

Resistance Training (Alternative-No Equipment)

Name: _____

Date: _____

Exercise Supervisor Contact: _____

How to do resistance training:

1. Do five minutes of slow walking and a stretching routine before and after resistance training. See pictures at end of document.
2. Do all exercises slowly and breathe normally. When you are performing an exercise, raise your body weight **to a count of 2 and lower your body weight to a count of 3.**
3. Do resistance training 2 to 3 times a week with at least one day of rest in between workouts.
4. Rest for at least 30 to 60 seconds between exercises.
5. **Stop** and talk with your Rehab Supervisor if you have any problems while doing the program.
6. Ask someone at home to help you with the exercises that require balance such as the first exercise (static lunge). The assistant should stand at your side, and if needed can correct any loss of balance by placing one hand on your hip.

Important words to know:

Repetition: Doing 1 complete exercise movement (such as 1 curl up)

Progression: Gradually increasing the difficulty level or adding more repetitions

Power up: Lifting the limb as fast as possible

What's the right intensity or effort level for me?

To find out if you are exercising at the right level of effort or if the exercise is the right one for you, answer these questions:

- After doing the last repetition, do I feel that I can do 5 to 10 more repetitions?
If you answer yes, then the exercise is **too easy**.
- Am I struggling to complete the last repetition?
If you answer yes, then the exercise is **too hard**.
- After the last repetition, do I feel as if I could do 2 to 3 more repetitions and no more?
If you answer yes, then this is a **good starting level or a good exercise for you**.

How to progress so you can get stronger and gain more muscle:

1. When you can comfortably repeat an exercise 10 times, slowly increase the number of repetitions to 15. **This may take 2 to 4 weeks.**
2. When you can comfortably repeat an exercise 15 times, increase the difficulty level and reduce the repetitions to 10.
 - a. There are examples of how to progress for each exercise. Check the tip included under each exercise picture.
3. Fill in your resistance training diary. Hand them in when you attend an exercise class or send them to your health care professional. Tracking your progress can help to keep you motivated.

Examples of how to progress the exercises:

Note: People progress at different rates. This is an example only.

Step	Week	How many repetitions to do	Type of Exercise
A	2	10	Continue with same exercise
B	3	12 to 13	Continue with same exercise
C	4	13 to 15	Continue with same exercise
D	5	10	Progress exercise to increase the difficulty level.*
----	8	Repeat steps B to D	-----

*Note: There are examples of how to increase the difficulty level for each exercise. Check the tip included under each exercise picture.

To help you to keep track of the exercises that are most appropriate for your level, use the resistance training worksheet the first time you use this document.

Dynamic Stretches

moving

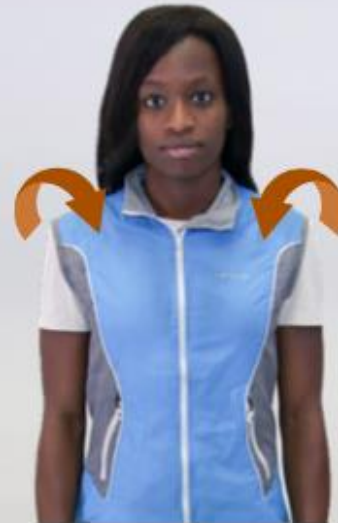
**BEFORE
EXERCISE**

Do these stretches **BEFORE** you do your walking/biking or resistance training program.

1 Standing March



2 Shoulder Rolls



3 Leg Swings



4 Ankle Rolls



Resistance Training Exercises

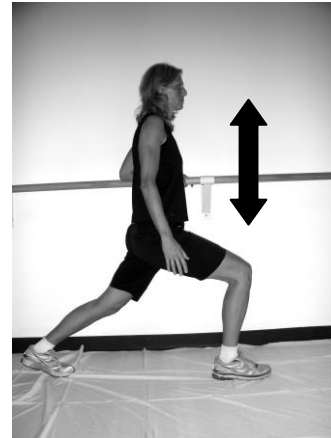
1) Static Lunge

Benefit: Helps with walking and balance.

