), compared to a non-significant decrease of 5.5 seconds in the placebo group (p=0.067).

Nutrition 21, LLC

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James Komorowski, MS, CNS, Vice President, Scientific & Regulatory Affairs of Nutrition 21 commented, "We are especially pleased with the presentation of the remarkable TMT B clinical results in two separate DBPC-X studies indicating Nitrosigine<sup>®</sup> supplementation significantly improves focus and mental acuity. These study results further support our knowledge of the positive effects of Nitrosigine<sup>®</sup> in humans."

"Nutrition 21 is delighted to have additional clinically substantiated benefits of focus and mental acuity to further support our NDI ingredient, Nitrosigine<sup>®</sup>. Athletes will be particularly interested in learning how Nitrosigine<sup>®</sup> can affect enhanced visual search, speed of processing, mental flexibility, and executive functions under pressure. Consumers should look for the Nitrosigine<sup>®</sup> logo on workout products to get more out of their fitness training," said Bill Levi, Vice President, Strategy & Business Development at Nutrition 21.

Consumer benefits of Nitrosigine<sup>®</sup> bonded arginine silicate supplementation include:

- Bioavailability of increased blood arginine levels; significant benefits lasting up to 6 hours\*<sup>1</sup>
- Dramatically improves mental acuity and focus, taking effect in less than 15 minutes\*<sup>5</sup>
- Boosts key factors for increasing blood flow\*<sup>†1-4</sup>
- Increases energy quickly and safely\*<sup>1,4</sup>
- Increases muscle volume\*<sup>†1-3</sup>
- Reduces muscle damage from exercise\*<sup>†1,4</sup>

### **About The American College of Nutrition<sup>®</sup> (ACN)**

The American College of Nutrition<sup>®</sup> (ACN), established in 1959, is on a mission to advance nutrition science to prevent and treat disease. They stimulate nutrition research and publication, elevate nutrition knowledge among clinicians and researchers and provide practical guidance on clinical nutrition. The ACN accepts no funding from for-profit corporations, reinforcing their commitment to advancing the science without compromise. The 56<sup>th</sup> annual conference, Translational Nutrition: Optimizing Brain Health will take place November 11 - 13, 2015, in Orlando, Florida.

For more information on the ACN visit [AmericanCollegeofNutrition.org](http://AmericanCollegeofNutrition.org).

### **About Nitrosigine<sup>®</sup>**

Nitrosigine<sup>®</sup>, a patented complex of bonded arginine silicate with FDA New Dietary Ingredient (NDI) notification status is affirmed as Generally Recognized As Safe (GRAS) at the level of 1,500 mg per day for use in nutritional bars and beverages. The Nitrosigine<sup>®</sup> complex bonds arginine and silicate – unlocking powerful synergistic effects. Nitrosigine<sup>®</sup> is scientifically engineered to boost key factors for significantly increased blood flow, supporting enhanced energy, focus and mental acuity, muscle volume, and less muscle damage from exercise.<sup>1-5</sup> Manufactured in the U.S., Nitrosigine<sup>®</sup> is a safe, non-stimulant, effective ingredient that is easy to formulate into new and existing products for sports nutrition, men's health and active lifestyle health.

For more information, please visit: [www.Nitrosigine.com](http://www.Nitrosigine.com)

### **About Nutrition 21, LLC**

Nutrition 21, a wholly owned subsidiary of JDS Therapeutics, is a leader in the nutritional supplement industry. The Company is a developer and marketer of efficacious, high-value, clinically substantiated ingredients for dietary supplements, medical foods and beverages, including Chromax<sup>®</sup> chromium picolinate and Nitrosigine<sup>®</sup> bonded arginine silicate. In 2013, Nitrosigine<sup>®</sup> received FDA New Dietary Ingredient Notification (NDI) status.

With many years of biotechnology and pharmaceutical experience, the Company's scientific platform has created unique, patented products that are safe and clinically effective. Rigorous preclinical and clinical trials are a key part of its product development strategy to ensure product safety and consumer trust.

Nutrition 21 currently holds over 100 domestic and international issued and pending patents for products. Many support unique claims associated with, among others, glucose metabolism, weight management, brain health, cardiovascular health, and sports nutrition.

For more information, please visit: [www.Nutrition21.com](http://www.Nutrition21.com)

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† Results compared to baseline.

1. Data on file 2015. Nutrition 21, LLC.
2. Kalman D, Feldman S, Samson A, Krieger D. A clinical evaluation to determine the safety, pharmacokinetics and pharmacodynamics of an inositol-stabilized arginine silicate dietary supplement in healthy adult males. *Clinical Pharmacology*. 2015;7:103-109.
3. Komorowski J, Rood-Ojalvo S, and El-Sohehy A. Arginine silicate supplementation decreases markers of cardiovascular, renal and metabolic dysfunction and increases markers of vasodilation and cardiovascular health in healthy adult males. *The FASEB Journal*. 2015;29(1):748.2.
4. Rood-Ojalvo S, Sandler D, Veledar E, Komorowski J. The benefits of inositol-stabilized arginine silicate as a workout ingredient. *Journal of the International Society of Sports Nutrition* 2015 12(Suppl 1):P14.
5. Harvey P, Rood-Ojalvo S, Komorowski J. The effects of inositol-stabilized arginine silicate on cognitive function. *Journal of the American College of Nutrition*. 2015;34(6)544.

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