

For Immediate Release**SCIENTIFIC BREAKTHROUGH IN SPORTS NUTRITION TO CHANGE THE GAME
FOR MILLIONS OF ENDURANCE ATHLETES**

A Genius Solution and New Category in Sports Nutrition: Neuro Muscular Performance

BOSTON, MA – June 2, 2016 – Exercise-associated muscle cramps are agonizing. Millions of athletes and fitness enthusiasts suffer from them – even the best trained and most nutritionally-savvy. They're painful, unpredictable and can rob an athlete of a killer performance and confidence. Existing "remedies" that target the muscle have limited scientific evidence that they work.

Breakthrough research, to be presented today at the American College of Sports Medicine's Annual Meeting and published in the Journal of the American Medical Athletic Association later this month, has led to the development of a revolutionary new sports shot, [HOTSHOT™](#), that is scientifically proven to prevent and treat muscle cramps by stopping them where they start: at the nerve.

Invented by a Nobel Prize-winning neuroscientist and endurance athlete in collaboration with a Harvard Medical School neurobiology professor, [HOTSHOT](#), previously codenamed #ITSTHENERVE, is a 1.7 fluid ounce sports shot comprised of a proprietary formula of GMO-free organic ingredients with a kick. Consumed before, during or after exercise, [HOTSHOT](#) facilitates the synchronization of communication between the nerve and muscle thereby giving athletes greater control over the way their nerves and muscles work together, boosting their Neuro Muscular Performance (NMP) to prevent and treat muscle cramps. Now athletes can push harder, train longer and finish stronger.

How Curiosity Killed the Cramp: Invention Inspired by Experience

Rod MacKinnon, MD, a Nobel Prize-winning neuroscientist, along with close friend and colleague Bruce Bean, PhD, a neurobiology professor at Harvard Medical School, sought to find a cure for cramping after a life-threatening event occurred off the coast of Cape Cod in 2010. The pair was enjoying a long-distance sea kayaking trip when almost simultaneously their arms seized up miles from shore, in dangerous conditions. Both were surprised by the muscle cramps because they had taken precautions to stay well-hydrated and topped up on electrolytes.

Curious as to what was known about the cause and cure of muscle cramps, MacKinnon and Bean dug into the literature and realized that cramping is not caused by dehydration or electrolyte imbalance, but instead originates from hyper-excited motor-nerves in the spinal cord.

Building off MacKinnon's Nobel Prize-winning research on ion channels, they hypothesized that activating certain Transient Receptor Potential (TRP) ion channels in sensory nerves in the mouth, throat and esophagus could send signals to calm those hyper-excited motor neurons, thereby stopping muscle cramps before they start.

Over several years, they experimented with numerous natural ingredients that activate certain TRP ion channels and refined the proprietary formula of ingredients found in [HOTSHOT](#) – now scientifically proven to prevent and treat muscle cramps.

Neuro Muscular Performance: A New Category in Sports Nutrition

In their pursuit to find a solution for muscle cramps, MacKinnon and Bean accidentally unlocked the power of Neuro Muscular Performance – the way that an athlete’s nerves and muscles work together in an optimal way. New evidence shows that boosting Neuro Muscular Performance also reduces post-exercise muscle soreness. The exercise-associated muscle cramp study of [HOTSHOT](#) conducted by Penn State University showed a statistically significant reduction in muscle soreness during the first 20 minutes after a muscle cramp, compared to placebo. And in field studies among athletes using [HOTSHOT](#) prior to working out, the majority reported reduced post-exercise soreness.

“This is a brand new concept in sports nutrition: how to stimulate sensory nerves as a way to affect your muscle function,” said MacKinnon. “This is cool science. The breakthrough and what we now know is how to prevent and treat muscle cramps. However, what intrigues me is what I’m hearing from athletes about other potential benefits. This is only the beginning.”

The company’s scientists, in partnership with leading sports science institutions, are continuing to study how [HOTSHOT](#) affects boosting an athlete’s Neuro Muscular Performance and how that may translate to additional benefits for athletes.