Start and End Position



Middle Position



1. Put one hand on counter or ledge for support
2. Take a step forward and bend the front knee making sure that the knee does not go past the toes.
3. Without pausing, keep the same foot position as you slowly straighten the front leg. Repeat knee bend on the same leg for up to 10 repetitions.
4. Then repeat with the other leg keeping back straight.

Repeat up to 10 times on each leg; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Tips:

1) If this is too difficult, only take a small step forward and bend the knee a quarter of the way.

Marzolini, Susan Registered Kinesiologist, PhD May 11, 2020

2) To make this exercise more difficult take a longer step forward.

Static Lunge Options

If you have **knee pain** when performing the static lunge then replace this exercise with one of the following shown at the end of the document.

1B) Thigh Press (easier) on page 14

1C) Seated leg lift (a bit harder) on page 15

- **Otherwise, continue to Exercise #2.**

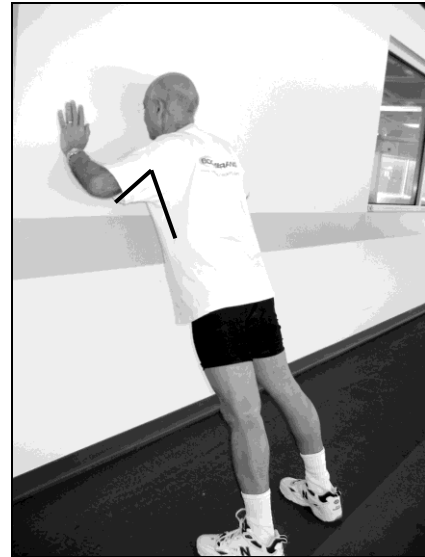
2) Wall Push Up

Benefit: Makes chest, arms, and upper back muscles stronger.

Start Position



End Position



1. Stand facing the wall with your feet placed slightly wider than shoulder width apart. Start with your feet close to the wall.
2. Put hands on the wall at shoulder height.
3. Gently lean forward. Then push back to start position making sure your back stays straight.

Technique tip: When doing this exercise try and keep a 45 degree angle between your elbow and your side

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more.

Move closer to the wall if you cannot complete 10 repetitions.

As you get stronger, gradually increase to 15 repetitions.

Progression: To make the exercise harder and as you get stronger, place your feet further away from the wall.

3) Heel Raises

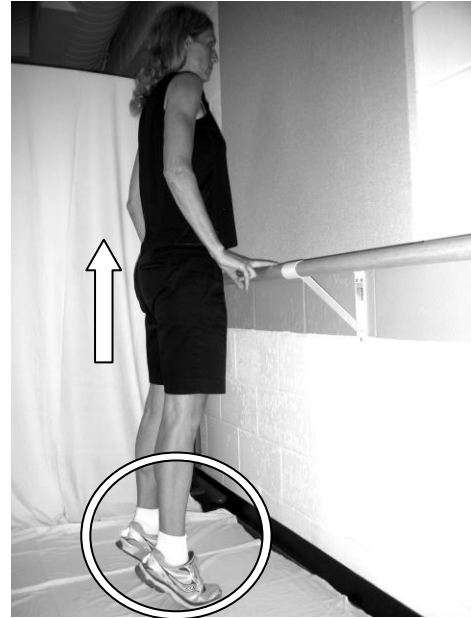
Benefit: Helps improve your balance and makes you stronger for walking.

Start and End Position



Stand with your feet shoulder width apart. Use the counter for support if you need it.

Middle Position



Slowly raise your heels as high as you can. Then slowly lower your heels and repeat.

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 repetitions.

Tip: Lift your body up towards ceiling and not forward.

Try to make sure your weight is distributed evenly between your feet.

Progression: you can progress in any order for options below.

