Core Strengthening After Lower Limb Amputation

After the loss of a leg, the muscles in the middle of your body will become very important to you. You can think of strength in the “core” or the middle of your body as a stable platform which makes it easier for your arms and leg to help you getting in and out of bed, standing up, and walking.

**BASIC SIT-UPS**

- Put your hands together like you are going to say a prayer.
- Tighten your tumy muscles like you are blowing out some candles.

- Push your hands between your knees, lift your head, and curl your back just until your shoulder blades come off the bed. Then slowly lower back down!
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HELPFUL HINTS!!

- Don’t put your hands behind your head-- this may hurt your neck!

- If your legs and feet come up in the air, you’re lifting your head too high!

- Try the same exercise with your hands across your chest, instead!

- Do 10 sit-ups at a time, a few times a day.

- When you can do 10 sit-ups without stopping, try to add 5 more.

- **Stop** if it hurts your low back or down your legs.

- You can try the same exercises sitting in a chair!!
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**CHAIR EXERCISES**

- You can do these with your hands across your chest (as shown above) or with your hands together like the basic sit-up.
- Put your chin toward your chest, and curl forward.
- Once your shoulder blades come away from the back of the chair, you don’t need to go any further forward.
- Return to the start position SLOWLY to also work your back muscles.

**ABDOMINAL BRACING**

- Put a small towel roll or ball in the small of your back.
- This should make you arch your back just a little bit!
- Pull in your tummy muscles like you are blowing out a candle.

START:
 Lean back in chair

Try to squeeze a ball or towel between your knees!
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CHAIR EXERCISES - LIFTING

- Keep your tummy tight (blow out some candles)!
- Slowly lift a light weight with both hands.
- Try to keep sitting straight—you may lean a little toward your amputated leg.
- Only lift until your hands are even with your shoulders.
- Try side-to-side twists with the same weight...unless it hurts your back!
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SUPINE BRIDGES

- To start, tighten your tummy like you are blowing out candles.
- Squeeze your butt muscles together.
- Once you can do those two things together, push down on your elbows and your foot, and try to lift your bottom off of the bed.

- Hold this position, count out loud to three, then SLOWLY lower back down!
PLANK EXERCISES

If you have a back that is easily hurt during bending or stooping, plank exercises may be more helpful to you. For the plank, you imagine your body being straight just like a 2 x 4 or plank like you would see in a lumber yard. The key is to pull your belly button in toward your backbone, and at the same time tighten the muscles in your low back without moving.

To Start:

- Get into a “push-up” position: Bend your ankle like you are stepping off of the gas pedal, with your big toe on the bed. Put your forearms on the bed, elbows level with your shoulders.
- Tighten your tummy muscles like you are blowing out birthday candles.
- Try to hold this position and count out loud to 5, then relax your tummy.
- Once you can do this for a 5-count, try to hold it for a 10-count.
- It may be more comfortable for you to put a pad under your amputated leg at the end of your thigh, but not right on the incision.

This “prone on elbows” position is a great stretch for the legs!
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The Plank Lift

- Put weight through your foot and your elbows, and slowly lift your waist up off the bed.
- Hold this position still for 5–10 seconds, then SLOWLY lower down.
- Keep your back straight! If it starts to hurt your back, lower down and take a break from the exercise.

Note the pad under the shin, away from the incision!

If your amputation is above the knee, the pad goes under the mid-thigh!
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Advanced Plank

- As you get stronger, try to lift your amputated leg up in the air while you hold the “plank” position!
- Try this with your knee straight, and then with your knee bent...this will work different muscles in the back of your leg.
- Try pointing at the wall with one arm at a time while you hold the “plank” position (you may need to prop your amputated leg on a pad to do this).
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SIDE PLANKS

The muscles on the sides of your tummy turn or twist your trunk. Think about what we do when we open a car door, put something in our back pocket, or close a kitchen cabinet. Side planks can help to strengthen these muscles without twisting a sore or injured back.

- Push down on your elbow (keep it in line with your shoulder).
- Try to lift your hips off the bed, hold for 3 to 5 seconds.

• Keep your shoulders, hip, and knees in a straight line!

Imagine you are pulling your ribs and hips closer!