American Society of Exercise Physiologists
2nd Annual Meeting, 1999
Abstract # __37___ Submission Category and Topic: __Invited - Topic__

Recommendations for the Development of Flexibility

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Athletes seldom approach flexibility training in the same way they train for strength or to run faster. Yet, athletic performance requires flexibility along with strength, cardiovascular endurance, and mental determination. The ability to move the body through a range of motion is clearly as important as developing the ability to focus one's attention to avoid physical injury. Hence, when an athlete fails to develop the flexibility to do a side split in gymnastics or to throw a baseball, the performance is constrained by the limitation. To perform a skill with the desired execution, the athlete's suppleness of the muscles and related connective tissues must be increased. The objective then, is to emphasize flexibility training with the same intensity as when developing strength, speed, and cardiovascular endurance. A knowledge of not only the specifics of the sport itself is important, but also the structure of the human body. Take for example, when a gymnast is on the parallel bars, which muscles make it difficult to raise the lower limb to the "L" position? Is the execution of the skill hindered by lack of hamstring flexibility? If so, which flexibility exercises would correct the problem? Is it possible to strengthen the hip flexors to overcome the poor range of motion of the gluteal and hamstring musculature? What about the lack of flexibility in the lower back? Or, what about weak abdominal muscles? Unfortunately, the undergraduate academic preparation of exercise physiologists is lacking when it comes to understanding which muscles need stretching and why. As a result, exercise physiologists tend to follow popularized guides such as every sport requires a highly specific set of flexibility exercises. For example, there are 12 exercises for the gymnast and 12 different exercises for the jogger, and so forth! Actually, however, different athletes engage in different sports with one common thread; that is, the human body. Across the spectrum of sports, it is the same human body that either hinders or promotes skill acquisition and/or performance. This paper sets the stage for a "different way of thinking" about flexibility. Flexibility is important for all the obvious reasons and, therefore, athletes and others should train for flexibility just as they train for more strength or to run a 10K faster. The problem is that most athletes don't spend enough time in flexibility training. When athletics make an effort to get more flexible, too often they engage in worthless stretches, given their lack of an understanding as to which muscles are likely to undergo adaptive shortening. Athletes need to train for increased range of motion, and it really doesn't matter whether it is by static (slow) stretching, ballistic stretching, or by proprioceptive neuromuscular facilitation. This paper addresses the specificity of flexibility training by identifying specific guidelines with implications for athletic training. This analysis will take into account the "definitions" and "examples" of flexibility exercises that are good, useless, or dangerous. Lastly, with a brief overview of the prerequisite anatomical knowledge to understand the number and kind of exercises for significant gains in flexibility, a good flexibility training program may be built on a solid foundation of as few as three exercises (regardless of the sport).