1. Use less support by putting only two fingers on counter. Then try with no support.
 2. Lift heels as fast as possible (power up), and slowly lower heels down.
 3. Put something heavy (10 to 20 lbs) in a knapsack.
 4. See Heel Raise Options 3B on page 16 to progress to the next level.
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Heel Raises Options and Alternatives

If exercise 3 (heel raise) is too easy or you are ready to progress, try exercise 3B

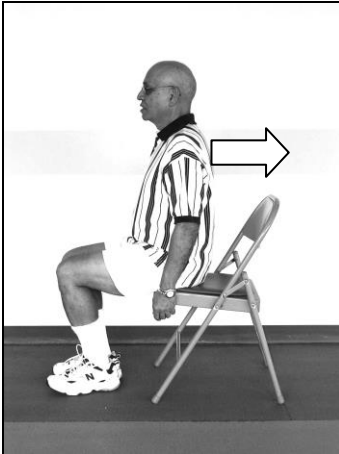
Heel Raise on the stair (harder) on page 16

- **Otherwise, continue to Exercise #4.**

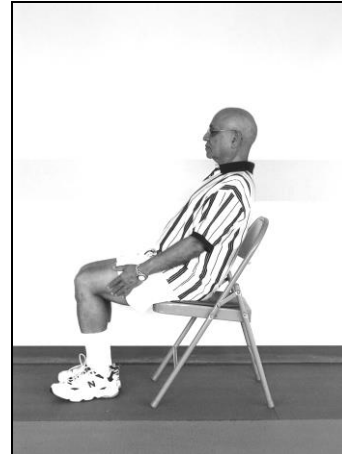
4) Seated Forward Curl – See important note below

Benefit: Helps improve balance and strengthen your core muscles.

Start Position



End Position



1. Place a sturdy chair (no wheels) against a wall. Sit in the middle or front of a chair (front is harder)
2. Using your hands as little as possible (or not at all, if you can) lean back slowly so that you are almost touching the back of the chair. Keep your back straight, knees bent, and feet flat on the floor. Do not arch your neck back.
3. Slowly bring your trunk forward. Make sure you can feel your stomach muscles doing most of the work until you are sitting up straight.

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

When this gets easy, try the progressions shown on the next page.



Important Note: Please talk to your exercise supervisor if you have osteoporosis or risk of fracture of the bones in the spine (weakened or thinning of the bones) or a hernia. This exercise may not be appropriate for you.

Progression for Seated Forward Curl:

Progression 1



Progression 2



- a. The further that you sit to the front of the chair the harder the exercise gets.
 - b. When you can do the 'curl up' comfortably 15 times, then cross your arms over your chest.
 - c. When you can do this exercise with arms crossed over chest 15 times comfortably, place your fingertips on your temples and extend your elbows out.
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5) Bridging Exercise

Benefit: Helps to build strength in the buttock and the hamstrings (the muscles in the back of the legs behind the thighs)



Lie flat on your back with knees bent, feet planted flat on the floor.



Tighten stomach muscles and buttock muscles and lift buttocks off the floor.

Create a straight line from your shoulders to your knees.

Return to starting position and repeat

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more. As you get stronger, gradually increase to 15 reps.

Tips: You can do this exercise while lying on a bed as above. Use either no pillows behind your head or a flat pillow. You can do this exercise on the floor.

Progression: Put your feet on a chair seat or put two or three pillows under your feet (see Exercise 5B on page 17).

When ready, try this exercise one leg at a time (see Exercise 5C on page 18).

Note: This is the last exercise of the workout.

For greater benefit, do the exercises again when you feel ready (2 or 3 sets).

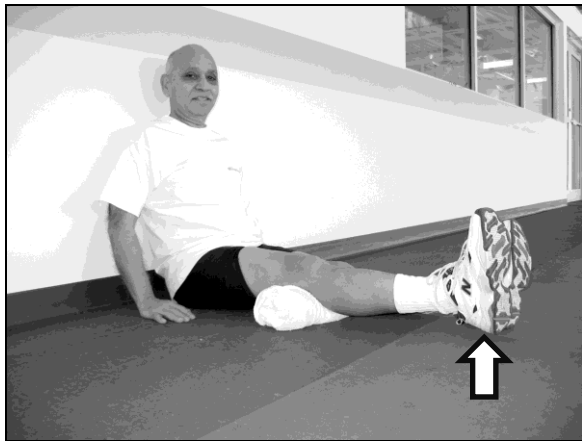
The exercises shown herein are ones that are harder or easier than the ones above. They will replace the exercise above.

