

Don't Fall Foul to Muscle or Bone Weakness

We all know that anyone can trip or fall, but the risk of falling increases as we get older. So often you hear people saying it was a silly accident – 'I tripped on the mat', or 'bumped into my stool which has always been there,' or 'I didn't see my dog lying on the floor'. But as we get older, accidental falls, however stupid the reason for them, can have extremely serious consequences, which is why learning how to reduce that risk of falling, or knowing how to cope if you do fall, becomes potentially life-saving.

If we're lucky when we fall, we'll only suffer a bruise or maybe a cut, but even these take longer to heal when we're older, due to the poorer blood circulation, fragility of our skin and skin healing rates which can be further affected by diseases like diabetes as well as some medications. But one of the greatest threats to long-term health and wellbeing, comes from fractures. Fractures to the wrist and arm, while impacting your daily activities, will hopefully be resolvable, but fractures to weight-bearing joints like the hip, can have very serious consequences including permanent disability, loss of independence and possibly even death.

Even falls that do not lead to injury can have a negative effect on older adults, often impacting self-confidence. After a fall, older people often limit their activity because they are afraid they will fall again. When you reduce your exercise and movement, your muscles and joints become weaker which makes you less stable, makes you less stable on your feet, and further increases the risk of another fall.

Add the further complication of the bone-weakening condition, osteoporosis, into the matter, which affects both men and women, and we have a perfect storm threatening our wellbeing in the latter years.

Which probably helps to explain why preventing falls from occurring in the first place has become a major priority in most national health programmes, particularly as we're now living longer.

The good news is that falls can be

Strategies for Reducing the Risk of Suffering a Fall



prevented with some simple precautions and some preparation helping you to avoid injuring yourself in the first place.

ARE YOU AT RISK OF FALLING?

- More than 1/3 of people over the age of 65 have at least one fall each year
- Sight and hearing difficulties, muscle weakness, and poor coordination can increase your risk
- Diabetes and heart disease, or problems with your circulation, thyroid, or nervous system can impair your balance
- Other common medical conditions that increase your risk of falling include arthritis, cataracts, or hip surgery.

Anyone can fall, but some factors can make it more likely for you to fall.

Additional risk factors for falls are:

- If you have fallen before
- Being fearful of falling, low self-confidence
- Feeling weak, tired, forgetful

- Feeling numbness or tingling in your feet
- Difficulty walking or unsteady walking
- Feeling light-headed, disoriented or dizzy
- Being dehydrated and having poor nutrition
- Using a cane or walker
- Having anxiety or depression
- Alcohol consumption
- Taking medication
 - Some medications can make you feel sleepy or dizzy, for example: pain medication, anti-histamines, sleeping pills, antidepressants, seizure medication, laxatives, and diuretics
 - Check with your doctor or carer to see what medication can be changed or carefully monitored to reduce your risk of falling
 - Medication that does make you sleepy or drowsy should be taken at night or when you are in bed or resting to avoid the need to move around and risk a fall.

MOST FALLS OCCUR AT HOME BUT MANY CAN BE PREVENTED

Some tips for making your home safe:

- Set up your furniture so that you can walk around without anything blocking your way.
- If your lighting is dim, use brighter light bulbs. Use a nightlight or keep a torch close to you at night.
- Secure loose electrical cords.
- Remove throw rugs or other loose items from your floor. If you have a rug covering a slippery floor, make sure the rug does not have any loose or fringed edges. Secure it with a non-slip mat underneath.
- Add handrails to stairways.

- Install raised toilet seats.
- If your bathroom is not close to your bedroom (or where you spend most of your time during the day), get a commode. Place it near you so you do not have to walk to the bathroom.
- Install grab bars and handrails next to your toilet and inside your shower. Never use towel racks to pull yourself up because they are not strong enough to hold your weight.
- Apply anti-slip stickers to the floor of your tub or shower.
- Buy a shower chair and a hand-held shower head so you can sit while taking a shower.
- When getting up from a lying position, always sit at the side of the bed or couch for a few minutes before you stand, so you don't get light-headed.
- Arrange items in your kitchen and bathroom cabinets at shoulder height so that you don't have to bend too low (bending over and then straightening up can make you light-headed) or reach too high on your tip toes which can cause you to lose balance.
- Avoid using a step or stool in the kitchen to reach high objects. If you have to, use a small ladder step and ensure it has rails/handles.
- Wear shoes with low heels and slip resistant soles inside and outside the house; avoid going barefoot or wearing slippers. Don't walk around the house in your socks alone.
- Be careful of pets. As much as we love them, they are a fall hazard! Attach bells so that you can hear them. Avoid them sleeping at the end of your bed if that is the route to and from the bathroom at night.
- Avoid over-heating your home (or cooling it for that matter); often a stuffy hot room

can make you light-headed and increase your risk of a fall.

- Keep a telephone near your bed. In the living room, keep a telephone next to your favourite chair. This way you don't have to get up to answer every call, and should you feel poorly you can call someone for assistance before getting up from your bed or chair.

WHAT ELSE CAN YOU DO TO REDUCE YOUR FALL RISK?

- 1+** **Exercise!** Get help and advice from a physical therapist about which exercises and activities you can do safely. The stronger your muscles and joints are, the better they will be able to support you on a stable base when walking around. And they can react better and faster should you trip and hopefully help stop a full fall to the ground and stronger muscles will also help you get up more easily if you do fall. The more active you are the better chance you have of maintaining your mobility and independence, which in turn is better for your health, self-esteem and self-confidence.
- 2+** Ask your physical therapist about local falls prevention programmes which will help you build strength, improve balance and give you some really good information on how to deal with a fall.
- 3+** Speak to your doctor about your medication and ones that could be changed to reduce your risk of falling
- 4+** Have your eyes and hearing checked once a year. Good vision will prevent those accidental trips on things you didn't see and proper hearing helps improve your balance and orientation.

