

Balance and strength exercise manual

BALANCE AND STRENGTH EXERCISES TO PREVENT FALLS

Welcome to the program!

These exercises have been selected to help you reduce the chance of falls. When you do these exercises you can improve:

- balance
- muscle strength.

You need to do the BALANCE exercises daily and the STRENGTH exercises three times each week. They do not all have to be done at the same time. You can divide the exercises up if that works better for you – 'snack on them'. Between each set of exercises take three deep breaths.

You may feel a bit stiff at first. This is quite normal. It is because you are using muscles that are not used to working in this way. It is important that you keep exercising. The stiffness will leave as your body becomes more used to the exercises.

SAFETY

Never exercise holding onto an object that may move, such as a chair. Use something stable like a bench or solid table.

Make sure you're medically able to do the exercises, and contact your doctor if, while exercising, you experience:

- dizziness
- chest pain
- shortness of breath (you are unable to speak because you are short of breath).

IMPROVING BALANCE TO PREVENT FALLS: BALANCE EXERCISES

Do these daily:

- 1. Sitting to standing
- 2. Sideways walking
- 3. Heel-and-toe standing
- 4. Heel-and-toe (tandem) walking (talk to an exercise specialist before beginning).

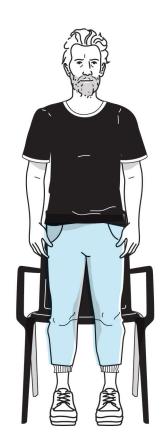
Balance is important for everyday activities. The following quick balance exercises should be done every day. You can do them all at one time or throughout the day as part of your daily routine.

For balance exercises, many people need to start with a firm support – stand close to a wall or bench. You need to challenge your balance to improve it. So you will need to upgrade by not holding on. This can be done by tapping and holding less and by reducing your base of support. Reducing your base of support is about moving your feet closer together. The aim is to increase the time and be able to do the activity without holding on.

You can improve your balance and maintain your gains.

SIT-TO-STAND

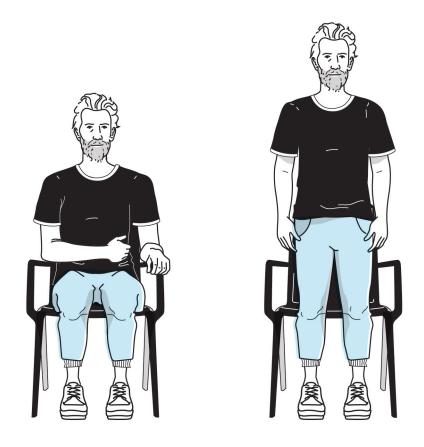




- 1. Sit on a chair that is not too low.
- 2. Place your feet behind your knees.
- 3. Lean forwards over your knees.
- 4. Move forward ready to rise.
- 5. Push off the armrests with your hands if needed.
- 6. Stand up very slowly.
- 7. Stand tall.
- 8. Now sit down slowly.
- 9. Repeat this exercise ____ times daily.

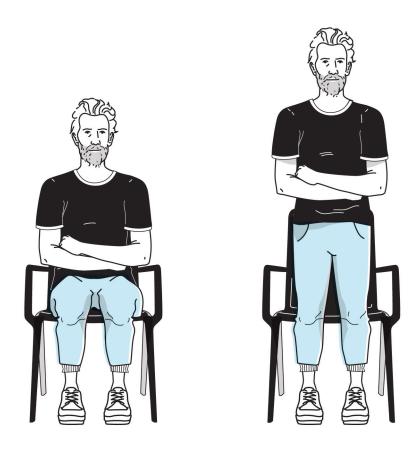
This is both a balance and strength exercise

Too easy? Try:



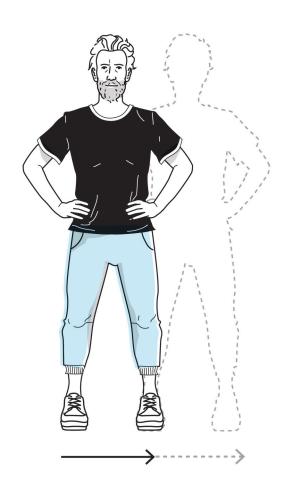
- 1. Gradually increase to 10 repetitions daily.
- 2. Stand up slowly using one hand on the armrest.

