

WORLD NEWS

Research & development

FOLLOWING THE EVOLUTION OF ECCENTRIC RESISTANCE TRAINING

LETTER FROM THE EDITOR

Dear reader and nHANCE follower,

This somewhat late May issue highlights the uniqueness and the increased awareness of our training methods. And how the YoYoTM technology, now marketed under the brand nHANCETM changed and revolutionized advanced exercise training in sports and rehab. More than twenty-five years of research, available through the scientific community has taught coaches and athletes how brief sessions of high-quality training with eccentric overload carry over to enhanced performance and reduced risks of injury. If there were any doubts about the benefits of chronic YoYoTM training, a recently published meta-analysis study by researchers showed overwhelming superiority over training with weights (see below). This information was gathered in controlled laboratory settings allowing for measurements using the most advanced technologies. Yet, the feedback we receive from our users are equally import in exploring new and innovative applications of our methods. Thus, this Newsletter highlights a few sports (ice-hockey and track) specific exercises using one among several nHANCE products. As a leader we continue to pave the way and by sharing with you! ”

Adrian Witt
Editor-in-Chief

ULTIMATE YOYOTM SQUAT – MORE THAN SQUATTING!



The Ultimate YoYoTM Squat offers much more than Squats! These shots are from an on-field session with Alejandro Del Aguila (**Alex Del Aguila** Centro De Entrenamiento Personal, Roquetas del Mar) at the Football and Track & Field Stadium of Almeria, Spain. Models: Ana Durban and Sergio Exposito. Pictures by: Miguel Frias



www.instagram.com/miguel_frias/

IF YOU STILL HAD DOUBTS? META-ANALYSIS SHOW SUPREMACY OF nHANCE DRIVEN BY YOYOTM OVER WEIGHT TRAINING

Dr. Moroto-Izquierdo and colleagues recently published a systematic review and meta-analysis of randomised controlled trials (**“Skeletal muscle functional and structural adaptations after eccentric overload flywheel resistance training: a systematic review and meta-analysis”**. *J Sci Med Sport*. 2017. doi: 10.1016/j.jsams.2017.03.004) lending more support to our claims. The team compared the efficacy of flywheel resistance exercise training emphasizing eccentric overload, versus traditional resistance exercise on muscle size, strength and power in athletes and healthy subjects. An electronic database search i.e., PubMed, MEDLINE (SportDiscus), Web of Science, Scopus and PEDro identified relevant publications through April 2016. A total of 9 studies (the vast majority employing original YoYoTM hardware) encompassing 276 subjects and 92 effect sizes, which met the inclusion criteria, were chosen for statistical analyses.

There were significant differences between the two exercise modes such that increases in concentric and eccentric strength, muscle power and size, vertical jump height and running speed were more robust with iso-inertial flywheel training as introduced more than 25 years ago. The study provides strong evidence for the superiority of YoYoTM, compared with traditional weight-stack exercise, to enhance critical performance features (e.g., speed, strength, power and muscle size) in athletes and healthy individuals. The report also cements the conclusions of the very recent review **“Clinical Applications of Iso-Inertial Eccentric-Overload (YOYOTM) Resistance Exercise”** originating from the Karolinska Institute and appearing in the Open Access *“Frontiers in Physiology”*. Get this paper for free at

www.frontiersin.org



WORLD NEWS

50% BLOW OUT SALE!

Take advantage of our summer sale of outgoing models of flywheels, vests and other attachments. Specify your needs by sending a note to info@nhance.se.



GET YOUR EARLY BIRD AWARD NOW AND ATTEND THE 4th GLOBAL HAMSTRING PROJECT IN BARCELONA

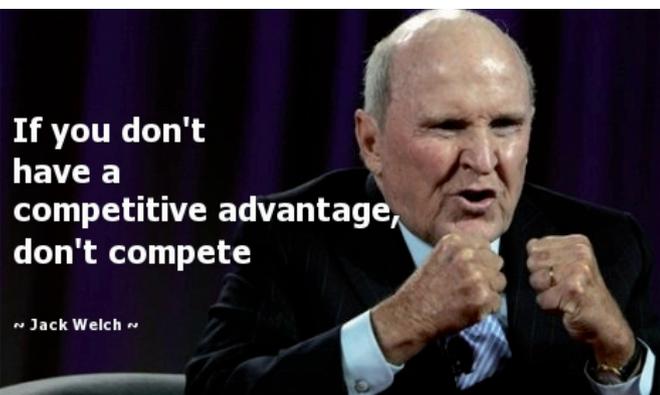


Registration for the fourth **Global Hamstring Project (GHP) November 24 and 25, downtown Barcelona is open.** Take advantage of

the "early bird" discount and save money. In addition to all great speakers, a few slots remain to be filled, there will be a hands-on work shop involving top speed and strength coaches and athletes. Our new, full line of nHANCE™ driven by YoYo equipment will be on display. Don't miss this unique opportunity to network, dine and have fun with old and new friends from all around the world. For updates, program and to register, and to review past year's meetings, follow our web site www.globalhamstring.eu. Save money and ensure your participation.

Sign up now as seats are limited

www.globalhamstring.eu



MASTERING AND BRINGING HAMSTRING, GLUTES AND QUADS TOGETHER



This summer our partner **Sporto High Performance of Kuopio**, together with Pro Prospect Ltd (<http://proprospect.fi/>) manage and run advanced top of the line 3-wk hockey camps at the "Kuopion

Oheisharjoittelukeskus" (co-owned by great Philadelphia Flyer; see inserted picture, Black Hawks and Predator defenceman **Kimmo Timonen**, serving NHL 16 seasons). Here, NHL, KHL and other players of the very best European leagues, off for "summer vacation", gather and camp together. Sporto's **Sami Kaartinen**, head coach of these camps, and **Jari Puustinen**, RPT and Dr. Naprapathy, have created and now incorporate a series of hockey specific exercises making use of the latest line of nHANCE driven by YoYo™. Shown here is the sliding skate squat with the aid of "Hooper's Box".



Jari Puustinen



Sami Kaartinen

*Sami Kaartinen and Jari Puustinen are among several great speakers at the fourth International Global Hamstring Project in November (see ad). They will present new exciting results from training studies of professional and semi-professional hockey players with focus on speed and power of hamstring, glute and quad muscle groups.



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