

Guide to Falls Prevention



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Introduction



Falls risk among the elderly population is relatively high.

About one-third of people aged 65 and above in Singapore have suffered a fall at least once.¹

40% of these falls account for injury-related deaths.¹



Majority of the cases happened at **home**.¹

In Singapore, about one-third of older adults aged 60 and above have fallen more than once.



Singaporeans Age 60 and above)

¹ <https://www.nuhsplus.edu.sg/article/how-to-prevent-falls-among-older-adults>

² https://www.healthhub.sg/live-healthy/abcs_of_falls

Risk Factors for Falls

Always consult a doctor on your risk factors and medical conditions.



Medical

- Arthritis
- Dementia
- Parkinson's Disease
- Diabetes
- Urinary Incontinence
- Stroke
- Taking multiple medications



Physical

- Muscle weakness
- Poor vision
- Poor balance
- Poor nutrition

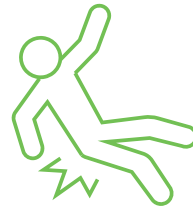


Environmental

- Inappropriate footwear
- Slippery or cluttered floor
- Low chair or toilet
- Poor lighting



- Fear of falling is a **negative cycle**.
- Ageing is a normal human process, but **falling is not**.



General Principles for Falls Prevention

Go for regular eye checks

Poor vision is associated with a high fall risk. Get your eyes checked regularly and if you are wearing glasses, ensure that they are of the right prescription.

Put on proper footwear and go for regular foot reviews (especially for people with diabetes)

- Wear well-fitted shoes that have non-slip soles. The shoes should also be easy to wear and remove.
- Maintain good foot hygiene and go for regular reviews with your podiatrist.



Fall proof yourself

- Wear pants/skirts that are above your ankle to avoid tripping.
- Do not walk around in slippery socks.
- Use proper walking aids to maintain balance. You may consult your physiotherapist for an assessment.



Quad Stick



Walking Frame

Ensure a safe home environment

In the living room/bedroom

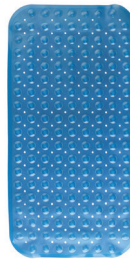
- Arrange your furniture such that there is a clear pathway for walking.
- Remove any fall hazards such as wires, toys, extra stools, buckets, floor towels, and carpets.
- Avoid wet floors and clean up mess/spills immediately. When mopping the floor, do not use excessive water or detergent. Ensure that the floor is dry before walking.
- Choose a sturdy chair with arm rest that provides you with support when standing up. Avoid low chair or sofa as it is more difficult to get up.



In the kitchen/toilet



Use proper shower chairs with arm rest and back rest.



Place anti-slippery floor mats or stickers in the toilet and kitchen.



Install grab bars to assist you in getting up from the seat

In general...

- Ensure that there is sufficient general lighting so you will be able to see the surrounding environment.
- Ensure that there is sufficient task light that focuses on the task and object, so you will be able to see the finer details.
- Reduce glares by using indirect or diffused light source.
- Light switches should be easily accessible, especially when getting up from the bed.
- Personal alarm should be worn at all times and wall cable alarm should be reachable at all times.



Exercise regularly



Strength, balance, flexibility, and endurance are essential for activities of daily living. Regular exercises can help you to maintain those functions and prevent falls.

You may perform the simple exercises as prescribed by your therapist (refer to the next section).



Home Exercises to Prevent Falls

You should perform the exercises as prescribed by your therapist. If you have any questions, please check with your therapist before working on the exercises.

Please take note of these Do's and Don'ts when exercising:

- Wear comfortable clothing and covered shoes that allow you to move freely
- Keep yourself hydrated
- Do not exercise if you are unwell
- If you experience these symptoms when exercising, **STOP** exercising and seek a doctor's advice:
 - Chest Pain
 - Fainting spells
 - Shortness of breath
 - Increasing pain in joints and muscles

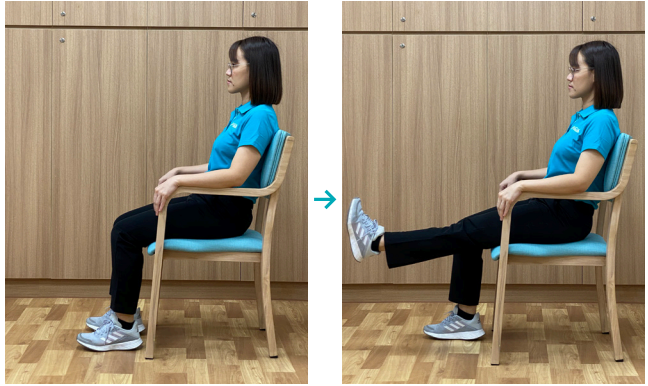
Back Stretch



1. Stand hip-width apart with knees slightly bent.
2. With your hands on the back, slowly press your hip forward and keep your chin down until you feel a stretch at your back.
3. Hold for 15 seconds. Repeat for 10 times.

