

# Dynamic Stretching vs. Static Stretching

By Angela Stahl, LAT, ATC, CSCS

It is drilled into athletes' minds that a proper warm up prior to practice or competition is important, though there is some misunderstanding on what kind of warm up is best before activity. Two types of stretching, dynamic and static, are used in athletics, but are commonly confused.



Dynamic stretches are functional stretches that incorporate many muscle groups in a sport specific manner. With dynamic stretching, the athlete performs a series of jumps, jogs, lunges, and directional changes. This type of stretching is best for the athlete prior to competition for many reasons: 1) it increases core body temperature, 2) prepares the muscles for active contraction and relaxation similar to activity, 3) incorporates a full range of motion of the joints, and 4) increases the athlete's heart rate. Each warm-up should last about ten minutes and the athlete should have a mild sweat when completed.

Static stretching is a stretch and hold of a specific muscle, such as a hurdler's stretch for the hamstrings. The athlete is either standing or sitting in one position for the duration of each stretch. Static stretches are best performed after competition because the muscles are already warm. This is the best time to actively stretch the muscle with minimal risk of "pulling" a muscle. Each stretch should be held for approximately 20-30 seconds, and the athlete should not "bounce."



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Dynamic Stretch		Static Stretch	
<b>Dynamic warm up (lower extremity)</b> <ul style="list-style-type: none"> <li>• Jogging (forward, backwards)</li> <li>• carioca</li> <li>• high knees</li> <li>• butt kickers</li> <li>• lunges (forward, backwards, sideways)</li> <li>• bounding/jumping</li> <li>• shuffles</li> <li>• leg swings</li> </ul>	<b>Dynamic warm up (upper extremity and trunk)</b> <ul style="list-style-type: none"> <li>• windmills</li> <li>• arm swings</li> <li>• huggers</li> <li>• neck circles (clockwise and counterclockwise)</li> <li>• hip circles</li> <li>• trunk rotations</li> <li>• side bends</li> </ul>	<b>Static Stretches (lower extremity)</b> <ul style="list-style-type: none"> <li>• calf stretch on wall (gastrocnemius)</li> <li>• seated hurdler's stretch (hamstrings)</li> <li>• standing quadriceps stretch – foot grab (quadriceps)</li> <li>• figure 4 (piriformis, buttocks)</li> <li>• kneeling with pelvis rotation (hip flexors)</li> <li>• butterfly (groin, adductors)</li> </ul>	<b>Static Stretches (upper extremity)</b> <ul style="list-style-type: none"> <li>• across the body (deltoids, rhomboids)</li> <li>• behind the head (triceps)</li> <li>• hand grasp behind the back (deltoids)</li> <li>• hand grasp behind the back and extended (biceps)</li> <li>• neck stretches (all ways)</li> <li>• doorway stretches (rotator cuff)</li> </ul>