

BALANCE FOR ALL.

Improving
Balance in all
Aspects of
Your Life



By: Michelle Collie

Balance For All

Did you ever consider standing on 1 leg while brushing your teeth to prevent future fall risk? Have you ever hopped side to side on a mat to decrease your risk of a knee sprain? Did you know that sitting on an inflatable ball improves balance within your core?

For most people, when they think about physical health and exercise they think about strength, flexibility and cardiovascular fitness. As a result, people combine various types of aerobic, resistant and stretching exercises to optimize their physical health and fitness.

There is however, a missing link. Essentially, what is needed is an added component to physical health that decreases the incidence of an elderly person falling and fracturing a hip, a young female athlete from a dreaded ACL injury, the busy mother from a slip on the New England ice, or the middle aged golfer from twisting his ankle getting off of a golf cart. Whether you are a high level athlete, a sedentary person, a busy working parent or a senior citizen, ensuring optimal balance may assist in preventing a life changing injury.

The ability to simply balance on one foot is essential for us to walk safely. This is the bare minimum, and there are a large number of people in our community who have never even tried it. "When assessing balance in my patients, many are surprised that they are unable to actually stand on one leg," states Brian Hay, MSPT, DPT, OCS.

Balance is not only the ability to stay upright but also the ability to move through space – whether this is walking across a room, getting in and out of the shower or running across a soccer field. The ability to balance requires a complex combination of strength, flexibility, coordination, nerve function, vision, vestibular input (in the inner ear) and proprioception (various nerves in joints that orient your brain in knowing your position in space.)

Yet another thing to do? The comforting news is that improving and optimizing your ability to balance is quite simple, and for many the activities or exercises you need to do can simply be incorporated into your current daily activities or exercise routines. "The fact is, if you don't use your balance, you will lose your balance!," states Yvonne Swanson, MSPT, OCS, a board certified orthopedic clinical specialist at Performance Physical Therapy. Now for some good news! As with most things concerning health and fitness, you can make substantial gains, even well into old age.

Balance and Fall Prevention

Falls among older people are common, costly and debilitating. According to the Centers for Disease Control and Prevention, for people age 65 and older, every 18 seconds someone is treated in a hospital emergency room for a fall-related injury. Even more frightening is that every 35 minutes an older person dies from a fall. Hip fractures are one of the most nonfatal, debilitating results of a fall of which nearly 75% are women. It is estimated that by 2020 falls may cost the nation \$43.8 billion.

As we age, our sight, hearing, muscle strength, coordination and reflexes change, which all affect our ability to balance. Additionally, health conditions such as diabetes, heart disease and circulation problems can have a detrimental effect on balance. It is well accepted that many medications can make people dizzy and therefore more at risk of falling.

So, what can you do? The key is to incorporate a balance exercise challenge into your day on a daily basis. This will allow you to maintain safe balance abilities, and to assess any changes in your ability to balance (in which case you would follow up with your physician.)

continued...

Anytime, Anywhere...

BALANCE EXERCISES

{ Single Leg Stand }

Stand beside a wall or a sturdy chair and lightly hold the support. Raise one foot off the ground. Maintain your balance while standing on one leg. Hold for a count of ten seconds. Repeat with other leg.

TAKE THE CHALLENGE:

- Let go of the support and stand on 1 leg for 10 seconds.
- Stand on 1 leg and close your eyes.
- Incorporate this into your daily life by standing on 1 leg when brushing your teeth or while you wait in line at the grocery store or at the bus stop.



Helen Keough demonstrates single leg stand while lightly holding onto a chair for support

{ Sit and Stand }

Get up from a chair and sit back down, without using your hands.

TAKE THE CHALLENGE:

- Do this exercise with your eyes closed and with your feet close together.
- Try it with a paper plate on your head.



Mrs Keough works hard to stand up without using her hands

You can do exercises to improve your balance almost anytime, anywhere, and as often as you like, as long as you have something sturdy nearby to hold on to if you become unsteady.

{ Tight-Rope Walk }

Walk heel-to-toe by placing your heel just in front of the toes of the opposite foot each time you take a step. Take 20 steps forward then walk backwards along the imaginary line.

TAKE THE CHALLENGE:

- To challenge your balance and your posture, do this walk with a paper plate on your head.
- Alternatively try turning your head to the left and right as walking.