Knee Extension

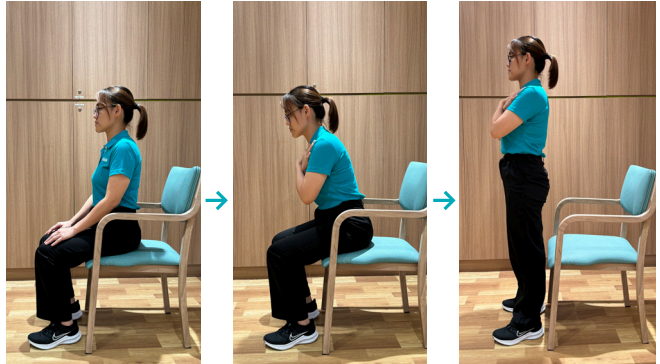
To strengthen the thigh muscles



1. Sit up straight and ensure both of your feet are on the ground.
2. Straighten your knee with the front thigh muscles in a slow and steady pace until the knee is 'locked'.
3. Slowly return to the ground.
4. Hold for 10 seconds. Repeat for 10 times.

Sit to Stand

To strengthen the lower limb muscles



1. Sit at the edge of the chair, feet shoulder width apart and slightly behind knees.
2. Lean trunk forward to stand up.
3. Straighten back in upright posture.
4. Slowly bend at the hips and lean trunk forward to sit back onto chair.

Hip Abduction (Standing)

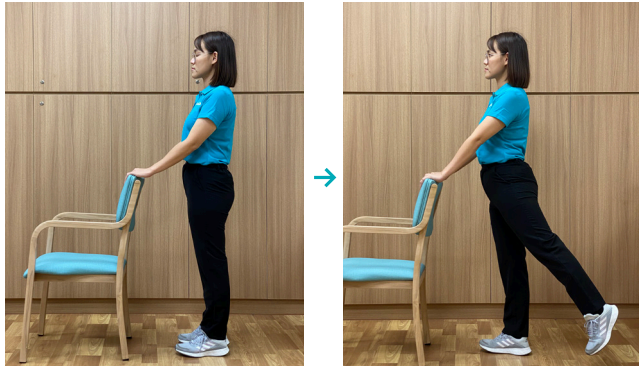
To strengthen the
side hip muscles



1. Stand beside a stable chair and place 1 hand on the chair for support.
2. Slowly lift 1 leg away from the chair to the side and bring it back. The movement should be slow and controlled, and your knees and trunk should be kept straight.
3. Repeat for 10 times.

Hip Extension in Standing

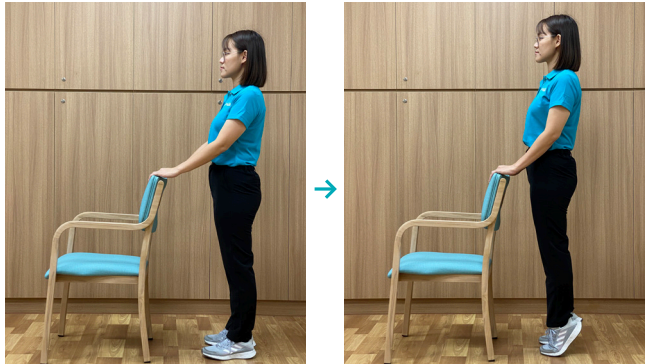
To strengthen the
buttock muscles



1. Stand behind a stable chair and place both hands on the chair for support.
2. Slowly squeeze your buttock to bring one leg back, and then slowly return to the starting position. Your knees and trunk should be straight.
3. Repeat for 10 times.

