

# Stand Up to Falling

## *A Matter of Balance and Fall Prevention*

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**A** Matter of Balance, a program that prepares the mind and body for exercise, was created by the University of Boston and adapted by many other states, including the Commonwealth of Kentucky. The eight-session, evidence-based falls management program is led by trained volunteer lay leaders. The program aims “to reduce [the] fear of falling, stop the fear of falling cycle, and increase activity levels among community-dwelling older adults.”

A Matter of Balance is a powerful program because it acknowledges the risk of falling and emphasizes practical coping strategies to reduce this fear. Strategies include:

- Promoting a view of falls and fear of falling as controllable
- Setting realistic goals for increasing activity
- Changing the environment to reduce fall risk factors
- Promoting exercise to increase strength and balance

According to the National Institute on Aging (NIA) and the A Matter of Balance program, a combination of **endurance, strength, balance, and stretching exercises** maximizes physical activity and increases the ability to carry out everyday activities.

### **Endurance or Aerobic Activity**

Endurance activity is exercise that helps you build energy. It increases breathing and heart rate as it improves the health of your heart, lungs, and circulatory system. At least 30 minutes of endurance activity (all at once or throughout the day) is recommended on most or all days of the week. Examples of activities that build endurance include:

- Brisk walking
- Yard work
- Dancing
- Jogging
- Swimming
- Biking
- Playing sports

## **Falling Facts**

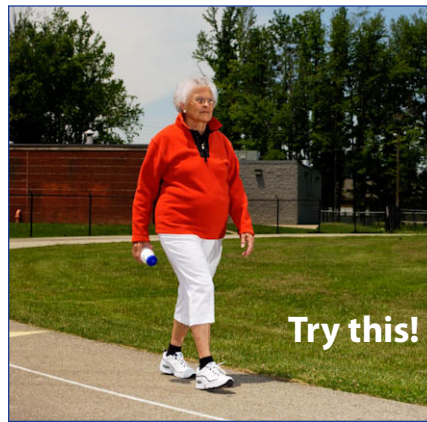
The risk of falling and of being seriously injured in a fall increases with age, but older adults (65+) are not falling because they are old. Some older adults may be at increased risk of falling because of a neurological disorder or a disease that causes trouble with walking, posture, and balance. Others may fall because of a number of preventable risk factors including

- Lack of exercise
- Unsafe home environments
- Vision problems
- Lack of balance
- Medication usage

By addressing such risk factors, a person can lower his/her chance of falling or prevent a fall from occurring.

In a given year, one in three older adults can expect to fall. Falls are the leading cause of injury and injury-related death among older adults. Falls are also the leading cause of nonfatal injuries and hospital admissions for trauma among older adults. Men age 65 and older are more likely to die from a fall; older women are more likely to experience a nonfatal fall injury, such as a hip fracture. Regardless of gender, after the age of 60, both the incidence of falling and the severity of fall-related complications increase. Such falls among seniors jeopardize health and independence.

The Kentucky Injury Prevention and Research Center (KIPRC) reports that older patients who are hospitalized for falling are six times more likely than younger patients to be discharged into a nursing home for intermediate or long-term care.



## **Count your steps to make sure you get the right amount of endurance activity.**

- Using a pedometer or step counter, monitor how many steps you take in a day. Counters keep track of the number of steps taken while walking. They can help you keep track of your endurance activity, set goals, and measure progress. You can buy a step counter at your local supercenter or health center.
- Set a goal that will increase your endurance. Many people who are inactive take fewer than 5,000 steps per day. As you build your endurance, keep in mind that approximately 8,000 steps a day meet the requirement for recommended activity level. But, 10,000 or more steps ensures satisfactory daily amounts of endurance exercise. If you want to be in the high-activity group, then you should strive for

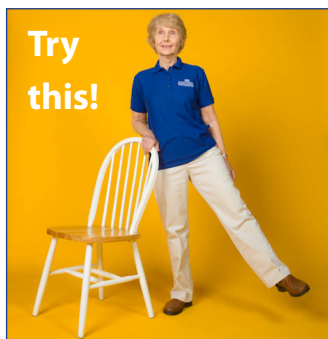
15,000 steps a day!

- Monitor your progress. Gradually adjust your goal upward as you become more fit.

