

Strength and balance

– exercise program to prevent falling

Light
program

This program is based on the OTAGO exercise program (Campbell & Robertson 2003), which has been proven effective in fall prevention.

- The aim of this exercise program is to maintain and improve balance and lower limb muscle strength. If you have been diagnosed with acute fractures, talk to your doctor before starting the program.
- Do the exercises three times per week.
- Start by doing 10 repetitions of each exercise. Take a break and then do another set of 10 repetitions if possible. If you do not have ankle cuff weights, you can also do the weight exercises using a resistance band.
- If necessary, place a pillow behind your back when you do the exercises in a sitting position.
- If you use a table or chair for support during the exercises, make sure that it is sturdy and will stay in place. As you progress, stay close to the table or chair but use it less.
- If necessary, contact a physiotherapist who specialises in fall prevention.
- Warm up a bit before starting the exercises. You can take a short walk or, for example, march in place for a few minutes while sitting or standing.

Knee extension

- Strap the weight on to your ankle. Sit on a chair with your back straight and well supported.
- Extend your knee until your leg is completely straight and then slowly lower the leg to the starting position.
- Switch the weight to the other ankle and repeat the exercise.

Alternatively, you can make a loop out of a resistance band and place it around your ankle and the leg of the chair. The band resists the movement when you extend your knee.

Repeat
10 times.
Take a break
and repeat
the exercise
if possible.



Knee flexion

- Strap the weight on to your ankle. Stand up tall, keep your back straight and look ahead. Hold on to, for example, the back of a chair or a table.
- Bend the knee and lift your foot up towards your bottom. Slowly lower your foot.
- Switch the weight to the other ankle and repeat the exercise.

Alternatively, you can make a loop out of a resistance band and place it around your ankle and the leg of the chair or table. The band resists the movement when you flex your knee.



Repeat 10 times. Take a break and repeat the exercise if possible.

Figure 8 walking

- Imagine a figure 8 pattern on the floor and walk along it.
- Walk at your normal pace.

Take a short break and repeat the figure 8 in the opposite direction.

You can adjust the difficulty by changing the size of the figure 8: A smaller figure 8 is more challenging for your balance than a large figure 8.



Standing side leg raise

- Strap the weight on to your ankle. Stand beside a table or chair and hold on to it with one hand. Stand up tall and keep your back straight throughout the movement, without leaning on the table or chair.
- Keep the exercising leg completely straight and lift it to the side. Slowly lower the leg.
- Switch the weight to the other leg, turn around and repeat with the other leg.

Alternatively, you can make a loop out of a resistance band and place it around both of your legs. The band resists the movement when you lift your leg to the side.



Repeat 10 times. Take a break and repeat the exercise if possible.

Heel toe standing

- Stand next to a table or chair for support. Stand up tall, keep your back straight and look ahead.
- Place one foot directly in front of the other as if you were standing on a line.
- Hold this position for 10 seconds.
- Move the front foot behind the back foot so that your feet are once again in a straight line. Hold this position for 10 seconds.



One leg stand

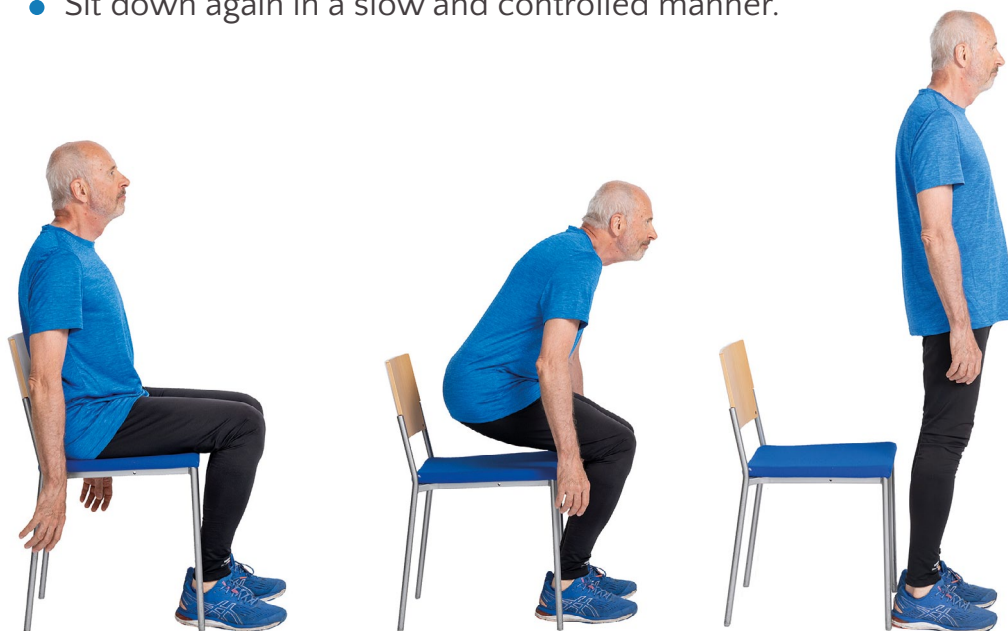
- Stand next to a table or chair for support. Stand up tall, keep your back straight and look ahead.
- Lift a leg into the air and stand on one leg.
- Try to hold this position for 10 seconds.
- Repeat with the other leg.



Sit to stand

- Sit on a chair with your feet firmly on the floor.
- Lean forward and stand up while straightening your back.
- Sit down again in a slow and controlled manner.

Aim for
10 repetitions.
Take a break
and repeat
the exercise.



If you have difficulty getting up from the chair, you can use your hands to lightly push off the knees.