Above Knee Amputation: Positioning and Exercise Program

The exercises and stretches in this handout will help to prepare you to wear a prosthesis properly. The positioning instructions and exercises in this program are designed to help you:

- Regain full motion at your hip
- Decrease stiffness
- Strengthen specific muscles to make sitting more comfortable and make you better able to transfer and use a prosthesis
- Increase your endurance for everyday activities

Perform the exercises as directed by your Physical Therapist (PT).
Repeat each exercise 10 times, 3 times per day.

Important positioning Do’s and Don’ts:
Remove the pillow from underneath your residual limb by noon on the day after surgery and do not put it back. Placing a pillow under your residual limb puts your hip in flexion. This means it is bent and can limit normal movement. It is very important that you are able to get your hip straight with your thigh flat on the bed. Each section will review their specific positioning do’s and don’ts, followed by exercises.

Section 1: Lying on your back

- Do keep your residual limb flat so that your hip is straight
- Do keep your legs close together
- Do lie on a firm bed or couch
- Don’t put a pillow under your residual limb
• Don’t put pillows between your thighs

**Exercise 1: Gluteal Sets**— Squeeze your buttocks together. Hold for 5-10 seconds. Relax. Repeat.

**Exercise 2: Hip Extension**— Pull your non-operative leg up to your chest with your hands. Push your residual limb down into the bed. Hold for 5-10 seconds. Relax. Repeat with opposite leg (See figures 1 and 2).

![Figure 1](image1.png)

![Figure 2](image2.png)
**Exercise 3: Bridging**— Bend your non-operative leg and place the bottom of your foot flat on the bed. Tighten your buttocks while lifting your hips off the bed. Work up to holding for 5-10 seconds. Relax. Repeat. (See figure 3)

![Figure 3](image)

**Exercise 4: Hip Adduction**— Place a towel roll between your thighs. Squeeze the towel roll, keeping your legs flat on the bed. Hold for 5-10 seconds. Relax. Repeat. (See figure 4)

![Figure 4](image)
Exercise 5: Hip Abduction—Slide your residual limb out to the side as far as possible. Do not roll the residual limb. Return to the middle. Relax. Repeat. (See figure 5)

![Figure 5](image)

Exercise 6: Hip abduction—Lie on your non-operative side. Lift your residual limb straight up, keeping your residual limb straight in line with your hip. Relax. Repeat. (See figure 6)

![Figure 6](image)
Exercise 7: Hip extension—Lie on your non-operative side. Bring your residual limb to your chest. Move the residual limb backwards as far as possible. Relax. Repeat. (See figure 7)

![Figure 7](image)

Section 2: Lying on your stomach:
- **Do** lie on your stomach on a firm bed at least 30 minutes twice a day
- **Do** keep both hips flat against the bed, completely straight
- **Do** keep your legs close together
- **Don’t** put pillows under your stomach or hips
- **Don’t** put pillows between your thighs
Exercise 8: Hip extension— Keep your hips flat on the bed. Lift your residual limb up toward the ceiling, pause at the top. Relax. Repeat. (See figure 8)

Section 3: Sitting:
- Do sit on a firm chair or couch
- Do sit up straight with your weight equally distributed onto your hips
- Do keep your thighs close together
- Do get up from the sitting position, at least hourly to stand or walk
- Don’t let your residual limb move out to the side away from your other leg
Exercise 9: Chair Push-Ups—Place hands on the armrests of the chair. Press down and lift your body by straightening your arms. Avoid pushing through your foot, it should be resting on the floor for balance. Hold for a count of 5 seconds. Slowly, lower yourself into the chair. Relax. Repeat. (See figure 9)

Section 4: Standing:
- Do try to stand up or walk at least once every waking hour
- Do hold your residual limb pointing to the floor when walking, with your hip straight
- Don’t hold your residual limb in front of you or out to the side when walking
- Don’t rest residual limb on walker or crutches
**Balance:**

When you have an above-knee amputation you lose approximately 15% of your body weight. This means when you move and stand, your center of gravity has shifted. This may make you feel off balance until you get used to your new center of gravity. When you are first transferring, standing, and walking you will be provided assistance and should use a gait belt. The more you move, stand, and walk, the sooner you will learn your new center of gravity and feel balanced again.