

From the Pages of *Sports & Fitness Magazine*

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Muscle Recovery in the Elite Athlete

Some sports require athletes to compete in all out performance at numerous different games, events, and distances, often with little rest in between bouts. It is common knowledge that performance suffers if the body has not fully recovered from previous bouts of exercise. This is because intense muscle contractions result in muscular damage, which in turn reduces the muscles ability to function. Knowing this, athletes and their trainers seek to identify the most effective and efficient way to allow the body to recover.

Factors such as age and diet play an important role in the body's ability to compete at a high level and heal from injury. Age however, does not necessarily play a role in the ability of the trained individuals' ability to recovery from activity. Studies have shown that high intensity endurance performance is maintained in both young and veteran athletes alike. With that said, it is that much more important for the older athlete to find other methods to allow their body to recover.

In the case of sports that may require the athlete to swim or run in numerous races within a short period of time, research has shown that an active cool down at 30-70% capability allows for maximal removal of waste products in the bloodstream and thus provides better recovery. Likewise, a diet high in vitamins and minerals that contain antioxidants may provide a boost to the body's natural healing process. Other studies have also shown that an early post exercise ingestion of a liquid carbohydrate and protein supplement better replenishes the muscles' available energy stores.

A good rule of thumb for any athlete, whether the weekend warrior or an Olympian is to include a proper warm up and cool down regimen before and after activity, which includes a flexibility component. Also, remember to eat a well balanced diet rich in nutrients.

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