

The Wellness Express™

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Recovery Techniques for Athletes

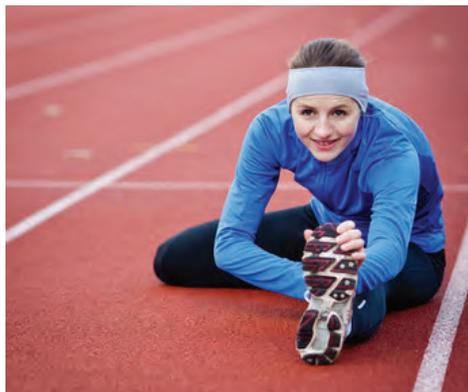
Presented by: Total Health Systems

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Introduction

Athletic activities place significant physical and metabolic demands on your body and affect your body's energy levels and internal environment. Many athletes, both competitive and recreational alike, may benefit from sports recovery techniques. Athletes who participate in long events, who train twice daily, who engage in weight training, who compete regularly or who experience high levels of fatigue or tissue damage may benefit most from recovery techniques. How quickly you recover from a bout of exercise or an athletic event may have as much to do with the techniques you employ immediately afterwards as the duration of the event or the intensity at which you performed it.

Using effective recovery techniques is important for all athletes to reverse or



minimize sources of fatigue and restore your body (and mind) back to pre-participation levels in the least possible amount of time. Recovery techniques, when used consistently and appropriately, may reduce fatigue, improve the frequency and quality of your training and elevate your game-day performance, notes the Australian Sports Commission.¹ Your chiropractor understands the unique demands of your sport and is an important resource in helping you establish your recovery routine. Your chiropractor can also use a number of manual medicine techniques to support your musculo-skeletal health before and after your athletic event or competition.

Stretching & Active Recovery

Stretching and active recovery (i.e., a warm-down) are commonly used recovery techniques. Gentle, static stretching for 10 seconds or more per stretch may help relax tight muscles, improve range of motion and reduce the likelihood of injury. The principle purpose behind this recovery technique is to reduce muscle tightness, not improve flexibility. Active recovery (i.e., light physical activity) has long been used to help dissipate excess heat post-exercise and enhance the removal of blood lactate, among other reasons.

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Exercise of the Week

Abdominal Bridge on Exercise Ball with Single Leg Curl

Difficulty: Easy to Moderate

(Consult your chiropractor before starting this or any other exercise.)

Start: Assume abdominal bridge position on exercise ball. Focus on bringing belly button inward and holding entire body in a straight line – ankles to ears.

Exercise: Lift one foot a few inches off floor. Stabilize yourself, keeping body still. Curl leg to 90 degrees and hold for 5-10 counts. Return to start position, and repeat with other leg. Maintain a tight abdomen throughout. Repeat 5-10 times per leg.



According to a 2000 study published in the *International Journal of Sports Medicine*, active recovery (exercise at 50 percent maximal oxygen uptake) was better than both rest or massage for removing blood lactate following maximal effort cycling tests in 18 trained male cyclists.²

Nutrition & Hydration

Getting the proper nutrients and staying hydrated are two key recovery techniques used by athletes. A 2008 study published in the *Journal of the International Society of Sports Nutrition* notes that athlete recovery following a cycling time trial was improved by consuming a liquid carbohydrate-protein supplement early in the recovery process (and produced greater recovery benefits than a carbohydrate-only drink containing an equal amount of energy or calories). The researchers also report that this liquid carbohydrate-protein supplement improved fat oxidation (the use of stored fats to produce energy) and subsequent same day exercise efforts in their study participants.³ Staying hydrated during physical activity is one of the best ways to ensure optimal athletic performance and restoration of water and electrolyte balance, states a 2004 study published in the journal *Science & Sports*, is a crucial part of the recovery process of any physical activity that results in sweat loss.⁴

Rest & Relaxation

Rest and relaxation are among the simplest - and possibly most effective - recovery techniques for athletes. Good quality sleep may be the No. 1 recovery tool for athletes, as it helps regenerate damaged tissues, abolishes lingering fatigue and provides a mental break

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from competition. According to a 2009 study published in the journal *Physical Medicine and Rehabilitation Clinics of North America*, there is a growing body of scientific evidence confirming a link between sleep, cognitive processes, and metabolic function, as it relates to post-exercise recovery and athletic performance.⁵ The National Sleep Foundation states that getting a good night's sleep is essential for peak athletic performance, regardless of activity and that less sleep may increase the likelihood of fatigue, low energy, poor focus and slow post-game recovery.⁶



Other Recovery Techniques

Other sports recovery techniques include hydrotherapy, compression garments, massage and other types of bodywork. Ask your chiropractor about what recovery techniques are best for you and your athletic activity.

Quote to Inspire

**“Sports do not build character.
They reveal it “**

Heywood Brown

References and Sources:

1. Australian Sports Commission. Post-match recovery for team sport athletes. <http://bit.ly/SiaXfP>. [accessed 2013 Jan 8].
2. Monedero J, Donne B. Effect of recovery interventions on lactate removal and subsequent performance. *International Journal of Sports Medicine*. 2000; 21: 593-597.
3. Berardi JM, Noreen EE, Lemon PWR. Recovery from a cycling time trial is enhanced with carbohydrate-protein supplementation vs. isoenergetic carbohydrate supplementation. *Journal of the International Society of Sports Nutrition*. 2008. Dec; 5: 24.
4. Maughan RJ, Shirreffs SM. Rehydration and recovery after exercise. *Science & Sports*. 2004. Oct; 19(5): 234-238.
5. Samuels C. Sleep, recovery, and performance: The new frontier in high-performance athletics. *Physical Medicine and Rehabilitation Clinics of North America*. 2009. Feb; 20(1): 149-159.
6. National Sleep Foundation. Sleep, Athletic Performance, and Recovery. <http://bit.ly/Sid975>. [accessed 2013 Jan 8].



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