

# Better Balance & Fall Prevention Guide



**the manual touch**  
PHYSICAL THERAPY

*Reclaim Movement, Function and Life*

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# About Denise Schwartz



## Specialties

- Whole Body Approach
- Functional Rehab
- Myofascial Release
- Integrative Manual therapy
- Cranial therapy
- Spinal conditions
- Kinesiotaping
- Running Injury Recovery/Prevention
- Balance/Vestibular rehab



The Manual Touch Physical Therapy opened in August of 2010, providing a whole body approach to health using both traditional and nontraditional PT practices. Denise Schwartz, Owner and Founder, fully believes this is the best approach to facilitating each patient's ability to overcome pain and achieve a higher quality of life.

Denise began her career working in a Level 1 trauma hospital for 14 years in the outpatient area, treating a variety of orthopedic and neurological patients. Having taken more than 5,000 continuing education hours to further her PT knowledge in manual therapy, spinal care, running and functional rehabilitation (rehab), Denise is certified and extensively trained in Integrative Manual Therapy (IMT) and Applied Functional Science.

Expanding her patient reach and impact, Denise then went on to

start CenterIMT Chicago. As part owner of three CenterIMT clinics, she organized numerous IMT courses and mentored other IMT therapists in the methods she has mastered to provide the best results for her patients.

Denise has assisted at many manual therapy classes and has taught myofascial release and therapeutic taping to other physical therapists at continuing education courses and teaches yearly running courses to the physical therapy assistant students at Oakton Community College.

Denise began running later in life which quickly became a passion. Despite multiple injuries common in older runners, she has gone on to complete numerous half marathons and her first full marathon in 2015.



# Falling Happens

Two years ago, at age 53, I slipped on my wet kitchen floor, twisting my leg behind me and landing hard on my back and my knee. My husband had to help me up from the floor, walk me to the couch where I laid down for 20 minutes to recover from the shock. My knee pain persisted for 3 months.

My 20-year-old son typically leaps and bounds up and down the stairs. Last year, he missed a step and slid down on his back. Within seconds, he was up and moving about as if nothing had happened.

Ed, an 89-year-old man, walks with a cane and tripped over a rug. He landed on his side and bruised his leg. Luckily, he didn't break anything, but he now has to use a walker.

Falling can happen to anyone at any age, but the older we get, the greater the possibility of falling and getting a serious injury. Older folks simply cannot bounce back from a fall like my 20-year-old son did.

Regain Your Balance

# Some Falling Facts:

As people age, the number of falls and the severity of injury resulting from falls increases. According to the Centers for Disease Control and Prevention (CDC), falls are the leading cause of fatal and nonfatal injuries in people age 65 and older and one-third of falls occur in this age population. As a child, when you fell, you usually picked yourself back up easily and went about your day without a thought of lasting injury. Now as an older adult, it is likely you have more of a fear of falling that could lead to serious injury, long-term limitations, lack of confidence, and loss of independence.

**The most common reasons for falls in older adults include a combination of changes that are often a part of the normal aging process:**

**Vision loss—not seeing clearly enough to avoid falling**

**Hip and leg weakness—making it harder to walk and lift your feet while stepping**

**Posture and balance issues—making it harder to stand up straight**

**Painful feet, back, or legs**

**Longer reaction time—taking you longer to react to something in your way**

**Increased drug use and drug interactions—may cause dizziness, affect balance**

**Chronic health problems—developing arthritis or weakness/loss of mobility issues following vascular events, e.g., clots, strokes, or heart attacks**

**Fear of falling – being overly cautious can have its drawbacks**

Older adults with more than 2 or more of the above issues have a greater risk of falling.

Common injuries due to falls in older adults include head injuries, shoulder and forearm fractures, spine fractures, pelvic fractures, and hip fractures.

Sobering statistics show (National Hospital Discharge Survey) that more than 90% of these injuries are hip fractures and most (75%) occur in women.

Approximately 25% of hip fracture patients will make a full recovery; 40% will require nursing home admission; 50% will be dependent upon a cane or a walker; and 20% will die within one year of the fall.

# What is Balance & How Does it Contribute to Falls?

Have you ever lost your footing on stairs, wet/icy pavement, or the floor of your own bedroom as you get up at night—causing you to fling your arms out to try and catch yourself before landing and raising your heart beat to cope with the suddenly stressful situation? Nearly everyone, regardless of age, has experienced these scenarios, probably multiple times in their lives. Everyone takes their sense of balance for granted because this sense seems to be automatic, until they are in danger of losing their balance.

Every day, your sense of body balance, known as proprioception, does a good job of automatically helping you lead a normal life: getting up from chairs or from lying down on the sofa/bed, walking past obstacles in your way, bending down to pick something up from the floor, navigating uneven terrain outside in the garden, just to name a few instances of your balance at work. Your balance is achieved through the integration of multiple bodily systems: visual, vestibular, nervous, and musculoskeletal.