Still too easy? Try:



1. Cross your arms in a sitting position. Stand up slowly. Keep your arms crossed when you stand up.

SIDEWAYS WALKING

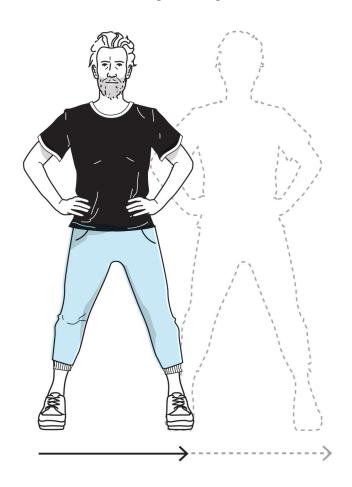


Start with:

- 1. Stand up tall and look straight ahead.
- 2. Place your hands on your hips. If you cannot hold your hips, that's ok. Try holding onto the kitchen bench or hallway wall.
- 3. Take a side step to the right with your right leg, then close with left leg so you are standing with your feet shoulder-width apart. Toes should point forwards.
- 4. Repeat this movement to take 10 steps to the right.

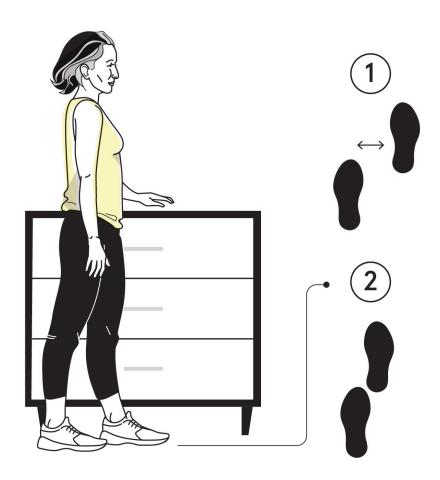
- 5. Take 10 steps to the left in the same way.
- 6. Repeat 10 steps to the right and 10 steps to the left.
- 7. Do this exercise daily.

Too easy? Try:

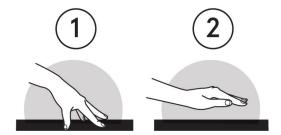


- 1. Take 10 longer steps to each side.
- 2. Gradually increase the number of times you take 10 steps to each side, until you are taking 10 steps to each side four times.
- 3. Increase the step height and length, always facing forwards. Pretend you are stepping over an alligator. This is great for balance as you are on one leg for a period of time.

HEEL-AND-TOE STANDING



- 1. Stand up tall beside the bench and look straight ahead.
- 2. Hold on to the bench with one hand.
- 3. Place one foot directly in front of the other so the feet form a straight line (see picture above). Centre your weight between your two feet.
- 4. Hold this standing position for 10 seconds.
- 5. Raise your hand above the bench for as long as you can. Tap the bench if you need to. (See picture on next page.)



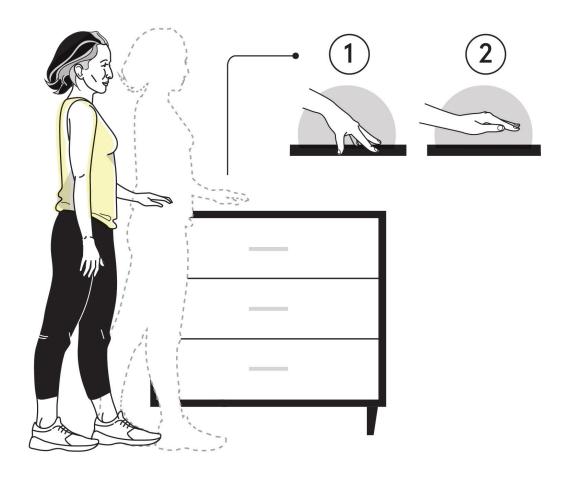
- 6. If this is too hard and you cannot let go then place your feet further apart, still one in front and the other. You should feel your balance is challenged.
- 7. Change the standing position. Take the foot that was behind and place it directly in front of the other foot.
- 8. Hold this position for 10 seconds.
- 9. Do this exercise daily.

To make it easier:

Widen your base of support and then gradually bring your feet together in a straight line.

You can practice this balance exercise as often as you like.

TANDEM (HEEL-AND-TOE) WALKING



Start this exercise when advised by an exercse specialist.

- 1. Stand up tall beside the bench and look straight ahead.
- 2. Hold on to the bench with one hand.
- 3. Walk forward by placing one foot directly in front of the other like you're walking on a tightrope. The heel of the front foot should be close to or touching the toes of the back foot.
- 4. Use just your fingertips for support when tandem walking forward, then advancing to no support.

