



### **Training Tip**

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### **Eating Your Way to Muscle Recovery**

Exercise is a form of trauma. As the muscle cell works during exercise it undergoes considerable trauma, and it is this trauma that brings on the soreness so familiar to anyone who has pushed themselves hard during a workout.

Now studies have identified a buildup of free radicals during exercise as one of the causes of muscle soreness. The buildup, called oxidative stress, is caused by free radical damage to the muscle cell membrane. What can you do to reduce free radical damage? Antioxidants including Vitamin C and E have been shown to reduce free radical buildup during exercise and protect against muscle damage.

In addition, a new study by Dr. Donald Layman of the University of Illinois in Urbana has shown that the amino acid Leucine, an amino acid found in protein-rich foods, can speed muscle recovery after exercise. Dr. Donald Layman recommends the consumption of protein-rich foods "as soon as possible after exercise." Layman explains that Leucine appears to have a specific, and apparently unique, impact on skeletal muscle. According to Layman, Leucine, similar to the hormone insulin, stimulates a cascade of chemical signals that "jump-start" the post-exercise protein metabolism process.

So after your workout, drink antioxidant rich juices such as orange juice, and eat protein rich foods.

Your muscles will thank you.