

**IN THE ZONE, ON DEMAND.** Top achievers have a ritual to help them perform at the highest level when the situation demands. Making NuCalm a part of their ritual allows them to sleep better, recover more fully, and reach peak performance at the most decisive moments.

Professional athletes endure significant physical, psychological, and emotional stress. With all the stressors that accompany the lifestyle of professional athletes, the actual competitive event may be the least stressful daily experience. Let's examine the stressors that routinely challenge professional athletes:

- Off-season training
- Competing for roster positions
- Regular season practice/ games
- Post-season play
- Injury recovery
- Performance pressures
- Travel schedule

*Off the field stressors include:*

- Appearances
- Family obligations
- Contracts
- Managing agents, lawyers, and accountants
- Social life demands
- Sponsor demands

There is constant pressure for players to handle all these stress points and perform at their highest levels day-in and day-out. Expectations

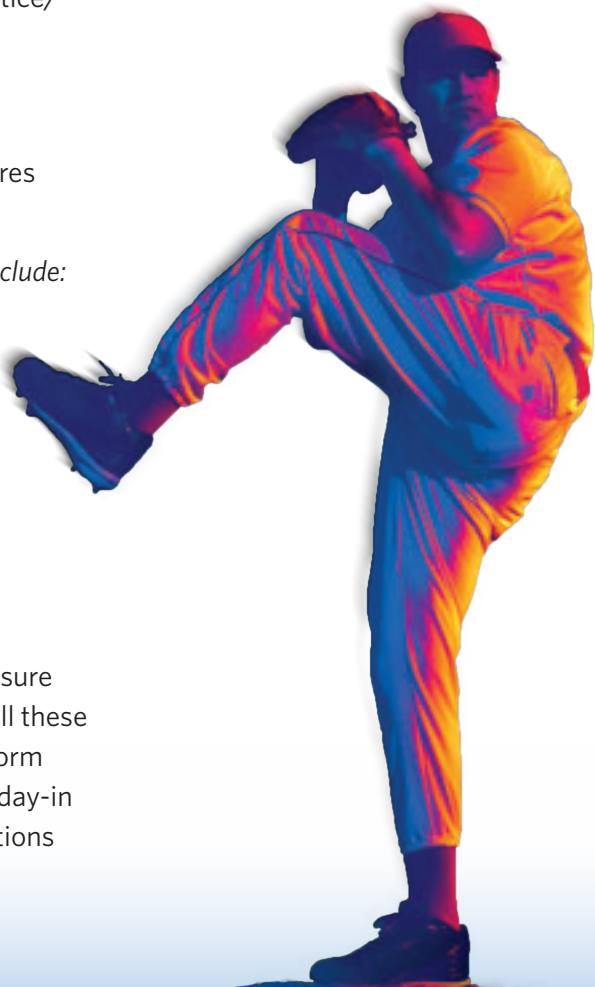
are applied by management, teammates, and fans as well as from the athletes themselves. Millions of dollars are invested in their ability to perform to their full potential. As a result, athletes (and those around them) are continually in search of an "edge"- something that allows them to maximize output and minimize obstacles to success.

NuCalm® is a safe, all-natural, patented neuroscience technology

proven to help athletes rest and restore in order to maintain a healthy internal balance and achieve optimal performance.

### **WHAT IS NUCALM?**

NuCalm naturally relaxes the body within minutes without drugs. Using biochemistry, physics, and neurophysiology, NuCalm rapidly and reliably brings brain wave function to a state of deep relaxation, allowing the body to restore and rejuvenate.



*"On NuCalm, subjects experience a rapid decrease in heart rate and respiration rate while exhibiting an increase in vagal tonality. These biomarkers are consistent with deep meditation and illustrative of the predictable rapid onset of the parasympathetic nervous system dominance created by NuCalm."*

*— Dr. Chung-Kang Peng, Ph.D., Co-Director of the Rey Institute for Nonlinear Dynamics in Medicine at the Beth Israel Deaconess Medical Center/Harvard Medical School*

## HOW DOES NUCALM WORK?

NuCalm triggers the neural communication pathways the body uses to prepare for rest by first interrupting the adrenaline/cortisol response associated with the midbrain activities of stress and then entraining brain wave function to deep relaxation.



*NuCalm mimics the natural process of readying the body for sleep*

The NuCalm system is comprised of four scientifically sequenced components that synergistically work on the GABAergic system to interrupt the adrenaline response and rapidly guide the brain to a deeply relaxed state. The four-step process includes:

### **NuCalm Dietary Supplements**

Proprietary formulation of inhibitory neurotransmitters (amino acids) that interrupt the adrenaline response and prepare the brain for relaxation. The all-natural ingredients are hypoallergenic, non-addictive, and regulated as GRAS (generally recognized as safe) by the FDA.

