**Lower Body Stretches**

**WHAT IT IS**
Stretching is the act of improving and maintaining flexibility, which is the ability to move a joint or joints smoothly and easily through a full range of motions. Stretches should be held for 20-30 seconds and performed during or after a light warm-up and again during cool-down.

**BENEFITS OF STRETCHING**
- Enhanced physical fitness
- Increased mental and physical relaxation
- Reduced risk of injury to joints, muscles, and tendons
- Reduced muscular soreness
- Reduced muscular tension
- Improved performance

**WHEN TO STRETCH**
Stretching can be done at any time, but is especially important during the warm-up before activities and the cool-down afterward.

**Warming up** is the process of raising the core body temperature. Warming up can be achieved by performing some form of aerobic activity using large muscle groups, such as biking or jogging. Stretching is NOT synonymous with warming up, but should be incorporated into the warming-up process. During warm-up, it is most appropriate to do dynamic stretches that mimic the motions you will be performing during activity.

After a workout, a **cool-down** period is essential. This enables the body to gradually cool and return to its resting state. The importance of this is often ignored, but people who stretch during this period often experience fewer problems with muscle soreness after strenuous activity. The stretches on this page work well as part of your cool down or when used at other times throughout the day.

**STRETCHING EXERCISES**

<table>
<thead>
<tr>
<th>Calf - Gastrocnemius</th>
<th>Calf - Soleus</th>
<th>Quadriceps</th>
<th>Hamstrings</th>
<th>Hamstrings (High)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Calf - Gastrocnemius" /></td>
<td><img src="image2" alt="Calf - Soleus" /></td>
<td><img src="image3" alt="Quadriceps" /></td>
<td><img src="image4" alt="Hamstrings" /></td>
<td><img src="image5" alt="Hamstrings (High)" /></td>
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- **Calf - Gastrocnemius**
  - Stand 3 feet from a wall, facing the wall. Step forward with one foot while keeping the back foot flat on the ground and knee straight. Lean forward until you feel a stretch in your calf.

- **Calf - Soleus**
  - Stand 3 feet from a wall, facing the wall. Step forward with one foot while keeping the back foot flat on the ground and knee slightly bent. Lean forward until you feel a stretch in your calf.

- **Quadriceps**
  - While standing on your left leg, bend right knee and grasp ankle behind you. Pull up and back on the ankle until you feel a stretch in the front of your right thigh. Be sure to keep your back straight during this stretch.

- **Hamstrings**
  - Lie on your back with your legs straight. Loop a towel around one foot and pull your thigh toward your chest while keeping your knee straight.

- **Hamstrings (High)**
  - Lie on your back. Grasp behind your knee and pull thigh to your chest. While holding your thigh to your chest try to straighten your knee, creating a stretch on the back of your thigh.
### STRETCHING EXERCISES

<table>
<thead>
<tr>
<th>Hip Flexor</th>
<th>Groin</th>
<th>IT Band</th>
<th>Glutes</th>
<th>Piriformis</th>
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<td><img src="image1.png" alt="Hip Flexor" /> Kneel on your right knee. Press your hips forward while slightly leaning backwards with your trunk. You should feel a stretch on the front of your right hip.</td>
<td><img src="image2.png" alt="Groin" /> Sit with the soles of your feet together. Press down slightly on both knees simultaneously. You should feel this stretch in your groin area.</td>
<td><img src="image3.png" alt="IT Band" /> Cross your right leg behind your left. Slowly bend your left knee while pressing your hips to your right and leaning your trunk to the left. You should feel a stretch on the outside of your right hip.</td>
<td><img src="image4.png" alt="Glutes" /> Sit with your right knee bent and crossed over your left. Pull your right knee toward your chest. You should feel this stretch in your right buttock.</td>
<td><img src="image5.png" alt="Piriformis" /> Lie on your back with your right ankle crossed onto your left knee. Grasp left thigh with both hands and pull toward your chest. You should feel this stretch in your right buttock.</td>
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<th>Single Knee-to-Chest</th>
<th>Double Knee-to-Chest</th>
<th>Low Back Crossover</th>
<th>Back Extension</th>
<th>Back Lateral Flexion</th>
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<td><img src="image6.png" alt="Single Knee-to-Chest" /> Lie on your back and alternate pulling each knee to your chest. You should feel this stretch in your lower back.</td>
<td><img src="image7.png" alt="Double Knee-to-Chest" /> Lie on your back and pull both knees to your chest at the same time. You should feel this stretch in your lower back.</td>
<td><img src="image8.png" alt="Low Back Crossover" /> Sit with your right knee crossed over your left. Cross your left elbow over your right knee. Use your elbow to push on your knee and create a twisting motion in your back.</td>
<td><img src="image9.png" alt="Back Extension" /> Lie on your stomach and extend your back by pressing up on your arms.</td>
<td><img src="image10.png" alt="Back Lateral Flexion" /> Lift one arm overhead and slowly bend to the opposite side at the waist.</td>
</tr>
</tbody>
</table>

### BREATHING DURING STRETCHING

Proper breathing is important for a successful stretch. Many people make the mistake of holding their breath while stretching, but remembering to breathe helps to relax the blood flow throughout the body and helps to mechanically remove the lactic acid and other byproducts of exercise.