

Importance of Balance

You may not think much about your balance—until you no longer have it, or you're doing yoga and fighting hard not to topple out of eagle pose. But balance has to do with a lot more than just being able to stand on one leg in a yoga studio. Ultimately, it's critical for everything you do, no matter your age or level of fitness. Balance improves overall fitness, quality of life, and performance, and decreases our risk of injury.

Our underappreciated ability to balance is a key part of what allows us to do everyday tasks, like walking, running, and getting up from a chair. Studies have shown that how well or how poorly you perform mobility skills/balance, strongly predicts how likely it is you'll experience more serious events in the future, like falls, hip fractures, and hospitalizations.

Balance, as it relates to function in daily life and activity, has more to do with the ability to quickly contract your muscles to stabilize or produce a desired movement. Having better balance means you are able to stop under control, recover momentum, and react quickly. As we age, we lose our ability to perform the quick muscle contractions at twice the rate that general strength declines, and what's more - if you're not actively training to improve your balance, that decline can accelerate.

How Balance Actually Works

Balancing as we walk, run, jump, or stand requires muscle mass. In addition to giving us strength, our muscles help keep our bones and joints aligned so we remain upright. But balancing also calls for the interaction of three primary sensory systems: One is the visual system, meaning what we see. Another is the somatosensory system, which includes nerve receptors that enable us to feel and touch things and to have a sense of our body in space, known as proprioception. The third is the vestibular system, a tiny but complex inner ear system that responds to gravity.

Input comes from all three systems, but for most of us, the dominant one is the visual system. Seeing what's in front of and around us triggers a series of neural (nerve) messages that act as an immediate, reassuring fact-check: for example, if everything in your environment is erect, pointing in the right direction visually, that means that you are too. This is why so many people find it challenging to stand on one foot with their eyes closed, because you remove the vision system from the equation. However, that is why we'll tell someone to close their eyes in balance training. Because, if you take away the visual system, the other two sensory systems can become stronger."

Balance Changes as We Age

Accidental injuries are the eighth leading cause of death, right behind diabetes for people 65 and older. However, our balance can be compromised long before we are eligible for Social Security. One may think of age-related balance challenges as the

concern of sweetly unsteady grandparents - but as early as our 30s, we begin to lose that all-important muscle mass. As we age, we begin to experience age-related deterioration in the visual, somatosensory, and vestibular systems. The decline is very gradual at the beginning, but by the time you hit sixty-five, the curve drops steeply.

Our visual acuity, including our depth perception and peripheral vision, begins to diminish, and the proprioceptors embedded throughout the body become less sensitive. Therefore, you're not picking up information as quickly or as accurately, and you react more slowly to things that could make you fall. Sensing our own slowness can make us apprehensive, which may be another reason the youthful spring in our step turns into a tentative shuffle. Also, the vestibular nerve endings in the inner ear tend to degenerate over time.

To further complicate matters, technology is working against our balance, whatever our age. Blame it on the all-too-common habit of constantly staring into our phones. A crooked or stiff neck can make someone go from looking 300 feet ahead to 50. Plus, the physical misalignment weakens muscles and stability. Now, thanks to phones and computers, these effects are becoming more evident in younger people, even college aged students.

How to Improve and Maintain Good Balance

The great news is, no matter how old you are, with repeated practice, you can maintain or enhance your balance. It's like learning to play an instrument, you need to create appropriate neuromuscular connections—that is, links between your brain and muscles. We call it “Muscle Memory”, and you need to practice to keep those connections from deteriorating.

This is where balance training comes into play. While your balance will change from day to day—injury, muscular fatigue, soreness, and lack of sleep can all affect balance, the key is to work on it regularly, daily if possible, but every other day at a minimum. You can start very small by standing on one leg while you brush your teeth or try picking up dropped objects while keeping one leg elevated behind you and as you improve, challenge yourself by lifting the elevated leg even higher. If you are short on time, space, or energy, an easy and effective balance builder is standing on one leg with eyes closed for as long as you can until you lose balance and actually time it, and then switch sides. Watch your time get longer with practice.