## **Strength**

Use it or lose it to maintain your muscles! Regardless of age, if muscles are not used, they waste away. Muscle strength, even in small increases, helps maintain a degree of independence. For example, upper body strength allows you to carry groceries and play with grandchildren; lower body strength improves balance and allows you to get up from a chair by yourself. Also, when supporting muscles (leg and hip) are strong, you are less likely to fall, or if you do fall they allow you to get up on your own. Strong muscles also lead to strong bones. The most common types of strength exercises are:

- Weight Training
- Resistance Training



- Isometric Training

**Side leg raises help strengthen hips, thighs, and buttocks.**

- Stand behind a sturdy chair with feet slightly apart, holding on for balance. Breathe in slowly.
- Breathe out and slowly lift one leg out to the side. Keep your back straight and your toes facing forward. The leg you are standing on should be slightly bent.
- Hold position for 1 second.
- Breathe in as you slowly lower your leg.
- Repeat 10 to 15 times with the same leg.
- Switch to the other leg, and repeat 10 to 15 times.
- Repeat 10-15 more times with each leg.

**Balance**

Good balance is key to preventing falls. When balance becomes impaired, older adults are more likely to experience general postural unsteadiness and falls. They may withdraw from physical activity for fear of falling. Exercises that aim to improve balance include:

- Toe stands
- Forward and side leg lifts
- Heel-to-toe walk

- Tai chi

**Heel-to-toe walk will help you become more steady on your feet.**

- Position the heel of one foot just in front of the toes of the other foot.

Your heel and toes should touch or almost touch.

- Choose a spot ahead of you and focus on it to keep you steady as you walk.
- Take one step. Put your heel just in front of the toe of your other foot.
- Repeat for 20 steps.

If you are unsteady on your feet, try doing this exercise near a wall so you can steady yourself if you need to. In the beginning, take as many steps as you feel comfortable and work your way toward more.

**Stretching and Flexibility**

Stretching keeps you flexible and helps you move more freely. A flexible body helps protect you from injury, including falls, and provides you with more freedom to participate in physical and everyday activities. The NIA recommends the following stretches to increase flexibility:

- Shoulder and upper arm stretches
- Calf stretches
- Yoga



**Calf stretches increase your flexibility.**

- Stand facing a wall with your feet slightly farther than arm's length from the wall and shoulder-width apart.
- Put your palms flat against the wall at shoulder height and shoulder-width apart.
- Step forward with right leg and bend right knee. Keeping both feet flat on the floor, bend left knee slightly until you feel a stretch in your left calf muscle. It shouldn't feel uncomfortable. If you don't feel a stretch, bend your right knee until you do.
- Hold position for 10 to 30 seconds
- Return to starting position.
- Repeat with left leg.
- Continue alternating legs for at least 3 to 5 times on each leg.

**Get Started and Keep Going**

The NIA recommends three keys to success to help

you get started and to keep you going with exercise and physical activity:

- **Include physical activity in your everyday life.** Make physical activity a permanent habit in your routine. To make exercise a priority, it needs to come easy. If it is difficult to maintain a routine, or it costs too much, you may feel less obliged to stay active. If exercising is made interesting, fun, and social, you are more likely to stay with it. Fun and social activities include walking every aisle in the grocery store, biking with a friend, or listening to music while working in the yard.
- **Be creative and choose exercises that incorporate endurance, strength, balance, and flexibility.** Mixing up your routine helps to prevent boredom and risk of injury while you benefit from the rewards of each type of exercise.
- **Plan for breaks in the routine.** Sometimes life—vacation, family time, emergencies, illness, retirement—gets in the way of your exercise routine. Sometimes these breaks make it challenging to stick to a regular exercise program. Get back on track when you are ready. You may need or want to speak with your doctor

about resuming physical activity. You may have to remind yourself of the reasons you first began your exercise routine. You may have to rely on family and friends to help you start again if you find that you lack the motivation to do so on your own. Maybe you are tired of your old routine. If this is the case, then think outside the box about alternative ways to exercise.

## Conclusion

In addition to helping prevent falls and fractures, another worthy aspect of exercise is that it encourages confidence, and a sense of social connectedness. In addition, people can be physically active at little or no cost. Local gyms, hospitals, and universities might be able to help you find a teacher and/or program near you that works for you. Your local county extension agent, senior center, church, YMCA/YWCA, parks and recreation department, and even your shopping mall may have wellness programs.

Almost anyone at any age can exercise, even people with long-term chronic health conditions. Check with your doctor prior to starting a new routine of physical activity. While exercising, wear sturdy shoes with ankle support, drink plenty of water before and after physical activity, and avoid exercising in extreme

heat and/or humidity. The American Geriatrics Society (AGS) recommends exercising with a partner and stopping immediately if you feel tightness in your chest, shortness of breath, dizziness, or lightheadedness.

Start slowly, set realistic goals, and listen to your body. If 10 to 30 seconds or 3 to 5 repetitions are too challenging, perform as many repetitions or hold for as long as you feel comfortable. Work your way toward more.

For information on A Matter of Balance and finding a program near you, contact your local extension agent.

## References

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