Flexibility - right routine by Larry Jusdanis

10/25/2003 - Flexibility must be an integral component of a hockey player's training program. It is important to understand just what flexibility means. The classic definition refers to the range of motion available at a particular joint while at rest. A hockey player, for instance, needs flexibility while skating, not at rest as the definition describes. Instead, flexibility can be viewed as being able to move with control. This means the joint is allowed to go through its largest range of motion while still allowing for control.

Before starting any flexibility program, the athlete needs to be assessed. To begin, one must understand the factors that can influence an athlete's flexibility. Consider these factors that come into play when looking at a player's flexibility:

- * Functional joint specificity: Flexibility programs should be prioritized to include the joints specific to the sport, e.g. Hockey players need to particularly stress flexibility of the hip region
- * An individual's elasticity and length of muscle and tendons: This is generally determined by genetics but can be fine tuned through a well-designed strength-and-flexibility training program.
- * Which particular joint structure is being considered? For example, the shoulder joint is more flexible than the knee joint because of its particular structure.
- * When improving flexibility of a particular joint, it is imperative to increase the strength of the surrounding musculature. Strength training and flexibility programs must be concurrent.
- * Body temperature prior to stretching: A player should increase core body temperature through a well-devised warm-up.
- * Mental state of an athlete: If a player is "uptight" or tense by nature he/she tends to be less flexible.

As an athlete, you need to understand the difference between static and dynamic stretching. Both are equally important, but each has its time and place. Static stretching refers to the traditional way of stretching, while the body is not moving from one place to another. Examples include sitting groin stretch or a hurdler stretch for the hamstrings.

Dynamic Flexibility Stretching refers to stretching that is done while the body is moving. This can be witnessed in such drills as walking lunges and leg rotations over hurdles.

What type of stretching, and when?

The next question that needs to be answered is, "What type of stretching is best for a hockey player?" The correct answer is "both".

Dynamic stretching should be done prior to getting on the ice, as compared to static stretching which should be done as part of a cooldown right after the game or at home. Too many coaches believe static stretching is warming up. But, stretching is not warming up. You must warm-up first in order to effectively stretch to gain flexibility. There is new evidence that shows that static stretching prior to physical activity can actually lead to tiredness and perhaps decreased coordination. In addition, static stretching is known to improve static flexibility, while dynamic stretching improves dynamic flexibility. Therefore, it is not logical to use static stretches to warm-up for a dynamic action such as a hockey game.

Research has shown there is little relationship between static flexibility and performance. Sports

Specific Training has watched many athletes who might be considered "tight" off-ice, but can perform exceptionally well on-ice.

Pendulum Dynamic Flexibility

Dynamic Flexibility should be an integral part of a hockey player's conditioning program. Dynamic stretching involves swinging arms, legs, and rotating the hip joint.

When following this type of program, care must be taken not to exceed the present range of the joint or an injury may occur. We use a system we call "Pendulum Dynamic Flexibility". When performing a dynamic stretch, SST emphasizes controlled, slow, even motion. Like a pendulum, the athlete increases speed and range of movement until the desired range of motion is established.

How long an athlete spends on a dynamic exercise depends on the athlete's flexibility in the specific joint that is being exercised.

Hamstring and Quad Pendulum Swings

Start by holding on to someone or something. Keeping your abs tight and chest up, swing your inside leg forward while keeping it as straight as possible. This will stretch the hamstrings. When your leg reaches its

highest point, allow it to swing behind you. By bending the swinging leg there is an increased stretch in the quadriceps muscle. Keeping the leg straight will further stretch the

psoas (pelvic area) muscle, which is traditionally a tight muscle in hockey players.

Both methods should be utilized as part of a dynamic stretch warm-up. Remember that your working leg swings like a pendulum. Slowly increase the range and speed of stretch throughout the reps. Perform 15-20 swings on each leg.

To make it really challenging we have our athletes perform this stretch without holding on to anything. You really get to see if you have balance issues!

Eagles

To perform this dynamic stretch, lay on your back (supine position). Have your arms extended out at shoulder height. With both legs straight, lift one leg until it is perpendicular to your torso. At this point bring the leg over to try and touch your left hand. Remember, keep your hand at shoulder height. Once you have crossed the body raise the leg back up, then return it to the ground.

Perform 10 reps with each leg.

A good little trick Coach "J" uses is to turn the head to the opposite side of the leg that is swung over the body. This allows the upper body to stabilize.

Scorpions Scorpions are the exact opposite of eagles. Instead of lying on your back, you lie on your stomach (prone position). Have your arms extended out at shoulder height. Lift your right leg up and bring it across your body toward your left hand. Don't worry - your leg will bend to reach across the body. Return to the starting position and repeat doing 10 reps on each leg.

To view pictures of these exercises, please visit www.sstcanada.com When performed daily, the Pendulum Dynamic Flexibility Program has dramatically increased our players' mobility in the hip region. Start moving slowly like a pendulum and then get after it! (Larry Jusdanis is a certified strength and conditioning specialist Sport Specific Training. For more information about SST's Pendulum Dynamic Flexibility Program, contact Larry at

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