Generally, you're already getting a good dose of balance training if you're doing moves like these when you exercise:

- Single-leg exercises (like step-ups)
- Exercises where you're in split stances, like lunges
- Exercises where the load is unbalanced, meaning you're holding or moving a weight only on one side

- Core exercises

If any of these are part of your regular fitness routine, you might only need five to 10 minutes of structured balance training on days you are not doing any of them. But if you are looking to get more targeted balance training into your life, there are excellent exercises that specifically help build balance and stability.



Single Limb Stance

It's best to start off with a simple balance exercise for seniors.

To do this:

- stand behind a steady, solid chair (not one with wheels), and hold on to the back of it.
- Lift up your right foot and balance on your left foot. Hold that position for as long as you can, then switch feet.
- The goal should be to stand on one foot without holding onto the chair and hold that pose for up to a minute.

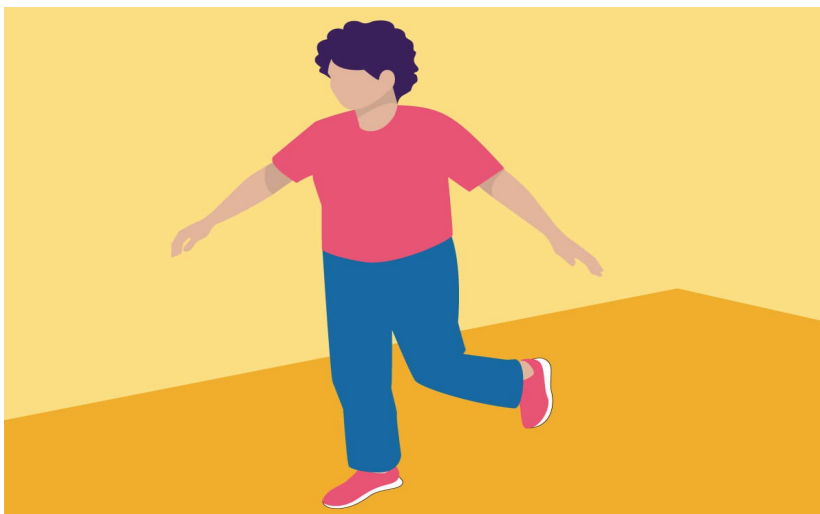


Walking Heel to Toe

You might read this and wonder, “How is walking an exercise to improve balance?” This exercise makes your legs stronger, which enables you to walk without falling.

To do this:

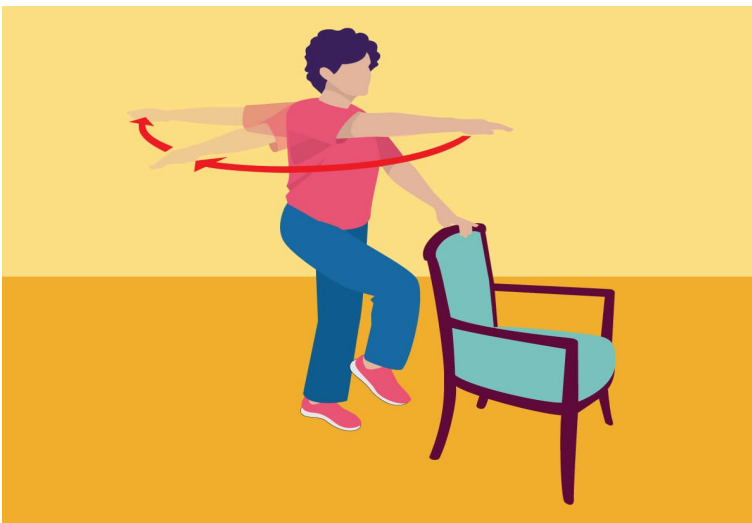
- Put your right foot in front of your left foot so that the heel of your right foot touches the top of the toes of your left foot.
- Move your left foot in front of your right, putting your weight on your heel. Then, shift your weight to your toes.
- Repeat the step with your left foot. Walk this way for 20 steps.