### **NuCalm Cranial Electrotherapy Stimulation (CES)**

A sub-sensory microcurrent is used to catalyze the effectiveness of the dietary supplements to interrupt the body's natural stress response. Research shows CES helps balance the brain's neurochemistry by reestablishing optimal neurotransmitter levels. The FDA cleared this Class III medical device in 1988 for the treatment of anxiety, depression, and insomnia.

### **NuCalm Neuroacoustic Software**

Proprietary frequency-following response, neuroacoustic software that entrains brain wave function to Alpha and Theta (12Hz-4Hz).

### **NuCalm Light-Blocking Eye Mask**

Blocks visual stimulation and maintains the relaxed state.

## THE NUCALM EFFECT

NuCalm essentially "flips the switch" on stress and adrenaline dominance and rapidly transitions the body to a deeply relaxed state. The NuCalm experience suspends the body in parasympathetic nervous system dominance which is the only time the body is capable of healing. The physiologic benefits of NuCalm include:

- ✓ Feeling of wellness - NuCalm promotes autonomic nervous system balance and triggers cellular maintenance - removing toxins
- ✓ Neuromuscular release - NuCalm reduces muscle tension, lactic acid build up, and inflammation
- ✓ Increased clarity and focus - NuCalm reduces stress and improves decision making
- ✓ Improved sleep - NuCalm grooms the body for better restorative sleep and restores circadian rhythm regulation



## NUCALM & ATHLETES

Competitive athletes have to avoid or overcome many obstacles – overtraining, injuries, team dynamics, recuperation, mental mistakes, dieting issues, sleep issues, travel, day-to-day stress, etc. Competing at high levels takes dedication, singular focus on results, and maintaining a high level of fitness. One of the key factors to success is rest and recovery. The best way to rest and recover is through restorative sleep.

NuCalm has been used by professional athletes with exceptional results. The typical use cases for NuCalm in professional athletics include:

### **Muscle Recovery**

When athletes exert themselves in workouts or competitive events lactic acid builds up in the active muscle groups. NuCalm suspends the body in the first stages of sleep (parasympathetic nervous system dominant state) resulting in the flow of oxygenated red blood cells throughout the entire body. The oxygenated red blood cells flush out the lactic acid in areas of physical tension. This significantly aids in muscle recovery post-exertion and prepares muscles for better performance.

### **Injury Recovery**

The wound healing process is a complex system of cascading cellular events that result in reconstitution and restoration of the injury site. Impediments

to any of the cellular functions during the healing process can delay healing and compromise the outcome. When athletes compete they are driven by adrenaline and are sympathetic nervous system dominant. For the body to heal and recover, you must be in parasympathetic nervous system dominance. NuCalm brings you to parasympathetic nervous system dominance within minutes and helps the body reduce inflammation and heal faster.

### **Performance**

When athletes can minimize distractions before and during an event, they achieve better results. NuCalm brings athletes to a place of deep relaxation where they can focus on the upcoming event and clear their mind of distractions. The meditative state that NuCalm provides also helps clear away distractions or self-doubt.

“... it is not strength of the musculature, but relaxation of muscles to produce additional load when required, allowing muscles to work at optimal sarcomere length. NuCalm is a significant advancement and amazing tool for quickly relaxing muscles throughout the entire body.”

