Exercises for Falls Prevention by Francesca Fisher, CSSTS

Many older adults are under the impression that just walking and doing upper body exercises are enough to keep them strong and healthy well into their golden years. However, it's the muscles in our lower body that need strength training the most. What walking won't accomplish and strength training will is the further strengthening of the hip and gluteal areas which lead to better stature and improved health.

Proprioceptive training is known by elite athletes worldwide, but now these same exercises and training methods are being incorporated into falls prevention and health promotion programs for older adults. These are exercises that are designed to enhance the mind and nerve syncopation while also simultaneously strengthening the bones and muscles through strength training exercises. Proprioception exercises can reduce the risk of falls by teaching the body to react quickly as it fine-tunes motor skills and coordination.

An example of how proprioception exercises can benefit older adults is to think of being able to react quickly to a situation such as stepping on the brake if a small animal crosses your path while you're driving, or moving your foot out of the way if you lose grip of the shampoo bottle. It's this Plan B approach that helps the brain be alert and ready to react!

Lunges are an excellent exercise that work the entire body but especially help to strengthen the muscles, bones, tendons, ligaments, and joints of the lower body. This exercise will also require some brain power and muscle concentration as you will be calling upon the gluteals to push back up from the lowered position. The brain must also tell both legs to bend at the same time and straighten back up to the starting position without any wobble or wavering.

For first timers, do this exercise with two chairs so that you're holding onto something with both arms. Position yourself between two back-to-back chairs as shown in the photo.



If you are able to position your stride so that the ball of the back foot is planted firmly on the ground and the heel is pointed up nicely, you'll further engage the muscles on the top of the feet which will allow them to become stronger which, in turn, will help with gait and balance, too.

When doing this exercise for the first time, bend ever so lightly just to make sure you are comfortable with the movement. If at any time you feel any knee pain, stop the exercise and reassess your form and stride. Make sure there is enough distance between the heel of the front foot and the knee of the back leg. Imagine your legs being able to form two perfect 90 degree angles.



Assisted Beginner Quarter-Rep Stationary Lunge

1. Position the chair so that the back of the chair is toward you.

2. Use the chair legs as your guide. The foot that's closest to the chair will be considered the front leg. Position this foot in the <u>middle</u> of both chair legs (as pictured.)

3. Extend the other leg almost directly behind about 24" from the heel of the front foot (spacing will differ based on the height of the person and/or the length of their legs. For taller people, they may have to space their feet 30" away from each other. For shorter people, they may have to space their feet 18" away from each other.) The heel of the back leg should be straight up and the weight of the body should be equally distributed on both legs.

4. Now bend both legs simultaneously downward into a 1/4 rep lunge position (25% of the way down.)5. Stand back up straightening both legs simultaneously so that you are in the same position as when you started (first photo).

6. Repeat to the desired number of repetitions (6-10 reps to start for beginners working to 10-15 reps for advanced).

TIPS:

Avoid lunging forward. The bending down movement should be straight down and up like a horse on a carousel.

Avoid cocking the back foot to the inside; the heel should be straight up towards the ceiling. The back leg should be almost directly behind the front leg and not off to the side. When the legs are bent, the distance between the front heel and the knee of the back foot should be 8-10". Vary the stance so that that lunge position is not too close or too far. Remember, think safety at all times: always hold onto the chair for support. As your balance increases, reduce chair support to holding on with just a few fingers, but always have the chair nearby and handy just in case you start to teeter.

Try adding this Lunge exercise once-a-week for at least two sets of 10 repetitions each leg and try to work up to doing three sets of 10-12 repetitions each leg. The workout should take about 12-15 minutes to complete and please make sure you stretch first!

<u>Author's Bio</u>: Francesca Fisher is the owner of the Geri-Fit Company and the creator of the Geri-Fit® exercise program for older adults. In addition to being a Certified Senior Strength Training Specialist and a Certified Personal Fitness Trainer, she is a published author and has been featured in 13 exercise videos. Her career in the fitness industry spans over 30 years during which time she has won numerous awards for business excellence and exercise programming development including the 2013 ASAP Award for Best Emerging Business in southern California, and the Top 10 Award by the National Association Women Business Owners (NAWBOA – Ohio chapter). Ms. Fisher's company is a certified woman-owned small business (WOSB) and a certified Woman-Owned Business (WBENC- West) and operates under the trade names Geri-Fit®, Golf-Fit®, and Geri-Flex®. The Geri-Fit® exercise program a tier III, evidence-based health promotion program that is held at many senior centers and recreation centers throughout the U.S. For more information, contact the Geri-Fit Company at 1-888-GERI-FIT or visit their website at gerifit.com.