Rock the Boat

To do this:

- Stand with your feet apart, so that the space between them is the same width as your hips. Make sure both feet are pressed into the ground firmly. Stand straight, with your head level.
- Transfer your weight to your right foot and slowly lift your left leg off the ground. Hold position for as long as possible (but no more than 30 secs.)
- Slowly put your foot onto the ground, then transfer your weight to that foot. Slowly lift your opposite leg.
- Start by doing this exercise for balance five times per side, then work your way up to more repetitions.



Clock Reach

To do this:

- You will need a chair for this exercise.
- Imagine that you are standing in the center of a clock. The number 12 is directly in front of you and the number 6 is directly behind you. Hold the chair with your left hand.
- Lift your right leg and extend your right arm so it's pointing to the number 12. Next, point your arm towards the number three, and finally, point it behind you at the

number 6. Bring your arm back to the number three, and then to the number 12.

Look straight ahead the whole time.

- Repeat this exercise twice per side.



Back Leg Raises

To do this:

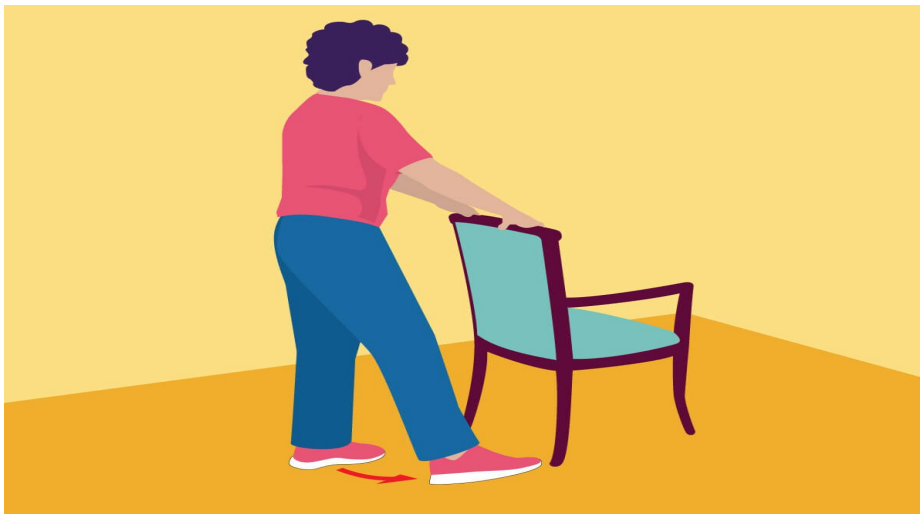
- This strength training exercise for seniors makes your bottom and your lower back stronger.
- Stand behind a chair. Slowly lift your right leg straight back – don't bend your knees or point your toes. Hold that position for one second, then gently bring your leg back down. Repeat these ten to 15 times per leg.



Single Limb Stance with Arm

To do this:

- This balance exercise for seniors improves your physical coordination.
- Stand with your feet together and arms at your side next to a chair. Lift your left hand over your head. Then, slowly raise your left foot off the floor. Hold that position for ten seconds. Repeat the same action on the right side.

