Below Knee Amputee Exercise Program

It is important that you take an active role in your rehabilitation. The following exercises must be done every day to prevent any complications.

After a below the knee amputation, it is important to prevent the hip and knee from staying in a bent or flexed position. To prevent this from happening you need to do the following:

• Frequently change the position of your hip and knee. Do not sit in a chair for long periods.

• Lay on your stomach for 20 minutes, 2 or 3 times a day. Do not place a pillow under your stomach.

• Do not put your amputated leg on a pillow when lying down unless otherwise told to do so. Do not place a pillow under your hips, knees or between your thighs.

• Do not hang your amputated leg over the side of the bed for a long period of time.
Do only the exercises checked by your therapist. Do each exercise ___ times a day.

**Stretching exercises:**

Do **not** bounce back and forth when doing stretching exercises.

- **Hamstring Stretch**
  
  Lie on your back. Bring your non-amputated limb toward your chest. Put your arm around your thigh and pull even closer. Hold for 20 seconds. Bring your non-amputated knee toward your chest. Straighten your leg until you feel a stretch in the back of your thigh.

- **Hip Flexor Stretch**
  
  Lie on your back. Bring your non-amputated leg up to your chest and hold it with your arms. Have someone push your amputated limb down to the bed and hold it for a count of 20. Relax and repeat. When your amputated leg can easily lie on the bed, scoot to the side and dangle your amputated limb over the side of the bed. Repeat the above exercise.
- **Alternative Stretch**
  
  Lie on your stomach. Place a rolled towel under your amputated limb. Lie in this position for 20 minutes. As you stretch the hip flexor muscle, you may increase the size of the towel roll.

- **Adductor Stretch**
  
  Sit with your back against a wall or against the head of your bed. Put your amputated limb out to the side and bend the other leg slightly. Push on the thigh, so you feel a stretch in your inner thigh. Make sure that both buttocks remain on the floor. Do not lift one up in the air.

- **Knee Bending**
  
  - Lie on your back and bend the knee of your amputated leg to your chest. Bend it as far as possible and then straighten the knee completely. Return to a starting position.
  
  - Lie on your stomach and bend your knee backwards as far as possible, keeping the thigh of your non-amputated leg on the bed.
☑ **Quad Sets**

Push the back of your knee down against the bed to tighten your thigh muscle. Hold for 5 seconds and release. Do this exercise on your amputated and non-amputated leg.

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**Strengthening Exercises**

☑ **Hip Extension - Prone**

Lie on your stomach. Lift your amputated limb toward the ceiling keeping your knee straight. Hold and then return to the starting position. Repeat _____ times.

![Diagram of Hip Extension - Prone](image1)

☑ **Hip Extension on Side**

Lie on your side. Push your amputated leg straight back behind you. Hold and then return to the starting position. Repeat _____ times.

![Diagram of Hip Extension on Side](image2)
- **Hip Extension #2**
  Lie on your back. Place a rolled towel under the end of your amputated limb. Push down into the towel and lift your hips off the floor. Repeat ___ times.

- **Hip Abduction**
  Lie on your back. Fasten a belt or theraband around your thighs as low as it is comfortable. Try to pull your legs apart by pushing outward against the belt or theraband. Push for a count of 5. Relax. Repeat ___ times.

- **Hip Abduction on Side**
  Lie on your side and lift your top leg toward the ceiling. Do not turn your knee up toward the ceiling. Return to the starting position. Repeat ____ times. Repeat this exercise with the other leg on top.

- **Hip Adduction**
  Lie on your back. Place a rolled towel or pillow between your legs as low as is comfortable. Squeeze the towel between your legs for a count of 5. Relax. Repeat this ___ times.
Alternative Hip Adduction Exercise

Lie on your side. Bring your top leg forward and let your foot rest on the floor in front of you. Lift your bottom leg toward the ceiling. Return to the starting position. Repeat ___ times.

Pelvic Tilt

Lie on your back. Bend your knee so the foot of your non-amputated leg is resting flat on the floor. Place your hands in the small of your back. Push your low back into your hands. Hold for a count of 5. Relax. Repeat this ___ times.

Partial Sit-up

Lie on your back. Bend your hips so the foot of your non-amputated leg is resting flat on the floor. Rest your hands on your thighs. Slowly curl up until your head and shoulder blades are off the floor. Look up to the ceiling as you do this exercise. Repeat this ___ times.

Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.