Stretches to Help Maintain or Improve Limb Function

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Knee Flexor or Hamstring Stretch
Keeping your hamstrings (located behind the knee and thigh) stretched will enable your knee on your residual limb to fully straighten. This is very important for prosthesis use because it will enable you to fully extend your knee during walking or running.

1. Sit on the edge of a sofa or similar type surface, preferably something harder.
2. Point the leg you will be stretching directly in front of you (Figure 1).
3. Hang the opposite leg to the side.
4. Lean forward gradually until you feel resistance in the back of the extended leg (Figure 2).
5. Do not bounce during this stretch.

2. Place a rolled towel under your leg above your knee if you are a below-knee amputee or close to the end of your residual limb if you are an above-knee amputee (Figure 3).
3. Make sure you have enough leverage to feel a stretch on the front of your hip and thigh.

Supine (Face Up) Position
1. Sit on the edge of your bed or mat (Figure 4).
2. Lie back, while grabbing the opposite leg from the one you want to stretch (Figure 5).

Hip Flexor Stretching (Two Positions)
These muscles (located on the front of the hip and thigh) often become tight from sitting too much, making it difficult to stand up and walk with a prosthesis. Stretching these muscles is crucial for good standing posture and for walking correctly. If the hip flexors are too tight, your back and sound leg will work hard to compensate for them and may themselves be injured by the additional stress.

Prone (Face Down) Position
1. Lie comfortably on your stomach.
3. The residual limb that is being stretched should be hanging in the air.

4. Pressure should be applied downward to the residual limb by another person or a weighted object, such as an ankle weight (Figure 6).

Elbow Flexor and Extensor Stretch
Decreased use of an arm that has been amputated below the elbow is common, which occasionally leads to elbow tightness. Full elbow range-of-motion is important, however, for increased function, especially when a prosthesis is being used.

**Flexor Stretch**
1. Lay your residual limb horizontally on a table or hard surface with a rolled towel under your arm just above your elbow.

2. Apply downward pressure to the end of your residual limb until a stretch is felt (Figure 7).

**Extensor Stretch**
1. Bend your residual limb at the elbow as far back as possible.

2. Apply pressure to the back of your forearm below the elbow until a stretch is felt (Figure 8).

Shoulder Stretching
Any person with an amputated upper limb at any level has a greater chance of having limited shoulder motion due to decreased activity. It is important to make sure that shoulder motion is maintained within functional limits for future use of that residual limb.