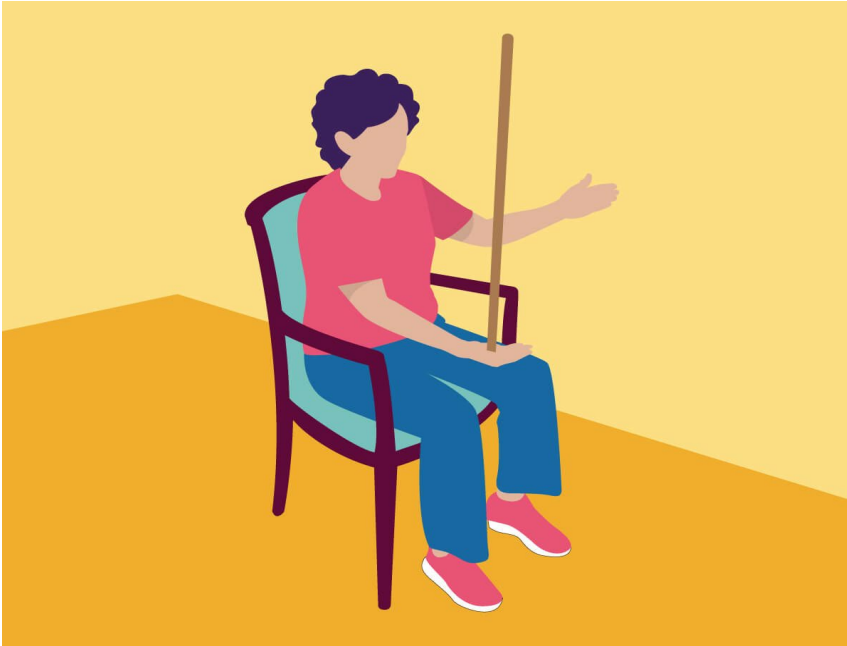


Side Leg Raise

To do this:

AUTHOR – Debra Fulton Fissette RN, MSN, APRN (Behavioral Health Nurse Practitioner)

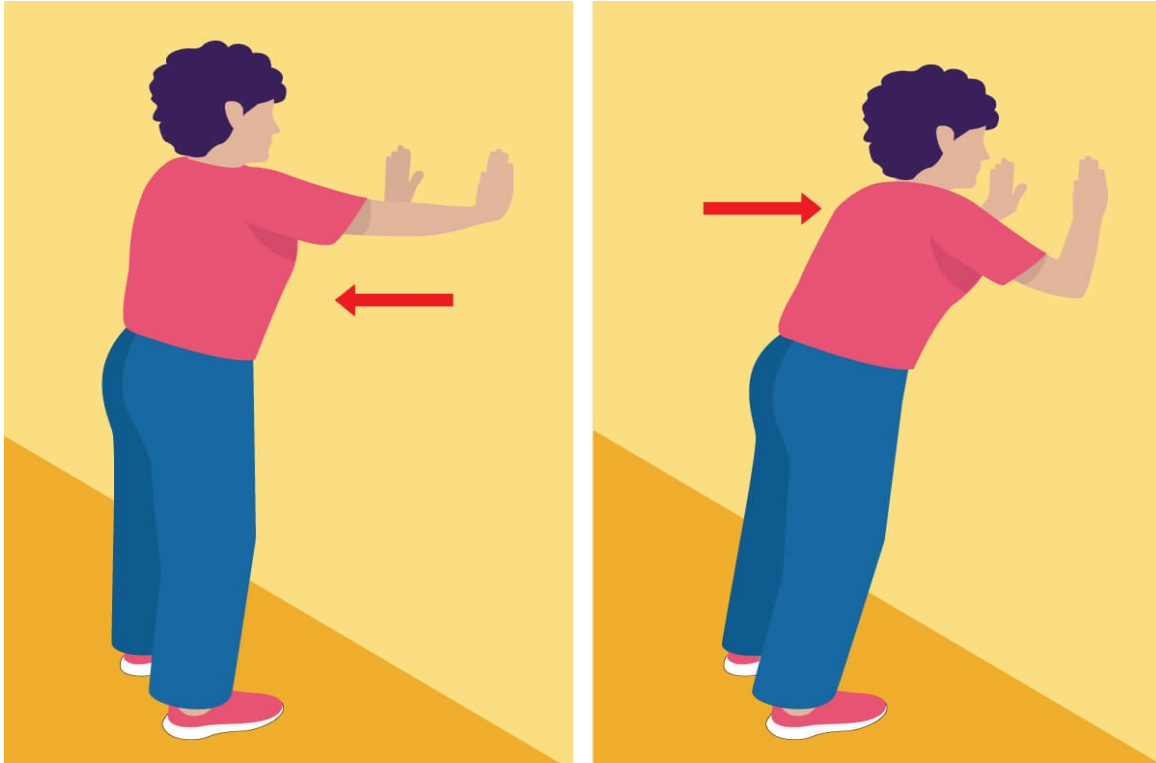
- You'll need a chair for this exercise to improve balance.
- Stand behind the chair with your feet slightly apart. Slowly lift your right leg to the side. Keep your back straight, your toe facing forward, and stare straight ahead. Lower your right leg slowly. Repeat this exercise ten to 15 times per leg.



