Hyperice

Research on Hyperice Vibration and Percussion

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

Improves fatigue resistance and speed/power/agility performance in taekwondo athletes

In elite Taekwondo athletes, including vibration foam rolling with the Hyperice Vyper as a general warm-up improved Hexaton test performance and increased fatigue resistance during repeated 'speed of kick' tests compared to a general warm-up alone.

- Symmetry 2021

Increases balance, cardiorespiratory endurance, strength in seniors

Adding Hyperice Vyper 2.0 vibration foam rolling to a static stretching warm-up routine increased flexibility, muscle strength, cardiorespiratory endurance and dynamic balance compared to a general warmup (i.e., static stretching alone) in 60-80 year old women.

- International Journal of Environmental Research and Public Health 2021

Increases blood lactate clearance

Following 100 meter water rescue for lifegaurds, 5 minutes of vibration foam rolling with the Hyperice Vyper significantly reduced lactate concentrations faster than both 5 minutes of passive recovery and non-vibrating foam rolling.

- American Journal of Emergency Medicine 2021

Improves neck pain and stiffness outcomes for forward neck posture compared to non-vibrating foam rolling

Compared to a non-vibrating high-density foam roller, self-massage with the Hyperice Vyper significantly enhanced decreases in neck pain and upper trapezius stiffness.

- Annals of the Romanian Society for Cell Biology 2021

Hyperice

Research on Hyperice Vibration and Percussion (cont.)

Peer Reviewed and Published

Increases hamstring flexibility

Vibration foam rolling of the hamstrings with the Hyperice Vyper 2.0 significantly increased active straight leg raising and knee extension range bilaterally compared to no significant change with non-vibration foam rolling.

- Journal of Exercise Rehabilitation 2019, Lim & Park

Improves dynamic balance as well as hamstring range of motion, flexibility and sensitivity

Static and dynamic vibration foam rolling of the lower limbs with the Hyperice Vyper 2.0 significantly improves hamstring range of motion, flexibility and soreness/pain tolerance while also improving measures of dynamic balance compared to non-vibration foam rolling.

- Journal of International Academy of Physical Therapy Research 2020, Kim & Shin

Reduces muscle stiffness

Adding vibration foam rolling with the Hyperice Vyper to a dynamic stretching routine markedly decreases muscle stiffness without impacting range of motion, jump and agility performance.

- Journal of Sports Science and Medicine 2020, Lin et al

Improves range of motion, strength, and agility

Static and vibration foam rolling of the calf with dynamic muscle contraction on the ankle joint significantly improved ankle dorsiflexion and plantar flexion, plantar flexor peak torque and agility.

- International Journal of Environmental Research and Public Health 2020, Lyu et al

Decreases medial knee displacement and potentially injury risk

A single therapy session including use of the Vyper (32Hz) to inhibit overactive muscles along with therapeutic exercises in participants with medial knee displacement significantly improved ankle dorsiflexion in passive straight-knee (+159%), passive-bent knee (+32%) and weight-bearing lunge conditions (+10%). Notably, medial knee displacement during overhead squat also decreased 35%.

- Clinical Biomechanics 2022, Ban & Yang

Hyperice

Research on Normatec® Line

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