- 5. Tandem walk forward for 5–10 steps.
- 6. Pause, then take another 5–10 steps forward.
- 7. Do this exercise daily.

To upgrade:

- 1. Include tandem walking backwards.
- 2. Increase the number of times you walk forwards and backwards.

STRENGTHENING EXERCISES

Do these at least 3-4 times a week:

- 1. Side hip-strengthening exercises
- 2. Knee-strengthening exercises
- 3. Calf raises

Strengthening your muscles is essential for keeping the bones and muscles that are needed for walking and that help you to be independent in your daily activities healthy.

Lift your leg slowly through the entire range of movement. Never hold your breath while lifting. Inhale before lifting, exhale while lifting and inhale again while lowering your leg.

Start with no weight in the first week, then add a low weight and slowly increase over a period of weeks.

Ask your facilitator where to get the ankle cuff weights or how to make them.

SIDE HIP-STRENGTHENING EXERCISE



Start with:

- 1. Stand up tall with left side towards the bench.
- 2. Look straight ahead.
- 3. Hold on with your left hand.
- 4. Keep the right leg straight and your toe pointing straight forward (do not point your toe sideways like a ballerina).
- 5. Lift the right leg out to the side, keeping it straight, until your foot is about 5 cm (2 inches) off the floor.

- 6. Keep your back straight. Do not lean forward, backward or sideways.
- 7. Lower your leg to the floor slowly.
- 8. Repeat 5 times for the right leg.
- 9. Turn around and hold onto the counter with your right hand.
- 10. Repeat this exercise 5 times for the left leg.
- 11. Do this exercise at least 3-4 times each week.

Too easy? Try:



- 1. Strap the ankle cuff weight on the ankle of the leg you are lifting.
- 2. Gradually increase to 10 repetitions each leg.
- 3. Once you are at 10 repetitions, add more weight to each leg.
- 4. When 10 repetitions becomes easy with the current weight, again increase the weight by 0.5 kg. To progress, repeat this cycle so the exercise is still hard to do. This will improve your strength.
- 5. Do this exercise at least 3-4 times each week.

KNEE-STRENGTHENING EXERCISE



Start with:

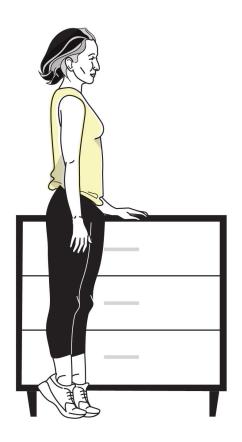
- 1. Sit on a chair with your back well supported.
- 2. Straighten the right leg slowly.
- 3. Hold for 5 seconds.
- 4. Lower the leg slowly.
- 5. Repeat 5 times for the right leg.
- 6. Straighten the left leg slowly.
- 7. Hold for 5 seconds.
- 8. Lower the leg slowly.
- 9. Repeat 5 times for the left leg.
- 10. Do this exercise at least 3-4 times each week.

Too easy? Try:



- 1. Strap the ankle cuff weights onto your ankles.
- 2. Start off with 5 repetitions and gradually increase to 10 repetitions each leg.
- 3. Once you are at 10 repetitions, increase your ankle weights.
- 4. When 10 repetitions becomes easy with the current weight, again increase the weight. To progress, repeat this cycle so the exercise is still hard to do. This means you are improving your strength.
- 5. Do this exercise at least 3-4 times each week.

CALF RAISES



Start with:

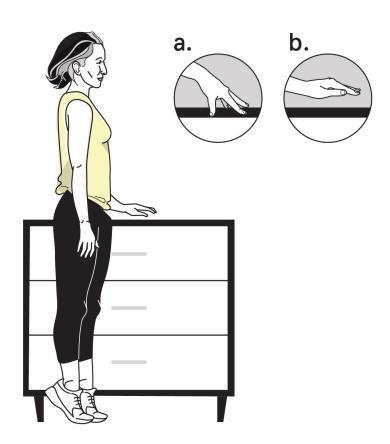
- 1. Stand up tall beside the bench and look straight ahead.
- 2. Hold on with one hand.
- 3. Place your feet shoulder width apart.
- 4. Come up onto your toes slowly (counting to 5) without rocking forward.
- 5. Slowly lower your heels to the ground (counting to 5).
- 6. Repeat this exercise 5 times.
- 7. Do this exercise daily.

Too easy? Try:

- 1. Gradually increase to 20 repetitions.
- 2. Use just your fingertips touching the bench for support (see picture below).

