

Orthopaedic Observations

A Matter of Medicine...

TM Pending

Proper Warm Up and Stretching Before Exercise for the Young

By Michael DeChello, MS, PT



It is necessary to warm up the body before beginning your exercise program or sport event to prepare the body for increasing levels of stress. A proper warm up will increase your ability to perform exercises correctly and reduce the risk of injury. It is important to learn how to properly and effectively warm up at an early age. This sets the stage for the young athlete as the intensity of

exercise and the level of competition increases as young athletes grow. Failing to warm up is a mistake many exercise enthusiasts make. There's an old saying, "If you don't have time to warm up than you don't have time to exercise."

General warm up is divisible into two basic groups ; general and specific. General warm up involves exercising the major muscle groups of the body with *minimal* or *no load*. Examples: **jogging, stationary bike, jumping jacks**. Warm up should be intense enough to increase the body core temperature and cause perspiration but not fatigue. A proper warm up will improve exercise performance by: increasing rate and strength of contractions, increase work capacity, increase cardiovascular and respiratory efficiency, and reduce the risk of injury by increasing muscle elasticity and joint range of motion. Following a general warm up program, a light stretching program should be performed.

Stretching should be done after a warm up because of the increased tissue temperature will make the stretching both safer and more effective.

A **specific warm up** should relate to activities specific to the exercise being performed. This can be accomplished by performing the exercise movement or sport-specific movement with little or no weights or at slower speeds. This helps to ensure proper form and technique.

A **cool down period** is also important following an exercise program. This gives the body a period of time to adjust to recovery. A cool down period assists: muscular relaxation, removal of waste products, reduces muscle soreness and allows the cardiovascular system to adjust to normal levels.

There are *misconceptions regarding weight training* for strength and flexibility: increasing your strength **does not** limit your flexibility, increasing your flexibility **does not** limit your strength gains and increasing muscular size **does not** cause lack of flexibility. Exercises must be performed through the entire range of motion. There should be emphasis on lowering or lengthening the muscle as well as lifting or shortening the muscle. Muscle groups on both sides of the joint should be worked equally to avoid a overpowering of one muscle group. Example: Push/pull or bicep curls and triceps extension.

Proper preparation for your workout or sports events, good technique and form, and cool down will ensure you to have a safe, effective and productive workout.

Mr. DeChello received his Bachelor of Science degree in Physical Therapy from Quinnipiac College in 1987 and his Master of Science degree in Allied Health from The University of Connecticut in 1998. He has over 20 years experience in out-patient rehabilitation. Mr. DeChello has been with The Orthopaedic Group, LLC since its start in 1998. He has extensive experience in working with all aspects of non-operative and post-operative orthopedic rehabilitation. He has worked closely with the physicians of The Orthopaedic Group, LLC to develop comprehensive rehabilitation protocols. Mr. DeChello specializes in treatment of foot and ankle disorders and has developed his own orthotic fabrication technique. Mr. DeChello has traveled around the country for teaching engagements for other rehab clinicians. Mr. DeChello is an active member of the American Physical Therapy Association and Connecticut Physical Therapy Association.