Balancing Wand

To do this:

- This balance exercise for seniors can be performed while seated. You'll need a cane or some kind of stick. A broomstick works well for this – just remove the broom's head before you start.
- Hold the bottom of the stick so that it's flat on the palm of your hand. The goal of this exercise is to keep the stick upright for as long as possible. Change hands so that you work on your balance skills on both sides of your body.



Wall Pushups

To do this:

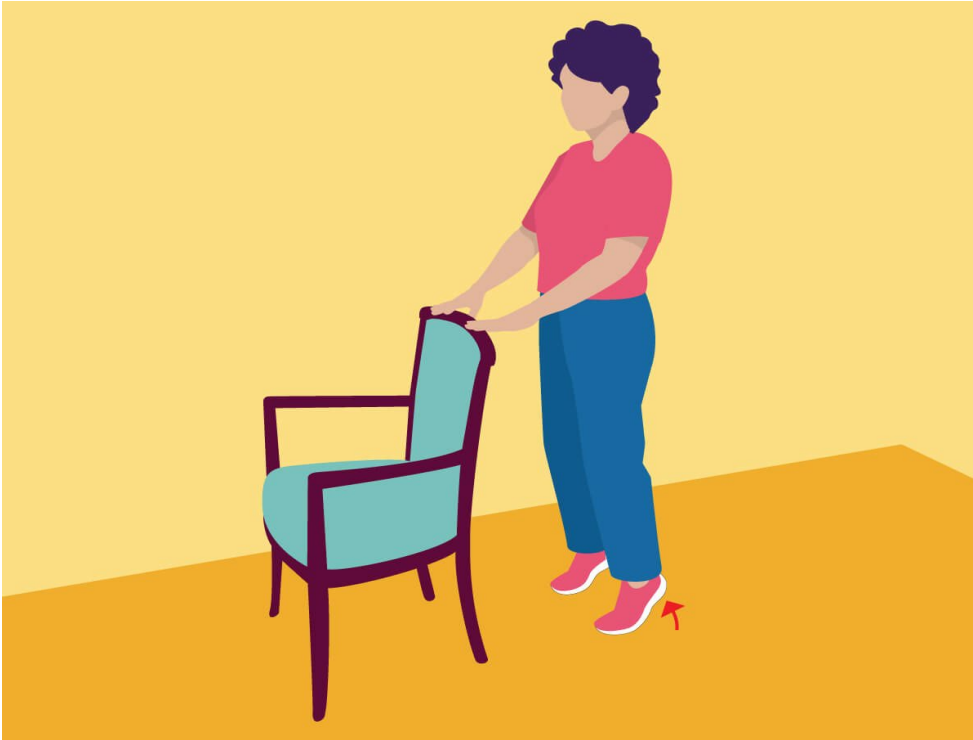
- As long as you've got a wall, you can do this strength training exercise for seniors.
- Stand an arm's length in front of a wall that doesn't have any paintings, decorations, windows or doors. Lean forward slightly and put your palms flat on the wall at the height and width of your shoulders. Keep your feet planted as you slowly bring your body towards the wall. Gently push yourself back so that your arms are straight.
- Do twenty of these.