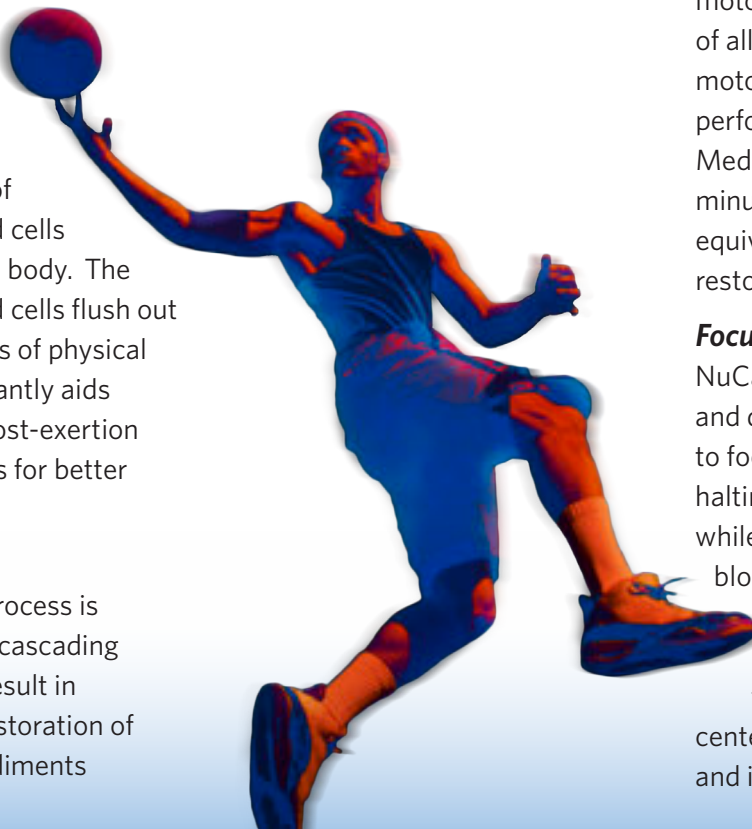
— Dr. Norman Thomas, DDS, PhD, O.  
Path. MD, B.Sc., Oxford Fellow, Director of  
Neuromuscular Research at LVI Global

### **Restorative Sleep**

NuCalm primes the GABAergic system which is responsible for slowing down internal systems and preparing the body for sleep. Recent research proves restorative sleep is the essential element in repetitive motor movement learning for integration into the sensory motor strip - the master controller of all muscle, particularly skeletal motor output critical to all athletic performance. Research at Harvard Medical School shows that a 45 minute exposure to NuCalm is equivalent to more than 2 hours of restorative sleep.

### **Focus**

NuCalm helps clear away stress and distractions, allowing athletes to focus. This is a direct result of halting the midbrain stress response while pumping oxygenated red blood cells through the brain's pre-frontal cortex, hippocampus, and frontal cortex. The frontal cortex is the cognitive center – thoughts, ability to reason, and information processing.





## A CASE STUDY

NuCalm is currently used by Olympic athletes and professional athletes in the NFL, NHL, MLB, and NBA. On a franchise level, Solace Lifesciences began work with the Chicago Blackhawks in June 2012.

"You could just tell that these guys were just more relaxed and they would tell me that. We want our players to play 'intense' not 'tense' and NuCalm is a way for them to just relax and deal with frustrations. NuCalm was very beneficial because it clears your head and allows you to start from scratch. The crucial part of this game is recovery. That's why I think NuCalm played an important role for us, especially during the playoffs."

— Mike Gapski, Head Trainer of the Chicago Blackhawks - 2015 and 2013 Stanley Cup Champions

During the 2014-2015 NHL season and playoffs the Chicago Blackhawks achieved :

- Stanley Cup Champions
- 4 overtime victories - most in the playoffs
- Took 43 hits per game, more than any other playoff team
- 33-0-0 when entering the 3rd period with the lead (regular season and playoffs)

In addition to statistical career highs in many relevant categories for several key players, as a team, the franchise experienced remarkable achievements during the 2012-2013 NHL season and playoffs:

- Stanley Cup Champions
- President's Trophy (best regular season record in the NHL)
- NHL record for best start to a season (undefeated for 24 games)
- Achieved a franchise first - came back from a 3-1 playoff series deficit to defeat the Red Wings in Game 7
- #1 in goals against per game
- #1 in OT goals (5-0 in OT)
- #1 in +/- on the road
- #1 in wins when trailing after 2 periods
- Tied for #1 with least amount of penalty minutes
- #1 road team

Using NuCalm between 2012 and 2015 the Chicago Blackhawks achieved:

- Only NHL team to make it to the conference finals 3 consecutive years
- Played the most playoff games of any NHL team over the past 3 years (65 playoff games)
- 19-4 record in playoff series games 5 through 7

"At SportFuel, we work with professional athletes to manage cortisol and address the inflammation response with nutrition and lifestyle. NuCalm has proven to be a remarkably reliable tool for helping to modulate cortisol levels and inflammation. NuCalm quickly takes athletes out of their catabolic breakdown mode and shifts them into a healthy build-up mode so they can heal and recover as quickly as possible. When athletes are in a balanced nervous system state, they respond instinctively instead of reacting impulsively, and thereby can perform at their highest level. I count on NuCalm personally and so do our athletes ... they have been using it for over 3 years and love it."

— Julie Burns, MS, RD, CCN  
Founder and CEO, SportFuel, Inc.

