NEW STUDY ON HAMSTRING STRETCHING FINDS BOTH STANDING AND SUPINE EXERCISES ARE EQUALLY EFFECTIVE IN INCREASING RANGE OF MOTION AT THE KNEE

Article Appearing in Winter Issue of Journal of Athletic Training Concludes Supine Stretching May Be Preferable for Unsupervised Athletes and Patients

DALLAS, Jan. 27 – Athletic trainers, coaches and other health care professionals continue to urge active people to stretch regularly to improve their flexibility, reduce their risk of injury and enhance their athletic performance. Among the areas of the body that may benefit most from such activity are the hamstring muscles. Poor hamstring flexibility has often been associated with injuries to the low back and lower extremities.

For years, the standing hamstring stretch has been found to be an effective technique for improving hamstring flexibility. The supine static stretching technique, (e.g. lying down on the floor), which is commonly used in clinical settings, has not been investigated until now.

The results of a new study – “Standing and Supine Hamstring Stretching Are Equally Effective” – can be found in the winter issue of the Journal of Athletic Training, published by the National Athletic Trainers’ Association (NATA). Conducted by Laura C. Decoster, ATC, Rebecca L. Scanlon, ATC, Kevin D. Horn, ATC and Joshua Cleland, DPT, at the New Hampshire Musculoskeletal Institute in Manchester, N.H, the report summarizes the results of a three-week study in which 29 healthy male and female subjects who exhibited limited hamstring flexibility were selected to participate. To view
The purpose of the study was to evaluate and compare the relative effectiveness of standing and supine hamstring stretching in increasing hamstring flexibility, as measured by increasing range of motion at the knee.

The standing hamstring stretch requires the individual to stand on one leg while placing the stretching leg forward on an elevated surface and simultaneously bending forward at the waist, without flexing the spine, to achieve an adequate stretch. The effectiveness of this stretch is significantly related to pelvic positioning; therefore proper performance is extremely important.

The supine hamstring stretch is performed lying down in a doorway or at a corner and placing the stretching leg on the wall while the other leg rests flat on the floor. The researchers performed this study to determine the relative effectiveness of this position because clinically they find that this stretch is easier and requires less supervision than the standing method, making it a technique that patients and athletes can perform independently.

Subjects were randomly assigned a different stretch for each leg. The stretching regimen was performed in a group setting three times per week, at the same time each day, for three weeks. Each stretching session consisted of performing the assigned stretches to each leg three times for 30 seconds each. Stretching sessions were supervised to ensure the stretches were being performed properly and consistently.

Throughout the study, the pelvic position was intentionally controlled by instruction and supervision during the standing hamstring stretch. For the supine stretch, the pelvic position was intentionally not controlled. This allowed the researchers to compare realistic (i.e. self-selected) pelvic positioning in the supine stretch with the most effective standing stretch technique. At the end of three weeks, post-study measurements were taken.

“Our results,” says lead author Decoster, “suggest that ‘casual’ supine hamstring stretching was as effective as the rigidly controlled standing stretching. For this reason, it may be preferable to use the supine method in unsupervised settings, such as home exercise programs or with athletes. Furthermore, supine stretching may better isolate the hamstrings, allow improved relaxation and, in general, be safer and more comfortable for people with a history of low back pain.”

About the National Athletic Trainers’ Association (NATA):
Certified athletic trainers (ATCs) are unique health care providers who specialize in the prevention, assessment, treatment and rehabilitation of injuries and illnesses that occur to athletes and the physically active. The National Athletic Trainers' Association represents and supports 30,000 members of the athletic training profession through education and research. www.nata.org, NATA, 2952 Stemmons Freeway, Ste. 200, Dallas, TX 75247, 214.637.6282; 214.637.2206 (fax).