Marching in Place

To do this:

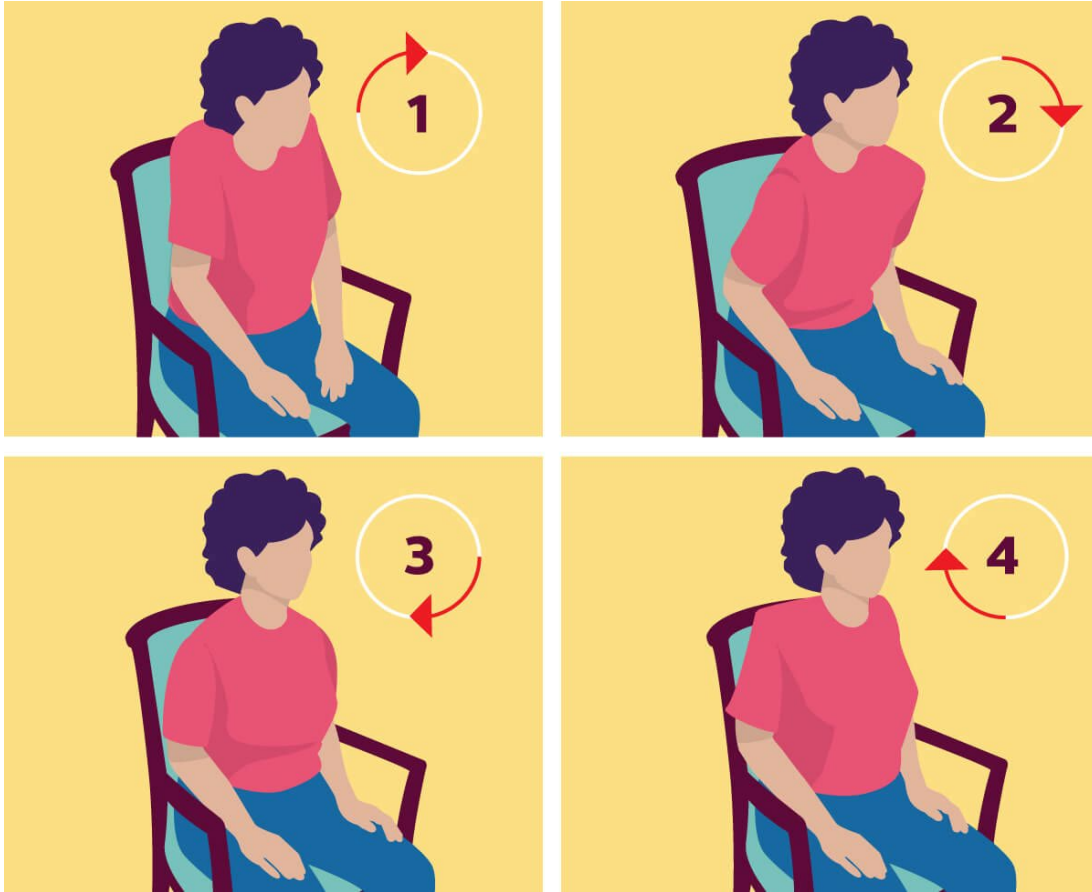
- Marching is a great balance exercise for seniors. If you need to hold onto something, do this exercise in front of a counter.
- Standing straight, lift your right knee as high as you can. Lower it, then lift the left leg. Lift and lower your legs 20 times.



Toe Lifts

To do this:

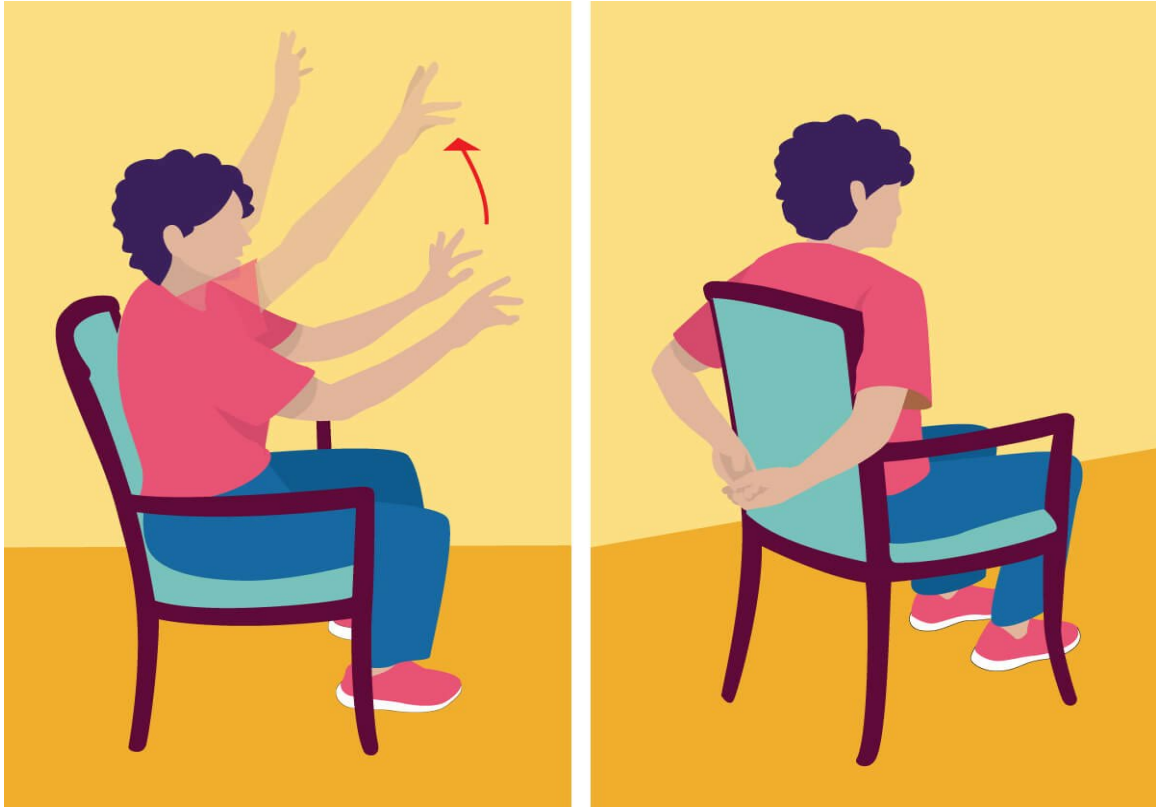
- This strength training exercise for seniors also improves balance. You'll need a chair or a counter.
- Stand straight and put your arms in front of you. Raise yourself up on your toes as high as you can go, then gently lower yourself. Don't lean too far forward on the chair or counter.
- Lift and lower yourself 20 times.



Shoulder Rolls

To do this:

- This is a simple exercise for seniors. You can do it seated or standing.
- Rotate your shoulders gently up to the ceiling, then back and down. Next, do the same thing, but roll them forwards and then down.



Hand and Finger Exercises

To do this:

- The following are exercises to improve flexibility. You don't need to stand for these.
- In the first exercise, pretend there's a wall in front of you. Your fingers will climb the wall until they're above your head. While holding your arms above your head, wiggle your fingers for ten seconds. Then, walk them back down.
- During the second exercise, touch your hands while they're behind your back. Reach for your left hand while your right hand is behind your back. Hold that position for ten seconds, then try with your other arm.



Calf Stretches

To do This:

- These strength training exercises for seniors can be performed sitting or standing.
- To do calf stretches while standing, find a wall with nothing on it. Stand facing the wall with your hands at eye level. Place your left leg behind your right leg. Keep your left heel on the floor and bend your right knee. Hold the stretch for 15 to 30 seconds. Repeat two to four times per leg.
- If you want to stretch your calves while sitting, you'll need a towel. Sit on the floor with your legs straight. Put the towel around the soles of your right foot and hold both ends. Pull the towel towards you while keeping your knee straight and hold it for 15 to 30 seconds. Repeat the exercise two to four times per leg.

Remember that before embarking on an exercise regimen, please consult your doctor. Falls don't have to be a fact of life – exercising can make you stronger and fitter. You don't need fancy equipment, either – just pull up a chair!