

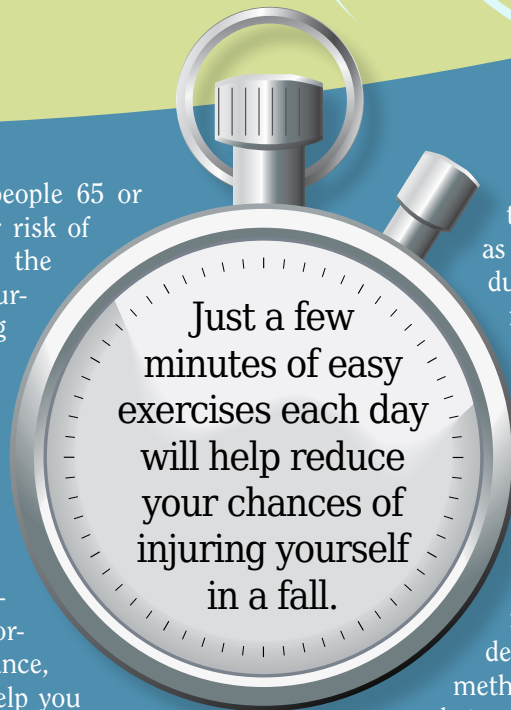
Exercising Equals Prevention

By Sonja Larson, RN



Each year about one-third of people 65 or older will fall, increasing their risk of broken bones. According to the American Academy of Orthopaedic Surgeons (AAOS), falls are the leading cause of fractures, and loss of muscle strength is the leading cause of falls. As we age, our coordination, muscle strength and flexibility begin to change as does our bone density.

Several studies show that exercise, started at any age or level, can help maintain or improve muscle function and increase bone density. Incorporating exercises that promote balance, flexibility, strength and endurance help you become better prepared to survive a fall, or better yet, prevent it before it happens. Start by including simple exercises in your daily routine.



A simple way to improve your balance is to stand on one leg with support for as long as you are able whenever you think about it during the day. Start by standing on one leg for one minute at a time, gradually increasing the duration. Next, try to balance with your eyes closed or without holding on. Another exercise is to stand on your toes for a count of ten, and then rock back on your heels for a count of ten.

Taking Tai Chi, Yoga or Pilates can improve your sense of balance, help you become aware of your center of gravity (your core), and improve self confidence. There are gentle variations of each method that work with individual limitations and strengths. Classes are available through health clubs, community education classes, hospitals and reliable online resources. Physical therapists and personal trainers can also help create an individualized balance training plan.

Balance



Balance exercises help retrain your internal sense of position.

Close your eyes while standing next to a secure chair or counter. Quiet yourself and try to feel your sense of gravity over your feet. Take a moment to absorb the following passage, "Think of wind blowing through a tree. If the tree is rigid it will fall over. If the tree sways with the wind, it is more stable and less likely to fall."

An important thing to remember is, when muscles are flexible, the body is able to respond quickly to everyday movements giving control to the body and enabling it to sway rather than fall.

Flexibility

Flexibility exercises improve your range of motion and how well your body can move. Stretching muscles and tissues that hold your body (skeletal system) together lessens muscle tension and soreness. Being limber (able to sway instead of fall) also helps prevent injuries.

It's always a good idea to warm up prior to stretching. For example, you could start by walking in place while pumping your arms. Get your blood flowing before you begin.

The flexibility/stretching program you choose should involve your body's major muscle groups: head, neck,



shoulders, arms, back, abdomen, hips, legs, knees, and ankles. Many of these programs can be done while sitting in a chair. Exercise bands, towels or belts can be used to assist you in doing some stretches. These exercises should never cause pain, especially joint pain. A mild “pulling” sensation and some discomfort are normal. Remember slow and steady are key in doing your stretches safely. Do not “bounce” into a stretch or lock your joints in place. Allow for a tiny amount of bend in your joints and breathe with each stretch. Your muscles will thank you!

Strengthening

Most strengthening exercises require you to lift or push weights. You may purchase handheld weights, or you may substitute common household items such as water bottles, soup cans or milk jugs partially filled with sand.



It is important to start with a strength training program that isn't too difficult or overwhelming. Trying to do too much too soon can cause muscle strains and pain. Try to select a program that includes exercises for all of the major muscle groups.

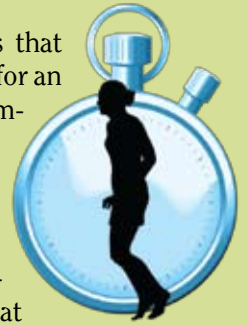
Begin training with a small amount of weight (1-5 lbs.) and set a goal of 5-10 repetitions per exercise per day. Gradually increase the number of repetitions before increasing the weight. Any amount of strength training will benefit your muscles. While you may not see muscles increase in size, you may notice an improvement in your ability to do everyday activities such as getting out of a chair or climbing stairs.

Studies have shown that strengthening exercises can be done in 10 minute segments throughout the day and provide the same benefit as a 30-60 minutes done at one time. Find

ways to incorporate exercise into your daily routine. Make a commitment to improving your muscle strength.

Endurance

Endurance exercises are activities that increase your heart rate and breathing for an extended period of time. Walking, swimming, raking leaves, and bicycling are examples of endurance exercises.



The key to success is finding an activity that you like to do that easily fits into your daily routine. For example, if you golf, leave the golf cart at the clubhouse. Use a push mower instead of a riding mower. Take a few laps around the grocery store before you begin to shop and check out the specials while you're at it. Start with a level of intensity or distance you are comfortable with and gradually increase.

It's important to note that endurance activities shouldn't cause breathlessness to the point that you're unable to talk. Stop the activity if you experience dizziness, become lightheaded, or experience chest pain and remember to always drink water to keep hydrated. As with any exercise program, you should consult with your doctor before you start.

An accident or a fall can change your life. By being willing to make small changes and incorporating them into everyday life, you will become better prepared to survive a fall or better yet, prevent it before it happens. You will improve your awareness of your external environment and your internal self. You will improve your chances of maintaining independence and enjoying the quality of life you currently have. Even better, you may surprise yourself with renewed strength, flexibility, balance and endurance.



Internal Factors and Balance

Internal factors include eyesight, hearing, medical conditions, medications, muscle strength and flexibility, and balance. Many “internal” problems develop during normal aging.

- Vision and hearing should be checked yearly and more often if you notice any change.
 - Schedule annual physicals with your family doctor to assess medical conditions and the medications used to treat these conditions.
 - Make an accurate list of the medications and supplements you take. Include the dose and time you take the medicine. Ask yourself if you are drowsy or lightheaded at certain times during the day. Are you able to connect these feelings with a certain medication? Talk to your doctor and see if you can make any changes in dosages and times to improve your stability during the day.
 - Take a good look at the foods and liquids you put in your body each day. Lightheadedness is often the result of not drinking enough water. Loss of balance is often related to alcohol intake.
 - Include adequate levels of calcium and Vitamin D in your diet to maintain healthy bones.
 - Smoking decreases bone strength and slows bone healing.
- A careful examination of our individual internal factors can help us become aware of our bodies' strengths and weakness and make changes that are beneficial in preventing accidents and falls.