

FlexEze

Advanced **DRUG FREE** Relief

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Does muscle soreness after exercise interfere with your recovery?

We have all felt the pain of overdoing it in the gym or even gardening. It has been difficult to know the best way to ease the pain and help recovery of muscles.

Well now science has come up with a solution.

The latest research has looked at this question and has discovered some exciting news for those that wish to recover more quickly from exercise, reduce muscle soreness and minimise muscle damage.

Research conducted in United States has shed light on a new approach to dealing with muscle soreness after exercise, commonly known as delayed onset muscle soreness (DOMS). Scientists have performed a study to examine the effectiveness and timing of application of heat wraps to reduce delayed onset muscle soreness from exercise, using blood samples measuring inflammation cells and pain scales to measure the outcomes of recovery and ultrasound images to examine muscle swelling.(1)

The study compared 4 groups of healthy people between the ages of 20 and 40 and had all subjects perform arm exercises until the bicep muscle fatigued. The subjects were randomly assigned to a non-heat group, and three heat application groups. The three heat groups were further divided into heat applied immediately after exercise (I), after 24 hours (24) and both immediately and after 24 hours (I24).

The results of blood samples of the different groups, ultrasounds of muscle and pain and functionality scales were compared to see which approach was the most effective in reducing muscle soreness and accelerating healing after strenuous exercise.

A key finding was that all 3 heat wrap application groups performed better than the control group that received no heat wrap therapy after exercise. The most effective for decreasing muscle soreness and reducing the inflammatory cells in the blood was the group that used heat wrap therapy applied for 8 hours immediately after exercise and again at 24 hours post exercise.

The next most effective was the immediate heat wrap group followed by the 24 hour group. The least effective group was the no heat wrap group.

The authors of the study concluded that **“when heat wrap therapy is applied immediately to the area of the body that the muscles have been exercised, there is a reduction in muscle soreness and an apparent acceleration in the healing process compared to no heat application”**

The authors commented that “blocking inflammation and pain alone with ibuprofen (anti-inflammatory medication) reduces cytokine response but does not increase healing. (2)

The results of the ultrasound images in this research also showed less damage and swelling of the muscles in the groups using heat wrap after exercise than the group with no heat wrap.

The researchers also observed a carryover effect in the heat wrap group when assessed after 24 hours that seems to be that increased heat and circulation allowed the muscle to heal faster. Greater circulation also removed waste products and promoted healing.

So if you are playing sport or working out at the gym or simply feeling soreness in muscles after activity consider using Flexeze heat wrap therapy immediately after exercise and again 24 hours later for up to eight hours to reduce muscle soreness, speed up healing and recover faster.

References:

(1) A Pilot Study Using Blood Biomarkers and Physiological Parameters to Assess Thermacare Heat Wraps for Efficacy and Timing of Application to Reduce Delayed Onset Muscle Soreness from Exercise. Jerrold S Petrofsky PhD, Mike Laymon DScPT, Lee Berk Dr PH et al. The Journal of Applied Research Vol.11,No2, 2011.

(2) Tokmakidis, S.P.,et al., The effects of ibuprofen on delayed muscle soreness and muscular performance after eccentric exercise. J Strength Cond Res, 2003. 17(1): p.53-9.