



spa | cellular recovery

by Ada Polla

LAST FALL, THE *ST. LOUIS POST Dispatch* published an article on the possibility that massage may aid in cellular recovery. Indeed, according to a recent study published in *Medicine & Science in Sports & Exercise*, researchers at Ohio State University found that Swedish massage helped speed muscle recovery at the cellular level for rabbits that engaged in intense exercise.

Thomas Best, professor of family medicine at Ohio State University and senior author of the rabbit study, said it is too soon to undertake clinical trials on humans. But he believes the rabbits' study's findings to be a strong start toward confirming massage's benefits to athletes.

In the study, the tibialis anterior muscles of six New Zealand white rabbits were subjected to one bout of damaging, eccentric contractions generated by a mechanical device to create a motion similar to the way quadriceps in human thighs move when running downhill. One muscle was then immediately subjected to cyclic compressive loads (i.e. massage), and the contralateral muscle served as the study control.

Aids recovery

The scientists found that commencing 30 minutes of cyclic compressive loading to the muscle immediately after a bout of eccentric exercise facilitated the recovery of function and attenuated leukocyte infiltration. In addition, fiber necrosis and wet weight of the tissue were also reduced by compressive loading.

In layperson's terms, massaging the sore muscles helped them to recover

and limited the nefarious effects of lactic acid. Muscles produce lactic acid during intense workouts, according to Ethel Frese, a professor of physical therapy at

winning eight gold medals. Torres, 41, became the oldest swimmer to compete in an Olympic event and win a silver medal.

Last summer, Olympic swimmer Michael Phelps revealed that he received a massage twice a day in Beijing, China.

St. Louis University and a cardiovascular and pulmonary specialist. The more intense the workout, the more lactic acid is produced. And the greater the accumulation of lactic acid, the more fatigued—and pained—the muscle becomes.

Lactic acid, be gone

Lactic acid will dissipate on its own, but enhancing blood circulation helps to get rid of it quicker, which relieves muscle cramps and spasms, according to Frese. The finding has helped the massage industry to grow and the popularity of the sports massage to increase among amateur as well as professional athletes. Frese believes massage may also be promoting the release of endorphins, a natural sedative that alleviates pain and produces a

general sense of well-being.

Indeed, Cynthia Riberio, vice president of the American Massage Therapy Association, says she has trained several thousand therapists specifically in sports massage.

Furthermore, last summer, Olympic swimmer Michael Phelps revealed that he received a massage twice a day in Beijing, China. His teammate, Dara Torres, had two massage therapists on standby. Phelps, 23, made history by



While further scientific study is necessary, and studies on humans remain

anecdotal at best, it does seem that massage can help athletes before and after an intense physical effort. Now what about us nonathletes—can we sign up for a massage, too? ■

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