- 5+** See a podiatrist to take good care of your feet as pain can affect your ability to walk properly.



- 6+** If your doctor or physical therapist suggests a cane or walking frame to help you walk, please use it! This will give you extra stability when walking and may help you avoid a bad fall.

- 7+** Do not use stairs without rails on both sides for support. If you must carry something while you are going up or down, hold it in one hand and use the handrail with the other.

- 8+** Don't take chances! Stay away from a freshly washed floor that could be slippery when wet. Similarly, be careful going outside in winter, icy paths are very dangerous and slippery for everyone.



- 9+** Keep emergency numbers in large print near each phone so that if you fall or feel poorly you can call for help before getting up and having an accident.

- 10+** Carry your mobile phone on you or have an alarm device you can carry with you (around your neck) in case you fall and can't reach the phone you can alert someone for help.

People often think that as clinicians and physical therapists, we only deal with the healthy and sporty. This is not the case at all and falls prevention is one of those areas in which we have particular expertise. We also have a whole range of free advice leaflets and exercise sheets, like this one, on many different aspects of health, and we can recommend local programmes and support should you need more advice.



FALL PREVENTION

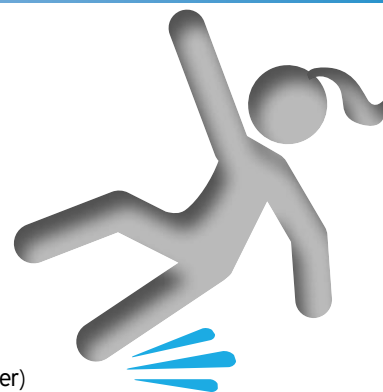
YOUR EXERCISE PROGRAMME

This programme has specific exercises to promote general body movement in your neck and upper back but also your legs and feet. It will help strengthen your lower limbs and keep you mobile helping to reduce your risk of falls. Ensure you perform the exercises in a safe environment without loose carpets or a slippery floor and always have a support (table, handrail etc) close by for balance if needed. These exercises should be done at least once a day, preferably twice a day time permitting. It is important to ensure the exercises are performed with good technique and good postural control. Make sure to repeat the same number of exercises on both sides where applicable. We have given suggested sets and repetitions. Remember everyone is different

so your therapist may give guidance that is more specific to you.

WARM UP AND COOL DOWN

It is important to warm up (unless advised otherwise by your practitioner) with a walk for 5-10 minutes before you start your exercises. Marching on the spot is also a good warm-up. This increases your circulation and helps prepare the muscles for the activity to come. When you have finished your exercises, end the session with a 5 minute gentle walk to allow your heart rate to slow down gradually.



NECK ROTATIONS SITTING

Sit upright with good posture. Rotate your neck slowly to the left by looking over your left shoulder. Take your neck to a comfortable end of range. Repeat to the right. Make sure you keep your shoulder and back relaxed. This is an excellent exercise to improve rotation and mobility in your neck.

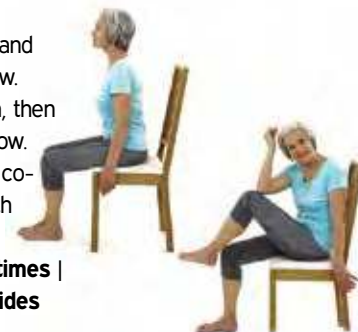


Perform 2 times daily | Repeat 8 times | Hold for 3 seconds | Perform both sides


 **Video:**
<https://youtu.be/7TNeGcg2JoM>

ELBOW TO KNEE SITTING

Lift knee upward toward your chest and touch your knee with your right elbow. Slowly return to the starting position, then repeat with the right leg and left elbow. This exercise will help improve your co-ordination, core strength, leg strength and hip mobility.



Perform 2 times daily | Repeat 8 times | Hold for 1 second | Perform both sides

 **Video:**
<https://youtu.be/idlt-wzbg4Q>

MARCHING ON THE SPOT WITH SUPPORT

Stand upright with good posture, holding on to a wall or table for support. March on the spot. Keep your knees up as high as feels comfortable. This exercise is good for knee mobility, endurance, balance and co-ordination.



Perform 2 times daily | Repeat 20 times

 **Video:**
<https://youtu.be/rdEeYykXZUQ>

CLIMB A ROPE SITTING

Sit upright with good posture, and imagine you have a rope in front of you. Climb up the imaginary rope using your arms. This exercise will help improve posture and strengthen your arms and core.



Perform 2 times daily | Repeat 8 times | Perform both sides

 **Video:**
<https://youtu.be/x8vuJPisFOg>

HEEL RAISES AND TOE LIFTS SITTING

Sit upright with good posture, with your feet flat on the floor. You can do this exercise in your shoes, or with bare feet. Lift your heels going up on to your toes, and then return to the floor. Lift your toes going up on your heels, and then return to the floor. This exercise will help strengthen your lower legs and ankles.



Perform 2 times daily | Repeat 8 times | Perform both sides exercise.

 **Video:**
<https://youtu.be/-7AF6kP3n-8>

1/4 SQUAT STANDING WITH SUPPORT

Stand upright with good posture. Hold on to a wall or table for support. Open your legs slightly wider than shoulder width, and bend your knees to the 1/4 squat position. Return to the start position. Make sure you keep the middle of your knee-cap in line with the middle toes of your foot. This is a strengthening exercise for the legs.



Perform 2 times daily | Repeat 10 times

 **Video:**
<https://youtu.be/LMLz1ZICFCs>

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