

## Warm-Up

In warming up, the trend is to begin with light exercises to increase blood flow to the muscles, tendons and ligaments and to slowly increase the body temperature. As the body is warmed up, static stretches can be done to further increase flexibility of the muscle/tendon units involved in the particular activity or sport. Dynamic stretching is the last and most strenuous segment involved and will not only aid in flexibility but can also help to increase quickness and power needed in sprinting, jumping, and other explosive movements in sports. For further warm up exercises the following resources are highly recommended (I found these books at the local library):

- *Core Performance* by Mark Verstegen
- *Stretching* by Bob Anderson
- *The New Rules of Lifting* by Lou Schuler and Alwyn Cosgrove

The sequence and exercises are as follows:

- Light exercises (5 repetitions each leg or 10 repetitions total)
  - Walking lunge with upper body twist (twist upper body to same side as forward leg)
  - Lateral lunge with opposite hand reach and touch (i.e., lunge to the right and touch left hand to the outside of right foot, step toward right with left foot and repeat; finish reps to the right, then perform lunges to the left)
  - Inchworm (bend down and touch ground with both hands, walk hands out to stretch out body and walk feet back to the hands)
  - T-push-up (perform push-up, then in the up position of a push-up, raise left hand toward the sky forming a T with arms, come back down into push-up position and then repeat push-up and raise the right hand toward the sky)
  - Forward lunge/forearm to instep (lunge forward with right leg and try to touch right elbow (elbow bent to 90 degrees), to inside of ankle; then place right fingertips on ground on the outside of the right ankle/left fingertips on inside of right ankle and straighten right leg, stretching the back of the right leg; step forward with left leg into lunge and repeat each step with left elbow to the inside of left ankle )

- Inverted hamstring (standing on one leg with arms out to the side, forward bend until torso/other outstretched leg is parallel to ground, return to upright, repeat with other leg)
- Sumo squat to stand (standing with feet wider than hips, bend down and hold tips of shoes; squat down to ground keeping back straight, extend the hips and straighten legs feeling the stretch in the back of both knees/thighs)
  
- Static stretches (10-15 second hold)
  - Standing side bend grasping elbow overhead with opposite hand
  - Calf stretch in lunge position (keep the heel of the back foot on the ground to feel the stretch in the calf; switch leg positions to stretch the opposite calf)
  - Sitting groin stretch (hold toes and use elbows to push knees toward the ground)
  - Sitting cross leg spinal twist (sit with right leg straight out and left foot [bent knee] on the outside of the right knee; twist to the left placing right elbow against outside of left knee; repeat with left leg straight out)
  - Hurdler's stretch (sit with both leg in front, one bent with side of knee flat on the ground, the other straight; reach for the toes of the straight leg feeling the stretch on the back of the knee; switch positions and repeat with other leg)
  - Side lying quadriceps stretch (lying on one side, reach back and grab the foot/ankle of the topmost leg and bend the knee back stretching the front of the thigh; switch sides and repeat with the other leg)
  - Deep squat (Squat all the way to the ground)
  
- Dynamic stretches
  - Base rotation with ball between feet (rotate feet from side to side rapidly simultaneously rotating upper body in opposite direction) (2x5 seconds)
  - Hop (feet together) side to side over ball (2x5 seconds)
  - One leg hop over ball (2x5 seconds each leg) (don't do this one if you have weak ankles or have had chronic ankle sprains)

- Split jump (in lunge position with back knee almost touching the ground, quickly jump straight up and land in same position) (5 repetitions with right leg in front, then 5 repetitions with left leg in front)
- Squat jump (hands behind head, squat down and jump quickly into the air; do 5 times)
- Lateral bound (standing on left leg, leap sideways to the right landing on the right foot, hold 3 seconds, then leap back to the left, landing on left foot, hold 3 seconds; repeat 4 times each side) (again, be careful with this one if you have weak ankles)
- Side to side jump and sprint (leap with both feet together side to side 4 times then sprint 5-10 yards; repeat)