Information for Patients and Families



University Sports Medicine Improve Your Flexibility

Why should I stretch?

- Increase the flexibility of your muscles
- Reduce risk of injury during exercise
- Promote healthy healing from injury

What stretches should I do?

Select stretches that involve the muscles you most commonly use in your sports or work activities. Be sure to give special attention to the areas of your body that you know are tight. You may be given specific stretches to aid in the recovery of an injury or to reduce muscle pain. The hamstrings, calves, chest, and low back are areas that can benefit from stretching in just about everybody. Get guidance from a physical therapist or knowledgeable fitness professional on both exercise selection and technique.

When should I stretch?

The great thing about stretching is you can do it just **about anywhere and anytime.** Stretch while watching TV, during a phone call, as part of a workout, or while waiting for the bus. You may want to stretch as a part of your warm-up for vigorous exercise. This may particularly important for "stop-and-go" sports like tennis, soccer or basketball, or in activities requiring motion outside of your normal movement patterns such as gymnastics or dance. There is no scientific evidence that stretching *before* a workout decreases your chance of injury. However studies suggest that improving overall flexibility by stretching at various times during the day can help. As we age, our muscles begin to lose some of their natural flexibility. Stretching becomes even more important to maintain fluid movement and range of motion. If you do a light cardiovascular warm-up prior to stretching, your muscles will be more pliable and may respond better to flexibility training. It is best to stretch daily, but you should follow the recommendations made by your doctor or physical therapist.

How should I stretch?

Hold the stretch position so that you feel muscle tension, **but not pain.** As you feel the muscle "release" you can lean further into the stretch to promote even greater flexibility gains. If you are stretching as part of a program of physical therapy, follow your therapist's instructions. Otherwise, hold the stretch 30 seconds and repeat each stretch 1 to 3 times. There are several other stretching methods involving the use of a partner or tightening of the opposite muscle group before stretching. An athletic trainer or physical therapist can provide expert instruction in these more complex techniques.

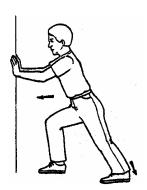
What else can I do to promote flexibility?

- Participate in exercise activities that require and encourage a full range of motion. Yoga, tai chi, martial arts, and various forms of dance require and develop flexible muscles.
- If you're stuck in the same posture all day in your job (constantly sitting or constantly standing), make an effort to periodically change your body position. Move around and stretch.

Stretching Exercises



- 1. Prop your leg up on a bench or stair, as shown. Stand tall with your chest high and your tummy tight.
- 2. Bend forward at the hip, keeping your knee and back straight, so that you feel the stretch behind the thigh or knee.
- 3. Hold the stretch for 30 seconds. Repeat 1 to 3 times on each side.
- 1. Stand grasping your ankle as shown.
- 2. Pull your bent leg backwards, keeping your knees parallel. Tuck your buttocks under and keep your tummy tight.
- 3. Bring your heel closer to your buttocks for more stretch.
- 4. Do not lean forward or allow your back to arch.
- 5. Hold for 30 seconds. Repeat 1 to 3 times on each side.



- 1. Position your body against a wall as shown, with one foot behind.
- 2. Point your toes directly toward the wall and hold your heel down.
- 3. Lean into the wall so that you feel a stretch in your calf.
- 4. Hold 30 seconds. Repeat 1 to 3 times on each side.
- 1. Stand, propping your leg up on a solid object as shown.
- 2. Lean your trunk forward so that you feel a stretch.
- 3. Hold 30 seconds. Repeat 1 to 3 times on each side.



2003, University of Colorado Hospital, Aurora