RESEARCH ON HYPERICE VIBRATION & PERCUSSION

Hyperice is commited to advancing the science of vibration and percussion – paving the way to better clinical outcomes. We fund independent studies exploring the effects of percussionary and vibratory therapy. Below is a summary of recently published studies.

PEER REVIEWED AND PUBLISHED

Reduces Pain

The Hyperice Vyper 2.0 vibrating fitness roller is an effective treatment for pain and stiffness, resulting in significantly greater results a non-vibrating foam roller test intervention.

- Annals of the Romanian Society for Cell Biology 2021

Decreases Delayed Onset Muscle Soreness

The Vyper 2.0 was as effective at massage at preventing DOMS and restoring concentric strength while also decreasing both pain and LDH levels in the 48 hours post exercise.

- Central University, New Delhi

Increases Range of Motion

Treatment of posterior shoulder tightness with a single Hyperice's Hypervolt session significantly improved horizontal adduction and internal rotation.

- Journal of Musculoskeletal Science and Technology

5-minute treatment of the calf muscles using Hyperice's Hypervolt significantly increased maximum dorsiflexion range of motion of the plantar flexor muscles.

- Journal of Sports Science & Medicine 2020

Promotes Local Circulation

Physical Therapists reported that mechanical percussion with the Hypervolt increased local blood flow, modulated pain and effectively treated myofascial trigger points and joint range of motion.

- International Journal of Sports Physical Therapy 2021

Increases Proprioception

Use of the Hyperice Vyper for warm up of the quadriceps and hamstrings versus a non-vibration rolling treatment significantly increased knee ROM, isokinetic peak torque and dynamic balance.

- Journal of Sports Sciences 2018

NON-PEER REVIEWED

Increases Range of Motion

Using the Vyper resulted in a 40% increase in ROM and a significant reduction in pain compared to those results obtained with a non-vibrating foam roller.

- The University of North Carolina at Chapel Hill

Promotes Golf Performance

In a study of competitive golfers, utilization of the Hyperice Vyper protocol optimized their swing through increased elasticity of the posterior chain, leading to an increase in the ratio between ball speed and club speed, as well as distance.

- Study by Rivet Jean-Jacques (Head of Sport Performance & Applied Biomechanics at the European Tour Performance Institute and Pronko Martin (Biomechanics Engineer at Biomecaswing Sport Performance Center)

RESEARCH ON NORMATEC LINE

Hyperice is commited to advancing the science of compression – paving the way to better clinical outcomes. We fund independent studies exploring the effects of peristaltic pulse compression. Below is a summary of recently published studies.

PEER REVIEWED AND PUBLISHED

Lessen Pain Sensitivity

Normatec Pulse compression is a promising means of accelerating and enhancing recovery by reducing muscle tenderness from pressure stimuli.

- Journal of Strength and Conditioning 2015

Increase Range of Motion

Normatec Pulse compression rapidly enhances acute range-of-motion with less discomfort and time.

- Journal of Strength and Conditioning 2014

Pulse Compression as a Treatment for DOMS

A 30-minute treatment of Normatec Pulse compression increases blood flow in the lower extremity, possibly making Pulse compression a viable option in the management of exercise-induced muscle damage (DOMS).

- Journal of Athletic Training 2016

Decrease Muscle Fatigue After Acute Exercise

Normatec Pulse compression increases flexibility and reduces select skeletal muscle oxidative stress and proteolysis markers during recovery from heavy resistance exercise.

- PLOS One Medical Journal 2017

Clear Metabolites Passively

Normatec Pulse compressionn significantly lowers blood lactate concentrations when compared to a passive recovery group.

- Journal of Athletic Enhancement 2013

Increase Oxygenated Hemoglobin

Normatec Pulse compression significantly increases total and oxygenated hemoglobin.

- Journal of Sport Rehabilitation 2018

Improve Endothelial Function

A single bout of Normatec Pulse compression improves conduit artery endothelial function systemically and improves RH blood flow in the compressed limbs.

- European Journal of Applied Physiology 2015

Gene Expression in Human Muscle Tissue

A 60 min bout of whole-leg, Normatec Pulse compression transiently upregulates PGC-1 mRNA, while also upregulating eNOS protein and NOx concentrations in biopsy samples.

- Journal of Experimental Physiology 2015

For the full publications or to discuss our ongoing research, please speak with a Hyperice representative.