Brian Hay, MSPT, DPT, OCS provides guidance to Mrs Keough as she walks heel-toe

Fall-Proof Your Living Environment

- Secure rugs and mats with double-faced tape or slip-resistant backing.
- If a mat is not secure, remove it.
- Keep your home well lit, and have someone available to change light bulbs if you are unable.
- If you get up during night, consider night lights so you are not feeling for light switches.
- Clean up spills to avoid slipping. Use non-slip mats in the bath and shower.
- If an assistive device such as a cane or walker has been recommended to you, use it! Do not rely on furniture and walls to assist you.
- If you do have balance limitations, consider having rails put into your bath or shower.
- Have a winter snow/ice plan in advance. If needed ask a neighbor if he/she is able to assist in clearing snow.





BALANCE FOR THE INJURED, BALANCE FOR THE ATHLETE

“Traditionally the focus on balance has been directed toward people over 65, however I see many younger people with poor balance,” states Lisa Decoste, MSPT, DPT, OCS . “For example, if you sprain your ankle, your proprioception, the ability of the ankle to know where it is in space, will decrease. This compromises balance and puts you at risk of another sprain or a more serious injury. Balance retraining is essential, otherwise this balance deficit will put this person at risk for the rest of their lives.”

Robert Doherty, BS, PTA, LATC, who has been at Performance Physical Therapy for 10 years, notes that, “even patients with low back pain tend to have altered balance because of a weak core, so dynamic balance exercises should be included for this population”.

“Dynamic balance is an essential skill we develop for our young athletes in our speed school,” describes Kevin Silva, PTA, BS, CSCS, co-founder of the Performance Speed School. “Agility, coordination and balance drills ultimately improve a young athlete’s performance and decrease the risk of injury”. Jennifer Beaudry, LATC, athletic trainer at Lincoln School adds, “It is disheartening to witness a school age child sprain their ankle or tear an ACL ligament, especially when you know this could have been prevented with a few simple exercises”.

{ Clock Face Single Leg Stand }

Stand on your right leg and imagine you are in the center of a clock. Move the left foot to point to the 12, then 11, then 10 and continue to 6:00. Then stand on your left foot and point the right foot to the 12, then 1, then 2 and continue to 6:00.

TAKE THE CHALLENGE:

- Repeat with your eyes closed and/or arms over head.
- Try standing on a piece of foam, or a rocker board.



Jasir Charris, a local soccer player who works with New England Revolution, demonstrates the clock face exercise at 9 o'clock

{ Ball Tosses }

Face another person and throw a ball to each other. Stand with feet close together to challenge balance or stand on 1 leg.

TAKE THE CHALLENGE:

- Use a medicine ball
- Stand on a bosu ball or foam.
- Side step or jump in various directions when throwing and catching the ball.
- Alternatively use a mini tramp to throw the ball onto it.



The AAU Baseball team throws medicine balls with various balance drills at a Performance Speed School

{ Sitting on a Ball }

Practice sitting on a ball without support to work the trunk muscles.

TAKE THE CHALLENGE:

- March while seated on the ball, 10 times, keeping the trunk and head still.
- Try leg extensions (straightening leg), 10 times each leg.
- Complete the leg exercises with arm raises.



Jasir challenges his trunk balance on a ball

TRY THIS

Balance exercises should not just be promoted not only for the elderly, the injured or the athletic, but for men and women of all ages. Here are some ideas for the whole family.

- Have a “Wii” at home? Have a family balance challenge!
- Whenever brushing your teeth or standing in line at the market, stand on 1 leg.
- Try yoga, Pilates, Tai Chi or karate.
- Try a specialized exercise class at the gym such as a bosu class.
- Lifting weights? – try doing it while sitting on a ball or standing on 1 leg.
- Encourage balance games with your kids – “Simon Says,” “Twister,” “Status,” or hopping, jumping and skipping activities.
- Encourage a variety of physical activities for your kids – soccer, playground and ballet.
- When you transition from sit to stand, attempt to maintain a good posture and try not use your hands.



Final Considerations

Consider how your balance is affected by your shoes. Wear flat shoes with a sole that grips the ground in the snow, ice and rain. 3 inch heels will challenge your balance too much!

Watch where you are going – talking on a cell phone while carrying groceries and unlocking the house with 2 kids running around is not a combination conducive to avoiding a slip and fall.

Take good care of yourself to optimize your balance. Get enough sleep, stay strong and physically active, and stand tall.

If it has been recommended that you use a walker or cane, than use it! It's for your own safety.



CALL 401-726-7100
www.performanceptri.com