Still too easy? Try:

1. Place your hand over the bench, but not touching (see picture below).



REMEMBER

You need to have good balance and muscle strength to help prevent falls.

Style points:

- Use good posture.
- Don't cheat yourself: use the correct movements for each exercise.
- Breathe!

Challenge yourself to change!

- With your balance exercises, when you are ready you can:
 - Increase the number of times you do each exercise.
 - Decrease the amount you hold on with each exercise.
 - Decrease your base of support.
- With your strength exercises, when you are ready you can:
 - Increase the number of times you do each exercise.
 - Increase the weight.

You need to keep doing the balance exercises daily and the strength exercises at least 3-4 times a week with weights.

You can do the exercises all at one time or 'snack' on them at different times of the day. Do what works for you.

Walking is good for you, but by itself will not increase or maintain your muscle strength or balance. However, as your balance and strength improves it's a good idea to increase the amount of physical activity that you do – walk to the shops instead of driving, use the stairs when you are able, stand to do the ironing and fold the clothes, get off the bus one stop earlier and walk, walk to the neighbours instead of using the phone.

EXERCISE RECORD WEEK 1

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				







Sideways walking

Date				
Repeats				

Heel-and-toe standing

Date				
Repeats				





Tandem (heel-and-toe) walking

Date				
Repeats				

Strength exercises – use ankle weights

Side hip-strengthening exercise

Date				
Repeats				



Knee-strengthening exercise



Date				
Repeats				

Calf raises

Date				
Repeats				



EXERCISE RECORD WEEK 2

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				







Sideways walking

Date				
Repeats				

Heel-and-toe standing

Date				
Repeats				





Tandem (heel-and-toe) walking

Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				



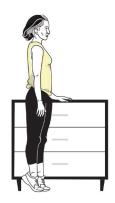
Knee-strengthening exercise



Date				
Repeats				
Weights (kg)				

Calf raises

Date				
Repeats				



EXERCISE RECORD WEEK 3

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				







Sideways walking

Date				
Repeats				

Heel-and-toe standing

Date				
Repeats				





Tandem (heel-and-toe) walking

Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				



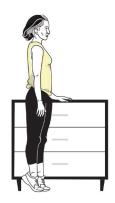
Knee-strengthening exercise



Date				
Repeats				
Weights (kg)				

Calf raises

Date				
Repeats				



EXERCISE RECORD WEEK 4

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				





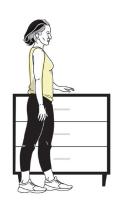


Sideways walking

Date				
Repeats				

Heel-and-toe standing

Date				
Repeats				





Tandem (heel-and-toe) walking

Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				



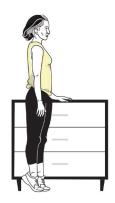
Knee-strengthening exercise



Date				
Repeats				
Weights (kg)				

Calf raises

Date				
Repeats				



EXERCISE RECORD WEEK 5

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				



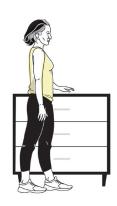




Sideways walking

Date				
Repeats				

Date				
Repeats				





Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				





Date				
Repeats				
Weights (kg)				

Date				
Repeats				



EXERCISE RECORD WEEK 6

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				



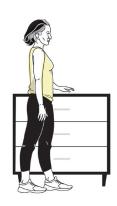




Sideways walking

Date				
Repeats				

Date				
Repeats				





Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				





Date				
Repeats				
Weights (kg)				

Date				
Repeats				



EXERCISE RECORD WEEK 7

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				



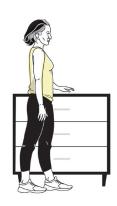




Sideways walking

Date				
Repeats				

Date				
Repeats				





Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				





Date				
Repeats				
Weights (kg)				

Date				
Repeats				



EXERCISE RECORD PHOTOCOPY TEMPLATE

Balance exercises - do these daily

Note: Be sure to stop exercising and consult your health professional if you start feeling unwell or uncomfortable or if you are not sure how to perform any exercise.

Sit-to-stand

Date				
Repeats				



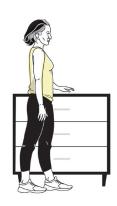




Sideways walking

Date				
Repeats				

Date				
Repeats				





Date				
Repeats				

Strength exercises – use ankle weights

Note: If use of ankle weights increase your hip or knee joint pain, stop using the weights.

Side hip-strengthening exercise

Date				
Repeats				
Weights (kg)				





Date				
Repeats				
Weights (kg)				

Date				
Repeats				

