

## Recovery

Recovery from activity is the process of allowing your body to undergo physical restoration to its previous state. Recovery is essential to preventing injury and promoting optimal physical performance in upcoming training or competition. As a result, the recovery phase should begin immediately following the cessation of an activity. This includes addressing psychological, physical, and nutritional needs post-exercise. For this post, we will focus on the latter two points.

Lactic acid is a metabolic by-product that accumulates in the muscle even after sub-maximal exercise. This lactic acid build up is responsible for decrements in performance, increased muscle fatigue, and the sensation of stiff or sore muscles. Post-exercise recovery practices have a major role in removing lactic acid from the working muscles and thus reversing these adverse affects. A study published in *Medicine & Science in Sports and Exercise*, reported that active recovery directly following activity enhanced recovery by decreasing muscle lactate levels more rapidly than complete rest (Ahmaidi, S., Granier, S., Taoutaou, Z., Mercier, J., Dubouchaud, H., & Prefaut, C. 1996). Active methods of recovery include some form of light cardiovascular activity such as walking, cycling, or jogging, as well as light dynamic or passive stretching. This is often referred to as a cool-down. To maintain your ability to train consistently, prevent injury and burnout, and feel good, the cool-down is a crucial component to any workout plan.

In order to help our bodies recover or rebuild following activity, we must also refuel our energy tank. During exercise, our muscles utilize minerals and nutrients that need to be replenished through the ingestion of fluid and food. Water and electrolyte sport drinks help to replenish these elements including sodium, potassium, and calcium often lost through our sweat or used by the working muscles. When possible, choose whole foods such as fruits or vegetables and unprocessed carbohydrates and proteins to fulfill the energy deficit. Fluids are typically easier to consume immediately post-workouts than whole foods. However, after strength workouts, proteins along with carbohydrates facilitate muscle rebuilding and recovery.

At Craven SPORT Services we understand the importance of recovery to keep your mind and body healthy and active. We encourage our clients to “train smarter to play harder” and are equipped with a knowledgeable staff of physical therapists, as well as a nutritionist, who are willing and available to assist you along the way and keep you active for life!

### References:

Ahmaidi, S., Granier, S., Taoutaou, Z., Mercier, J., Dubouchaud, H., & Prefaut, C. (1996). Effects of active recovery on plasma lactate and anaerobic power following repeated intensive exercise. *Medicine & Science in Sports & Exercise*, 28(4):450-6. PMID: 8778550