

Surface Electromyography Shows how Incrediwear Helps Professional Athletes Recover

RESEARCH AIM:

changes in muscular load and fatigue in elite athletes who used iNCREDIWEAR for



STUDY DESIGN:

Twenty (20) subjects, six (6) professional hockey players and fourteen (14) professional soccer players, were enrolled in a double blinded, placebo-controlled three arm study. Following informed consent, subjects were asked to perform a cycling or running test, then recover by sleeping overnight wearing Incrediwear leg sleeves, and then perform the same cycling or running test again the following day. Real-time measurements were taken with surface electromyography (sEMG) to record muscular loading and recovery using the Myontec Ltd. EMG-embedded textile shorts.

sEMG

TECHNOLOGY **BACKGROUND:**

sEMG is a non-invasive technique used to measure and analyze the electrical activity of muscles. The sEMG shorts enable accurate, validated measurement of gluteal, hamstring and quadriceps muscle activity.

KEY FINDINGS:

DRAMATIC IMPROVEMENT

The subjects wearing the Incrediwear leg sleeves demonstrated dramatically improved recovery compared to placebo subjects and the subjects who did not receive any recovery garment.



In the study, we observed reduced muscle load which is positively correlated with recovery



In hockey players (n=6), normalized improvement in recovery was 31.0% compared to -1.1% for subjects who received placebo sleeves and in soccer players (n=14), normalized improvement in recovery was 16.8% compared to 6.9% for subjects who received placebo sleeves.



Mechanism of improved recovery is the Incrediwear technology, which reduces inflammation and increases blood flow.

UNEQUIVOCAL TRAINING BENEFIT

CONCLUSION:

athletes. Subjects who wore Incrediwear to recover improved by an average of 21.1% overall, an unequivocal

ADDITIONAL INFO:

Real-time, accurate surface electromyography (sEMG) data was gathered using Myontec technology, whose sEMG embedded shorts are changing sports research capabilities by enabling non-invasive measurements of muscle signaling and load during strenuous activity. The Myontec sEMG shorts measure the load of each muscle and muscle group separately, meaning an athlete's musculoskeletal status be analyzed specifically to look for injury propensity and imbalance. In combination with Incrediwear, Myontec shorts should be implemented as a valuable tool for muscle evaluation and monitoring during activity, while using Incrediwear to drastically improve the ability of each athlete to...

> recover optimally every day, train harder, and achieve the greatest training benefit.