Replacement Exercises For Numbers 1 to 5 Above

Alternative Exercises to the Static Lunge (Exercise #1)

1B) Thigh Press (easier)

Benefit: Makes the muscles around the knee stronger to help stabilize the joint.



1. Roll up a bath towel. Sit on the floor or bed, and lean against a wall with your legs straight out in front of you.
2. Place the towel under one knee.
3. Squeeze your front thigh muscles tightly and press down on the towel.
4. Hold for 2 slow counts. Relax and repeat. Then switch legs.

Repeat up to 10 times on each leg; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Alternative Exercise to the Static Lunge (Exercise #1)

1C) Seated Leg Lift (a bit harder than the thigh press)

Benefit: Makes the muscles around the knee stronger to help stabilize the joint.



1. Sit on the floor or bed. Lean against a wall with one leg straight out in front of you and the other bent.
2. Wrap your arms around the bent leg for support.
3. Lift the straight leg off the floor, keeping the leg straight (but not locked). Try not to lean back.
4. Lower the leg, lightly touching the floor and repeat before switching sides.

Repeat up to 10 times on each leg; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Alternative Exercises to the Heel Raise (Exercise #3)

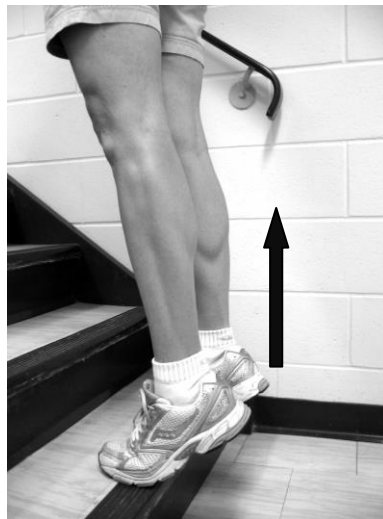
3B) Double Heel Raise on Stairs (harder)

Benefit: Helps to improve balance and builds strength for walking and stair climbing

Start and End
Position



Middle Position



Stand with both feet on the bottom step using good posture.

Using the handrail for support, slowly raise your heels as high as you can.

Slowly lower your heels down below the level of the stair.

Repeat.

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Tips: Lift your body up towards the ceiling and not forward.

Try to make sure the weight is even between your feet.

Progression: Slowly lower your heels down as low as possible, then **POWER UP** (lift your heels as fast as possible without losing balance). Repeat.

When ready, speak with your rehab supervisor to try this exercise one leg at a time.

Progression to the Bridging Exercise (Exercise #5)

5B) Bridging Exercise Progression (on bed with pillows)

Benefit: Helps to build strength in the buttock and the hamstrings (the muscles in the back of the legs behind the thighs)



Lay on your back with your palms down at your sides.

Bend your knees with feet on the pillows.



Tighten stomach and buttock muscles and lift buttocks off the floor.

Create a straight line from your shoulders to your knees.

Slowly return to starting position and repeat.

Repeat up to 10 times; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Tips: Use either no pillows behind your head or a flat pillow.

Progression: When ready, try this exercise one leg at a time (see Exercise 5C on page 18).

Progression to the Bridging Exercise (Exercise #5)

5C) One-leg Bridge (Hardest)

Benefit: Helps to build strength in the buttocks and the hamstrings (the muscles in the back of the legs behind the thighs)



- 1 Lay on your back with your palms down at your sides.
2. Bend your knees with feet on the floor or bed.
3. Lift one leg and fully extend it, forming a 45-degree angle with the floor.
4. Tighten stomach and buttock muscles and lift hips off the floor.
5. Slowly return to the starting position and repeat.

Note: This exercise can be performed on the bed. Use either no pillows behind your head or a flat pillow.

Repeat up to 10 times on each leg; stop when you feel you could do 2 to 3 more repetitions and no more.

As you get stronger, gradually increase to 15 reps.

Static Stretches

not moving

AFTER EXERCISE

Do these stretches **AFTER** you do your walking/biking or resistance training program. **Hold each stretch for 15 to 30 seconds. Breathe normally.**

