

Warming Up

A warm up is should slightly increase the heart rate but not to the level experienced during your workout. Some examples include low intensity on a bicycle, elliptical, rowing machine, or some basic movements seen on the next page.

Benefits of a Proper Warm Up

- Increased movement of blood through your tissues.
- Increased delivery of oxygen and nutrients to your muscles. This prevents you from getting out of breath early or too easily.
- Prepares your muscles for stretching.
- Prepares your heart for an increase in activity, preventing a rapid increase in blood pressure.
- Prepares you mentally for the upcoming exercise.
- Primes your nerve-to-muscle pathways to be ready for exercise.
- Improved coordination and reaction times.

Stretching After a Warm Up

Stretching is necessary to increase range of motion. Sudden forceful movements can cause serious injury to muscles and tendons. Stretching also releases synovial fluid stored in the joints which helps lubricate and project your joints from friction and injury.

Stretching brings blood supply to soft tissues. This improves endurance so you don't get tired as easily. Stretching helps elongate muscles, improve flexibility, promote healing and prevent future injury.



How to Properly Stretch

- **Focus on the major muscle groups**, i.e. calves, thighs, hips, lower back, neck and shoulders. You should also stretch those muscles you regularly use at work, such as the wrist and hands.
- **Do not hold your breath or overstretch** to the point of pain or discomfort.
- **A gradual, sustained stretch** is preferred over a quick, bouncy stretch. If you stretch the muscle slowly, the muscle loosens and you can stretch further. If you stretch too quickly, the muscle reacts with a strong contraction, which increases tension.
- **Do a short warm up first**, then stretch and hold each stretch for 30-40 seconds.

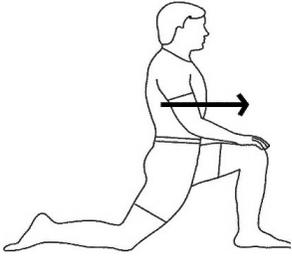
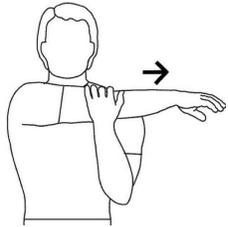
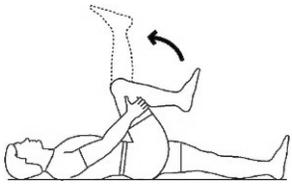
Resources: <http://www.livestrong.com>, <http://www.MayoClinic.com>, <http://www.sparkpeople.com/>

Warm Up Exercises

<p>Step 1 Start an easy march in place to increase blood circulation and lift the body core temperature. Repeat for 3 sets of 8 counts.</p>		<p>Step 1 Stand with your legs hip-width apart, knees relaxed, upper body lifted through spine, and shoulders relaxed. Start with your arms down at the sides. Inhale as you lift your arms to the side.</p>	
<p>Step 2 Alternately extend each leg forward from your hip socket and touch heel to the floor, bending supporting leg at the knee, as you swing your arms rhythmically from side to side. Repeat for 3 sets of 8 counts.</p>		<p>Step 2 Continue inhaling and lift your arms up over your head. Exhale and replace arms to starting position. Repeat for 4 times.</p>	
<p>Step 3 Alternately lift each knee as you raise your arms and reach toward the ceiling. Lift from the hip socket, keeping spine lifted and abdominals held in tight. Keep your weight centered into your hips over your heels. Reach one arm up and over to lengthen the waistline and back. Repeat for 3 sets of 8 counts.</p>		<p>Step 3 Inhale as you lift your arms to the side and up over your head. Hold the abdominal muscles in and tilt the pelvic girdle upward. Clasp hands and round your back slightly to elongate the spine. Keep arms in line with your ears. Relax the shoulders and exhale as you return to starting position. Repeat for 4 times.</p>	
<p>Step 4 Advanced exercisers can move into an easy jog in place. Always keep your body in alignment and roll through the ball and heel of your foot. Bend your knees to absorb the shock of the impact. Intermediate and beginning exercisers can continue with an easy march. Continue for 1 to 3 minutes.</p>		<p>Step 4 Roll your shoulders back 8 times and forward 8 times. Turn your head to the right and left.</p>	

Resource: <http://health.howstuffworks.com/>

At-Home Stretching Exercises

<p>Hip Flexors</p> <ul style="list-style-type: none"> • Kneel on your right knee, cushioning your kneecap with a folded towel. • Place your left foot in front of you, bending your knee and placing your left hand on your left leg for stability. • Place your right hand on your right hip to avoid bending at the waist. Keep your back straight and abdominal muscles tight. • Lean forward, shifting more body weight onto your front leg. You'll feel a stretch in your right thigh. • Hold for about 30 seconds. • Switch legs and repeat. 	
<p>Shoulders</p> <ul style="list-style-type: none"> • Bring your left arm across your body and hold it with your right arm, either above or below the elbow. • Hold for about 30 seconds. • Switch arms and repeat. 	
<p>Lower Back</p> <ul style="list-style-type: none"> • Lie on your back on a firm surface with the backs of your heels flat on the floor. • Gently pull one knee up to your chest until you feel a stretch in your lower back. • Bring the knee as close to your chest as comfortably possible. • Keep the opposite leg relaxed in a comfortable position, either with your knee bent or with your leg extended. • Hold for about 30 seconds. • Switch legs and repeat. 	
<p>Quadriceps</p> <ul style="list-style-type: none"> • Stand near a wall or a piece of sturdy exercise equipment for support. • Grasp your ankle and gently pull your heel up and back until you feel a stretch in the front of your thigh. • Tighten your stomach muscles to prevent your stomach from sagging outward, and keep your knees close together. • Hold for about 30 seconds. • Switch legs and repeat. 	
<p>Hamstrings</p> <ul style="list-style-type: none"> • Lie on the floor near the outer corner of a wall or a door frame if desired. • Raise your left leg and rest your left heel against the wall. Keep your left knee slightly bent. • Gently straighten your left leg until you feel a stretch along the back of your left thigh. • Hold for about 30 seconds. • Switch legs and repeat. 	

Resource: <http://www.MayoClinic.com>