Visual System:	Vestibular System (inner ear):	Nervous system:	Musculoskeletal:
<p>Your eyes provide information about the environment and location in the space around you so you can see and prepare for dangers, obstacles and changes. This is why it can be difficult to keep your balance in the dark.</p>	<p>Your inner ears provide information about the current position of your head at rest and its movement in space as you move. This system may be affected if you feel off balance when standing up or walking as well as when your inner ear is overwhelmed from too many rapid changes in position (e.g., riding a rollercoaster), causing you to feel nauseous, dizzy or to have vertigo.</p>	<p>Proprioception is a built-in mechanism that provides your nervous system with the information to know where your body, arms and legs are in space by sensing pressure changes in your joints. This is why when you close your eyes and then lift your arm and wave it above your head, for example, you automatically know where your arm is in space above you.</p>	<p>Your muscles and joints provide you with support in order to move around efficiently.</p>



# How Do I Know if I Have Balance Issues?

Here are 2 simple tests you can do to determine if your balance is in good condition or if it needs improvement. These tests can also be used as exercises to improve your balance, prevent falls, and improve independent living when practiced regularly at any age.

## **Test 1: Single Leg Stance**

1. Stand near a sturdy surface (table or counter)
2. Without holding on, lift one leg off the ground
3. Count how many seconds you can stand without putting your foot down or touching with your hand
4. Check how you compare with others your age

<u>Age</u>	<u>Average Balance Time</u>
40-59	25-27 seconds
60-69	20-25 seconds
70-79	10-15 seconds
80	5-6 seconds

## **Test 2: 5 Time Sit-to-Stand Test**

1. Sit in a standard chair with your back against the back of the chair (make sure the chair isn't touching a wall)
2. Cross your arms over your chest
3. Stand up and sit back down 5 times as fast as you can.

Check how you scored compared to others your age.

<u>Age</u>	<u>Average Time to Complete</u>
60-69	11 seconds
70-79	13 seconds
80-89	15 seconds

What it means: If you took longer than the average you may be at higher risk of falling.

# 3 Things You Can Do to Prevent Falls

- Create a safe environment and improve personal safety
- Improve your balance
- Find out why you are having balance difficulty and/or falling

## 1 - Create a safe environment

It's important to keep your home safe as most falls happen when at home.

- Remove throw rugs or tape them down
- Install grab rails in the tub, shower, and by the toilet
- Have good handrails along a staircase
- Use good lighting—a switch at the entrance of each room is helpful
- Decrease clutter
- Place frequently used items in easy-to-reach places
- DO NOT use stepstools or ladders
- Use a grabber to pick things up off the floor



**Some things to be mindful of as you go about your day to be safe and be aware of your own limitations.**

- Understand and accept your limitations
- Wear non-slip shoes with good support
- Be aware of your posture. Try to maintain your weight evenly over your feet [[Watch this video to learn how to find your center of balance](#)]
- Avoid fast movements including quick turns or changes in position
- Always get up slowly when rising from a chair and make sure you are steady before starting to walk
- Don't shuffle as you walk, rather lift your feet with each step to prevent tripping over uneven surfaces
- Be mindful of your surroundings
- Be cautious rolling in bed
- Pets – when walking the dog or bending over to feed animals can easily cause a loss of balance
- Use assistive device such as a cane or walker to promote independence
- Learn how to get up off the floor
- Sit down to put on pants instead of standing on one leg at a time



**Caution:** *If you are taking medications, ask your doctor if there are any side effects or interactions which may cause light-headedness or decreased balance*

## 2 – Improve Your Balance

The following 5-minute exercise program performed daily can improve your balance:

**Please note:** *You should always be in a safe place when doing exercises, such as near a kitchen counter or in a narrow hallway. If you need more safety and have a walker, stand with your back to kitchen counter and walker in front of you, this way you are surrounded on all sides. A modification of this can be done with high back chairs.*

### **STOP any exercise that causes or increases your pain.**

**1 - Stabilize your body:** Engage your abs – put your tongue on back of top teeth, make a “Thhhhh” sound [[Click here to watch the video](#)]. Do this throughout your day while sitting, standing, walking, and transitional movements such as sit-to-stand.

### **2 - Find your center of balance:**

- Rock forward/backward from ankles [[Click here to watch the video](#)]
- Walk heel to toe – forward/backward
- Sidestepping - walk sideways as you move around the house



**3 - Stand with feet together, hands on hips** – hold for 10-20 seconds; the following is a progression of difficulty:

- Eyes open – turn head right/left
- Eyes closed
- Stand on unstable surface

**4 - Stand with one foot in front of the other**, as close together as possible to provide some challenge but still able to perform for 10-20 seconds; the following is a progression of difficulty:

- Arms out to side
- Hands on hips
- Hands on hips – turn head right/left



**5 - Cross arm punches** – stand with feet shoulder width apart, alternate punching hand across body, be sure to move hips

### 3 - Find out why you are having balance difficulty and/or falling

It may be time to see your primary care physician and your physical therapist to be evaluated for your balance issues. Your physical therapist will evaluate you to determine the cause(s) of your balance issue, assess your risk for falls and provide you with a treatment plan to improve your balance.

## What to Do Next...

If you have Medicare, call or make an appointment with your primary care doc and ask for a referral to physical therapy. If you don't have Medicare, give us a call to schedule an appointment now.



If you want to share your story or have questions related to balance or fall prevention, please email me. I'd love to hear from you!

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