Supported by Science

[HOTSHOT](#)’s formula of strong TRP activators has shown a statistically significant reduction in muscle cramp intensity compared to placebo in two distinct muscle cramp models: 1) electrically induced muscle cramps; and 2) an innovative new model developed by Penn State University in which healthy volunteers maximally contracted one calf muscle until cramping occurred.

A field study of healthy, cramp-prone athletes who consumed [HOTSHOT](#) 15-30 minutes before their normal training sessions showed a 50 percent or more reduction in the frequency of exercise-associated muscle cramps compared to the observed baseline frequency. In addition, the athletes reported a quicker return to training when a cramp episode did occur.

“I am not aware of any other consumer product that has demonstrated significant efficacy in mitigating muscle cramps in such a rigorous double-blind scientific study,” said Larry Kenney, Ph.D., FACSM, Marie Underhill Noll Chair in Human Performance and Professor of Physiology and Kinesiology at Penn State University.

Trusted by World-Class Athletes: TeamHOTSHOT

The proprietary [HOTSHOT](#) formulation is NSF Certified for Sport® and has been extensively tested by amateur and world-class athletes across endurance sports, track and field, professional football and tennis. Among the elite athletes and sports scientists, who are the company’s brand ambassadors and rely on the product’s NMP benefits, are:

- **U.S. National Team distance runners** expected to compete on the world stage this summer, Shalane Flanagan, Amy Cragg, Colleen Quigley and Evan Jager.
- **Five-time IRONMAN® and IRONMAN 70.3® World Champion**, Craig ‘Crowie’ Alexander.
- **Neurosurgical Consultant to the Denver Broncos**, Dr. Chad Prusmack.

“I have been an endurance athlete for over 20 years,” said Craig ‘Crowie’ Alexander, 5-time IRONMAN and IRONMAN 70.3 World Champion. “Muscle cramps are a source of concern for me because they put a brake on your momentum. They can strike at the beginning of the race or when you are meters from the finish line. A cramp can paralyze you mentally, and physically, and cost you crucial time. So [HOTSHOT](#) is a big confidence-builder and game changer in endurance sports, knowing you won’t be stopped in your tracks by cramping.”

Boost Your Neuro Muscular Performance

HOTSHOT is available online at www.TeamHOTSHOT.com and at select specialty retailers in Los Angeles, Calif., Boulder, Colo. and Boston, Mass. A single serve bottle is \$7 USD, while six-bottle and 12-bottle packs are \$35 and \$65 USD, respectively.

To learn more about [HOTSHOT](#) and the science around Neuro Muscular Performance, visit www.TeamHOTSHOT.com. Join the conversation on Facebook, [Twitter](#) and [Instagram](#).

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About HOTSHOT

Invented by Rod MacKinnon, a Nobel Prize-winning neuroscientist and endurance athlete, [HOTSHOT](#)[™] is the sports shot with a kick that is scientifically proven to prevent and treat muscle cramps. A scientific breakthrough in sports nutrition, [HOTSHOT](#) is a kick-ass proprietary formulation of organic ingredients that boosts Neuro Muscular Performance – how an athlete’s nerves and muscles work together in an optimal way. MacKinnon and Harvard neurobiology professor Bruce Bean spent several years calibrating this precise formulation of Transient Receptor Potential (TRP) activator ingredients that stimulate TRP ion channels in the mouth, esophagus and stomach that directly influence and regulate nerve function. Translation? [HOTSHOT](#) stops muscle cramps where they start – at the nerve – allowing athletes to push harder, train longer and finish stronger. [HOTSHOT](#) is a non-GMO Project Verified, USDA Certified Organic product that is NSF Certified for Sport[®]. To learn more, visit www.TeamHOTSHOT.com. [HOTSHOT](#) is a product of Flex Innovation Group LLC, a division of Flex Pharma, Inc. (Nasdaq FLKS).