Exercise and Sports Massage

Numerous studies have been conducted regarding the effect of sports massage on athletes. The majority of these studies produced contradictory results. One study that compared professional athletes to controls found no significant differences in muscle soreness. Another study that compared professional athletes with controls found a significant improvement in muscle pain for athletes who had massage. However, there was no significant improvements in the health of those who didn't receive massage. Similar results were also observed in a separate study that contrasted active athletes with non-athletes.

Although there are no conclusive studies proving that sports massage improves athletic performance however, numerous studies have demonstrated that it can help athletes recover quicker. In one study, scientists discovered that massages helped reduce the recovery time of athletes participating in a high-intensity workout. In another study, participants who completed the maximum workload exercise performed significantly better than the controls after receiving a Sports massage. In a separate study, therapists who performed sports massage were able to show a marked improvement in physical performance of overweight adolescent women.



A study comparing the production of lactic acid in the injured and control groups found no differences. However the researchers did conclude that the impact of massage might depend on the person the massage is given to. Researchers discovered that lactic acids were produced at a higher rate in the group that was not being massaged than in the exercise group, and remained significantly lower after the session. On the other hand the production of lactic acid was found to be greater in the the injured group during exercise, and continued to rise after the session. This could be because the increased lactic acid <u>DDDDD</u> production in injured patients may decrease the patient's pain threshold and result in a greater perceived exertion.

There are a myriad of theories on how massage can improve athletic performance. The physiologists have suggested that a good stretching of the muscles deep in the legs is the reason for athletes' faster recovery from injury. The same theory suggests that athletes benefit from stretching the superficial muscles of the arms and shoulders to strengthen them. Another theory is that athletes who engage in intense competition may be able recover quicker when their lower muscles are tighter and shorter. And a strong abdominal muscle core can prevent spasms and cramps that can occur in athletes during strenuous activity.

Massage therapy can aid athletes improve their flexibility and strength. Stretching muscles can help them become more flexible and more willing to move and train. When athletes exercise their muscles tighten and restrict their movement. To ease discomfort in the muscles, athletes should exercise to stretch tight muscles. Massage can help with this.

Studies have shown that athletes feel an increase in cortisol while exercising or performing high intensity. This stress hormone signals physical stress. Research has shown that cortisol boosts endurance and strength during low intensity workout. In the study, endurance performance was measured prior to and after athletes completed 30 sprints. The sprints were recorded to measure muscle twitch activation. The results showed an increase in

strength of the muscles after sprints.

The presence of muscle glycogen in muscles increases muscle strength. Glycogen is a major source of energy in muscles after intense exercise. When the body of the athlete experiences a period of high intensity physical exertion, it releases large amounts of glycogen to replenish lost energy during sprints. Researchers from the University of Northumbria published a study that found that short sprints prior to racing resulted in significant increase in the amount of glycogen in the muscles.

The results of these studies suggest that sports massage may indeed be beneficial for athletes both during and after vigorous exercise. However, one must remember that these studies were conducted on healthy non-athletes. Before you start any treatment, consult your physician if you suffer from conditions that alter circulation, such as kidney disease, diabetes and high blood pressure or other conditions.