



FOUR - SIDED STRETCH PLAN

By Chris Greene

The physical act of running requires the contraction of specific muscle groups - calves, hamstrings, quads, back - to facilitate that motion. That constant contraction can leave behind an increasing sense of tension, inflexibility and decreased range of motion. For many of you in the program, odd aches and pains will arise from time to time due to tension in the muscles and should be viewed as precursors to injury. Keeping in mind, your coaches are not doctors and should not try to diagnose injuries for you but they can suggest ways to alleviate the discomfort you are experiencing. Stretching the muscles in and around those areas of pain can prevent such cases.

Why should we stretch?

Although there are no definitive studies that show that stretching will prevent injuries, every sports medicine physician and physical therapist will prescribe a stretching regimen as a treatment for specific ailments once they have been diagnosed. Very specific injuries, such as plantar fasciitis for example, are often attributed to a lack of flexibility in one or more muscle of the rear leg. Once your treatment has concluded that same stretching regimen will be suggested as a preventative for future occurrences.

When and how to properly stretch?

There has been and will always be debate on when the proper time is to stretch but the general consensus is that it should occur after the muscles have been adequately warmed-up. Some experts will suggest jogging, even in place, for 5 minutes to warm-up the muscles before you stretch them but even this is debated. Stretching should always be performed after a workout in order to relieve the tension running has produced.

As you perform your stretching routine you should do so gradually and build up to larger stretches. In other words begin with simple standing stretches and progress to more complicated seated ones that would require more movement and manipulation of the body and limbs. A complicated stretch would be one that requires more than a couple of simple sentences of explanation. A large stretch would be one that either addresses a dense area of muscle or multiple muscle groups simultaneously. Those areas require more time to relax and may be too tight to address first. Pigeon pose is an example of a pose that addresses multiple groups of muscles simultaneously and should be done last.

Each participant should hold the required stretch for 30-60 seconds to allow the muscle to gradually relax. Depending on the tension in the area the stretch can be repeated once each side has been completed. Bouncing up and down should be prevented as well as assisted stretching unless the facilitator is trained to do so. At all times the back should remain neutral and never rounded to prevent injury to the spine and its supportive muscles.

Why the Four-Sided Plan?

There are several ways to stretch different muscles in the body and to include them all would require volumes of text and photos. Within the next couple of pages you will find a few simple selected stretches presented in a four-sided approach. The premise suggest that your legs are comprised of four individual sides, front, outer, inner and rear. The point for the consideration and the plan is to encourage a more thorough inspection of the legs.



Standing Forward Bend

Stand with the feet hip width apart and parallel to one another and have the knees bent slightly. Walk the hands down the quads to release and protect the lower back. Once you have folded forward as far as possible release the hands from the quads and grab the elbows and hold. *This will open the hamstrings and the gluteus. To increase sensation, straighten the legs more by guiding the knees back with the quads.*



Standing Forward Lean

Cross one leg in front of the other keeping the feet a few inches apart. Raise the arm that is on the same side as the rear leg. Grab the wrist of that arm with the other hand, pull the arm straight and lean in the direction of the grabbing hand. Hold then repeat other side. *This will open the outer shoulder, outer rib cage, hip and outer quad and thigh.*



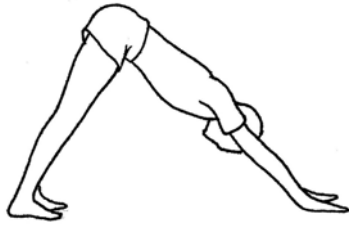
Standing Quad Stretch

Raise one heel into the gluteus and grab that foot with the hand on the same side. Pull the heel into the gluteus while keeping the knees together, back straight and bottom of pelvis forward. Hold then repeat other side. *This will open the quad muscles, shin and ankle. To increase sensation, tilt the top of pelvis further forward.*



Lunge Stretch

Walk one leg behind you as far as you comfortably can and remain on the toes of the rear foot. Bend the other leg to 90° if possible. Place the hands on top of the quad to keep the torso lifted. Hold then repeat other side. *This will open the quads, inner thigh (adductors) and front of hip (hip flexors) for the rear leg as well as the rear inner thigh of the front leg. The toes, arches and achilles will benefit from this stretch as well. To increase sensation, lower the knee of the rear leg, place the top of the foot on the ground and lean into the knee of the front leg.*



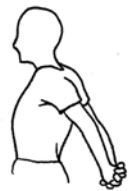
Downward Facing Dog Stretch

From the lunge, place your palms on the ground on either side of the front foot. Walk the front foot back to meet the other and keep them hips width apart. Lift your hips as you lower your heels. *This will open the calves, hamstrings and gluteus. To deepen sensation, tilt the bottom of the sit bones up, lower the heels and straighten the legs more by guiding the knees back with the quads.*



Alternating Shoulder Stretch

From either a standing or seated position grab both elbows and raise the forearms overhead. Release one hand so that it falls toward the shoulder or spine placing the forearm behind the head. Use the grabbing hand to guide the clasped elbow further down the spine. *This will open the outer shoulder.*



Rear Extended Arms Shoulder Stretch

From a standing position extend the arms behind you and clasp the hands. Pull the hands away from you and up simultaneously extending the chest forward. *This will open the front and sides of chest and shoulders with some sensation in the upper back as well.*

Larger Stretches

Once you have completed the above stretches feel free to add more such as the larger ones listed below, but not pictured, since the muscles have been gradually relaxed. If you are not familiar with these and are interested in using them please let me know. The larger stretches require a bit of attention to bodily alignment. Instead of relaxing a particular area you can easily irritate another without proper knowledge.

Standing Forward Fold –w- legs apart
Seated Groin Stretch (Butterfly)
Pigeon Pose
Thunderbolt Pose

Straight-leg Bent Knee Stretch
Hero's Pose
Seated Spinal Twist

Note: Forward bending stretches that would place the head lower than the heart should be avoided if you feel dizzy following a run. If become injured during a run and icing is immediately necessary skip the post run stretch. The drawings were adapted and altered from Bob Anderson's book Stretching. Other sources used to develop this plan are Lore of Running by Tim Noakes, MD, The Runners Yoga Book by Jean Couch and Light on Yoga by Sri. B.K.S. Iyengar.