Why WARM-UP and why post STRETCHING is important?

Before exercise, in the warm-up, you want to prepare the muscle for activity. *Begin with a 5-10 minute jog*. Warm the muscle for the activity. Then perform fluid drills. FLUID drills should focus on the exercise to improve functional movement, coordination, stability, and efficiency while decreasing the risk of injury. Each activity helps to develop important components of proper running technique; if done correctly.

Listed below are several reasons why a runner performs FLUID drills

✓ Serves as an excellent warm-up tool for both training and competitive events: running drills imitate specific characteristics of technically sound running form, including upright posture of the trunk and spinal column, proper arms during the running stride, proper knee drive and leg action.

✓ The drills help to develop the important body awareness ability: the drills are performed slowly at first while developing a feel for proper technique, and proper technique is carried over to the running.

✓ Drills also help to strengthen specific muscle groups: the feet, calves, shins, thighs, and hips. The ankle, knee and hip joints undergo considerable flexibility and extension during the running stride, and each of these joints is exercised through a similar range of motion during the various fluid drills.

Fluid Drills (movement) → 25-40 meters

- High Knee Butt Kicks
- Left, right and alternating Fast Leg
- Fairy Dance
- High Knee Karaoke
- Single Leg Hops
- Skier Hops (Feet together)
- Speed Skates
- Russian Kicks
- Can-Can with Hand Clap
- Lunge Steps
- Backwards Reach
- Swivel Hips
- Fast Feet

Stretching after you exercise is very important for all runners. The benefits from stretching are that you may prevent injury, bring the shortened muscles back to their original length, and to reduce or avoid post exercise stiffness. When you stretch you are trying to increase the range of movement around a joint or a group of joints. This helps to strengthen the joint and to increase the flow of blood into the muscles around the joint.

After exercise, in the cool-down, you want to bring back the muscles used to their original length. During activity the muscle shortens, you notice this when the muscle gets tight and hard. To reduce or even prevent post exercise muscle stiff-ness you are now trying to lengthen and loosen the muscle back to its pre-exercise level. You should hold the stretch for longer - 30 seconds.

Below are stretches we recommend you as a minimum do before and after running. There are many more good stretches but these five exercises will be a good start to prevent you from getting injured.

Ten tips on how to stretch

1. Move slowly into the stretch.
2. Hold the stretch for 10 seconds prior to exercise (warm-up) and for 30 seconds post exercise (cool-down).
3. Breathe and relax while holding the stretch.
4. NEVER do any bouncy stretching, always hold and relax.
5. Focus on the muscle you are trying to stretch and then try to lengthen it.
6. You may be able to breach in and push the stretch slightly further half way through the stretch. This is most important during cool-down.
7. Move slowly out of the stretch again.
8. Remember to stretch both sides.
9. Increasing the range of movement around a joint will help the blood flow to the muscles surrounding the joint and increase circulation that will carry away any lactic acids that may build up in the muscle.
10. Do more stretching that just warm-up and cool-down. A lot of gyms offer stretch-classes where the aim is to permanently and progressively to increase your flexibility.

5 Essential Stretches

Calf – Gastrocnemius

- Step one foot a large step in front of the other
- Feet parallel, pointing forward
- Back heel flat on the ground
- Hands on the front bend knee
- Back straight and head slightly down
- FEEL the stretch in the calf of the back leg

Lower calf - Soleus

- One foot in front of the other, small step
- Weight on the back leg
- Feet parallel, toes pointing forward
- Both heels down
- FEEL the stretch in the lower calf of the back leg

Hamstrings

- One foot in front of the other, a small step apart
- Sit back on the back leg (weight on the back leg
- Stretch front leg (flex foot upwards for extra resistance)
- Lift your buttocks
- Hands on bend leg
- Stomach in, head lifted and back straight
- FEEL the stretch in the straight leg – just below your buttocks

Quadriceps and Hip-flexors

- Back straight
- Stomach in
- Supporting leg soft (slightly bend)
- Push bend foot into your hand at the ankle – Not your toe
- Use a wall or partner for balance
- FEEL the stretch in the quad (hip) of your bend leg and try to move the muscle out for extra flexibility

Iliotibial Band

- Cross feet by taking one foot in front of the other (the right foot in front)
- Find your balance and keep your back straight
- Front leg slightly bend
- Push left hip slightly left, away from the centre of you body
- Hands along side of your body
- FEEL the stretch on the outside of your left leg

Add your own personal stretches:
Know your body and what you need to stretch

Chalk Talk

From Aurora Sports Medicine Institute
www.Aurrora.org/sportsmedicine

Heat versus Ice for Treatment of an Injury

Following an injury, you may have pain and swelling- but how do you know which is the best treatment for a fresh injury, such as an ankle sprain?

You can make the right choice for treatment by understanding the EFFECTS of both heat and ice. Ice is beneficial initially because, when applied to the injured area, the blood vessels constrict and decrease blood flow, thus controlling swelling. Keeping the swelling down is one of the keys to a quick recovery. A general rule is to apply ice to a new injury for at least the first 72 hours. Not only will this help control swelling, but ice can also greatly reduce pain at the injury site. Ice should be applied 15-20 minutes at a time by using a gel-pack, Ziploc bag of ice, bag of frozen vegetables, or simply by placing some ice in a towel.

Heat has the opposite effect of cold, in that it increases the amount of blood flow to the area. The added blood flow helps the healing process by removing unwanted fluid from the injured area. The best time to use heat is after the first 72 hours of injury, but ONLY if there is minimal swelling and the area is no longer warm in comparison to the surrounding tissue. Heat, as with ice, should be applied for about 15-20 minutes at a time. The easiest way to use moist heat at home is by taking a warm bath or shower. However, you can put damp towels in the microwave for about two minutes it simply place a damp cloth towel between a heating pad and your skin. ALWAYS add a layer of cloth between your skin and the heat if the heat pack gets too hot.

It is important to remember that if an injury shows signs of swelling, inflammation, or redness, ice should be used. If the swelling or pain is severe or persists, SEE YOUR doctor for further medical care.

For more information about this or other sports medicine topics, call the Aurora Sports Medicine Institute Hotline (800) 219-7776