Heel Raise

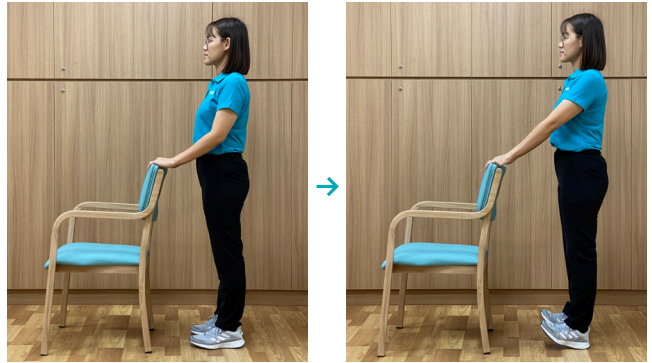
To strengthen the calf muscles



1. Stand behind a stable chair and place both hands on the chair for support.
2. Slowly raise your heels and return to the starting position. Your knees and trunk should be kept straight.
3. Repeat for 10 times.

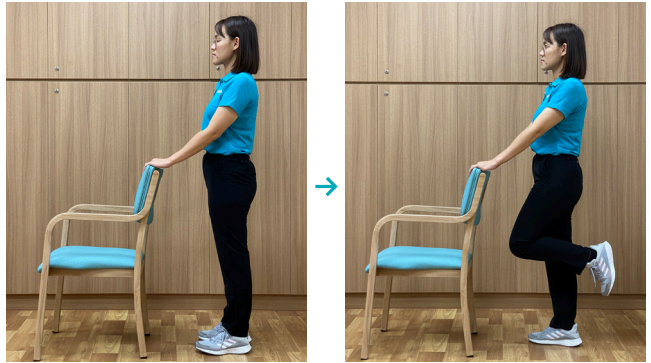
Toe Raise

To improve shin muscles and balance



1. Stand behind a stable chair and place both hands on the chair for support.
2. Slowly lift your forefoot and stand on your heels, then slowly return to the starting position. Your knees and trunk should be straight.
3. Repeat for 10 times.

Single Leg Standing



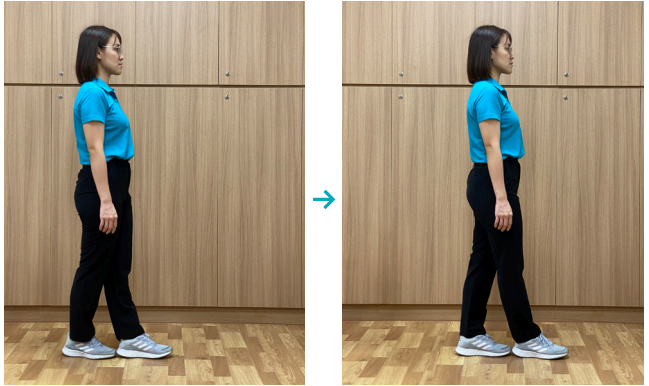
1. Stand behind a stable chair and place both hands on the chair for support.
2. Slowly bend one knee and hold for 10 seconds, then return to the starting position. Your knees and trunk should be straight.
3. Repeat for 10 times.
4. As your balance improves, reduce the hand support on the chair.

Side Walk



1. Ensure that there is ample space around you. Start by placing your feet together and arms at the side.
2. You may start with walking along the wall with hands on the wall for support or walk under supervision of a person if you find this exercise difficult.
3. Look straight and start sidestepping with one side of the leg, followed by the other leg.
4. Return to starting position and repeat 5 laps.

Heel-Toe Walk



1. You may start with walking beside the wall with hand on the wall for support or walk under supervision of a person if you find this exercise difficult.
2. Walk by placing one foot directly in front of the other. You should walk in a straight line.
3. Repeat for 5 laps.

Fall Recovery in the Event of a Fall

How should you get up from a fall?

Note: Always check your body for any injuries before getting up.

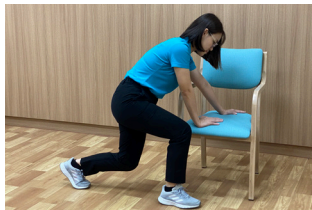
Do not get up by yourself if you are not able to, or are feeling weak or dizzy. If in doubt, always call for help.



Step 1: Get to a side-lying position. Support yourself with your elbows and hands.



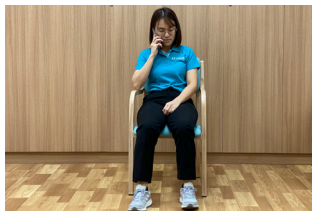
Step 2: Support yourself with your knees and hands.



Step 4: Slowly stand up and sit down on the chair.



Step 3: Hold onto a stable chair. Get into the "knight position".



Step 5: Call for help and seek medical attention.

If you have any questions...

Please reach out to your therapist or visit our Day Rehabilitation and Physiotherapy Centres.





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