

## Flexibility Training for Seniors

Flexibility is a very important, but often neglected, fitness component. The number one reason for injury in my older patients is due to a lack of flexibility. Every activity we do in life requires a specific amount of motion from typically multiple joints. If one or more of those areas lacks a certain amount of flexibility, then you are going to injure one or more regions of your body because of that stiffness. You must remember that balanced muscle length and unrestricted movement around your joints is essential for avoiding injuries. Flexibility is defined as; *the maximum ability to move a joint or a combination of joints through a range of motion*. Many factors though can influence your flexibility, including muscle temperature and elasticity, distensibility of the rubberized joint capsule, and the extensibility of your ligaments and tendons.

Not only do people have different degrees of flexibility, but flexibility can vary in different areas of the same body, for example, the hamstring group on the back of the thigh is often tighter than the quadriceps group which are located on the front of the thigh. This decrease in flexibility can then cause improper or inefficient movement. Also when a muscle is tight, it tends to lose its inherent sensation. This sequence of muscle tightness causing altered movement patterns and decreased sensation shows how lack of flexibility in one area can lead to injuries in another. It is possible to improve flexibility at any age with appropriate training, but it is especially beneficial in the senior population because as we age we tend to lose flexibility, not gain it.

Both muscle and joint flexibility is best improved by regular stretching routines, so flexibility training requires knowledge of joint range of motion and muscle reactions to stretching. Stretching exercises can be used to; increase and maintain range of motion, improve posture for daily home and work activities, reduce muscle soreness after physical chores, and to prevent musculoskeletal injuries. These benefits illustrate the importance of including stretching for flexibility in an exercise routine. Optimizing your flexibility can allow for more efficient movement, and this in turn will enhance your mobility and physical ability as well as prevent injuries.

Ideally, stretching should always be included as part of your warm-up; however, you should not just jump in and start stretching your cold muscles. The ability to perform physical work tends to be improved at elevated body temperatures. Simple warm-up activities can include rolling your shoulders forward and backwards and arm circles clockwise and counterclockwise are good for the upper extremities. If you are going to perform leg exercises, walking or riding a stationary bike for 3 to 5 minutes before your stretching program are good activities. Once you have increased the circulation to your working muscles, you can perform the gentle static stretching exercises. After your stretches, you then can rest, perform higher-level exercises, or attempt a home or work activity.

There are a few basic stretching rules you may want to follow. First, you never want to bounce when you stretch. Hold a static stretching exercise to build up soft tissue tension so positive deformation in the tissue can occur. Bouncing can tear tissues or cause injuries in other affected areas. Secondly, stretching should cause a sensation of discomfort or tension, but should not produce pain. Pain indicates that you have pushed too far. Also, do not hold your breath. Make sure to breathe in regular inhalations and exhalations while performing the stretches. Also, know what you are stretching and why. Each individual and activity has different flexibility requirements; individual assessments are required to recognize tight and unstable areas. Lastly, watch for muscle substitution and make sure the proper group is being stretched.

As with any new exercise program you should consult your family physician to discuss your intentions on starting a stretching program. He or she can talk to you about your specific medical history, and be able to advise you if this is something you can participate in safely. They should also be able to provide you with some local professionals who can provide you with this type of program. Ideally, a certified personal trainer or licensed physical therapists are more than capable of providing a well-rounded, comprehensive stretching program. By increasing your flexibility, you can significantly decrease your chances of injuring yourself during physical activity, and will provide you with a feeling of better health and wellness.

Scott Hazuda, Licensed Physical Therapist  
Tidewater Physical Therapy and Rehab Associates  
406 Marvel Court  
Easton, Maryland 21601  
(410)-822-3116