

The Complete Guide to Balance Training - Part 5 of 5

Developing Exercise Programs from Assessment Results

The next step is to analyze the assessment battery results to develop the

Assessment	Poor 20% & Below	Below Average 21-40%	Average 41-60%	Above Average 61-80%	Excellent Above 80%
FRT	6.75" or less	7.00" - 8.75"	9.00" - 10.25"	10.50" - 12.00"	> 12.00"
TUG	>11.5 sec	11.5 - 9.0 sec	8.9 - 7.8 sec	7.7 - 6.6 sec	< 6.6 sec
CS	< 6 reps or used hands	6 - 10 reps	11 - 14 reps	14 - 18 reps	> 18 reps

bones of the older adult's fall prevention exercise program. This is done by determining how well the older adult scored on each of the three assessments based by comparing each score to established norms that reflect a large number of community-dwelling older adults. The norms for all 3 assessments are included in the table below and are split into quintiles (20% increments) from lowest to highest. The quintile where the assessment score landed will identify the appropriate level of difficulty for the exercises in each domain of the program, with the lowest quintile resulting in the most regressed (i.e., easy) exercises and the highest quintile resulting in the most progressed (i.e., difficult) exercises. Remember that the Functional Reach Test results are associated with the exercises in the domains of Joint Mobility and Static Balance. The Timed Up and Go results are associated with Dynamic Balance and Gait Enhancement exercises. Finally, the 30-Second Chair Stand results are associated with the domains of Muscle Strength and Muscle Power.

It is possible that the person will score in different quintiles for the 3

Mary's Assessment Results

FRT	TUG	CS
8.25"	7.4 sec	11 reps
Below Average	Above Average	Average

assessments and that means that the person should have exercises of varying difficulty based on which assessments was the best and which was the worst.

For example, consider Mary's results in the example below:

These results mean that Mary needs the most help with her Static Balance and Joint Mobility (as indicated by her Below Average score on the FRT), whereas she is in fairly good shape with her Dynamic Balance and Gait (as indicated by her Above Average score on the TUG). Meanwhile, her Muscle Strength and Muscle Power fall into the Average category as measured by the CS test. This is where having 3 assessments that identify the different programmatic elements of a fall prevention exercise program is very powerful because it can drive an individualized exercise program design that is specific to virtually all older adults.

Using Assessment Results to Build the Exercise Program

The assessment results are then applied to determine the difficulty of the

Any Good Exercise Exists On A Continuum!!!



individual exercises within the fall prevention exercise program. Any good exercise exists on a continuum where it can retain its ultimate purpose but be progressed or regressed by modifications to things such as base of support, movement complexity, sensory challenges, and planes of motion.

So, for people scoring in the lowest 20% when compared to the norms for the particular assessment, they should be performing a Level 1 (most regressed) exercise. In contrast, those scoring in the highest 20% as compared to the norms for the assessment should be performing a Level 5 (most progressed) exercise, with Level 2-4 exercises being associated with the intermediate normative categories. Sensory Stimulation exercises are an important part of any fall prevention exercise program, and all 3 assessments require sensory awareness, therefore the median (middle-rated) normative score of the 3 assessments should determine the corresponding level of Sensory Stimulation exercises. In Mary's example above, she would receive Level 3 Sensory Stimulation exercises due to her median test score (Chair Stand Test) being in the Average category.

Normative Scoring Category & Exercise Level:

Poor = Level 1 Exercises

Below Average = Level 2 Exercises

Average = Level 3 Exercises

Above Average = Level 4 Exercises

Excellent = Level 5 Exercises

So, the construction of Mary's Exercise Template would look like this:

Mary's Fall Prevention Exercise Program Template

Joint Mobility & Static Balance	Dynamic Balance & Gait Enhancement	Muscle Strength & Muscle Power	Sensory Stimulation
Based on FRT Score in 2nd Quartile	Based on TUG Score in 4th Quartile	Based on CS Score in 3rd Quartile	Based on Median Score of 3 Assessments
Level 2 Exercises	Level 4 Exercises	Level 3 Exercises	Level 3 Exercises

The assessment results are then applied to determine the difficulty of the individual exercises within the fall prevention exercise program. Any good exercise exists on a continuum where it can retain its ultimate purpose but be easily progressed or regressed by modifications training elements such as base of support, movement complexity, sensory challenges, and planes of motion.

In order to complete the construction of the exercise program, a scheme for loading the program must be developed. Unfortunately, as of now, no exercise prescription has been developed for frequency/intensity/time/type specifically for the prevention of falls. However, it is known that like many other types of exercise, fall prevention exercise exhibits a dose/response relationship. Therefore, the exercise program should be performed at least 3-4 days per week. Based on outcomes from successful fall prevention

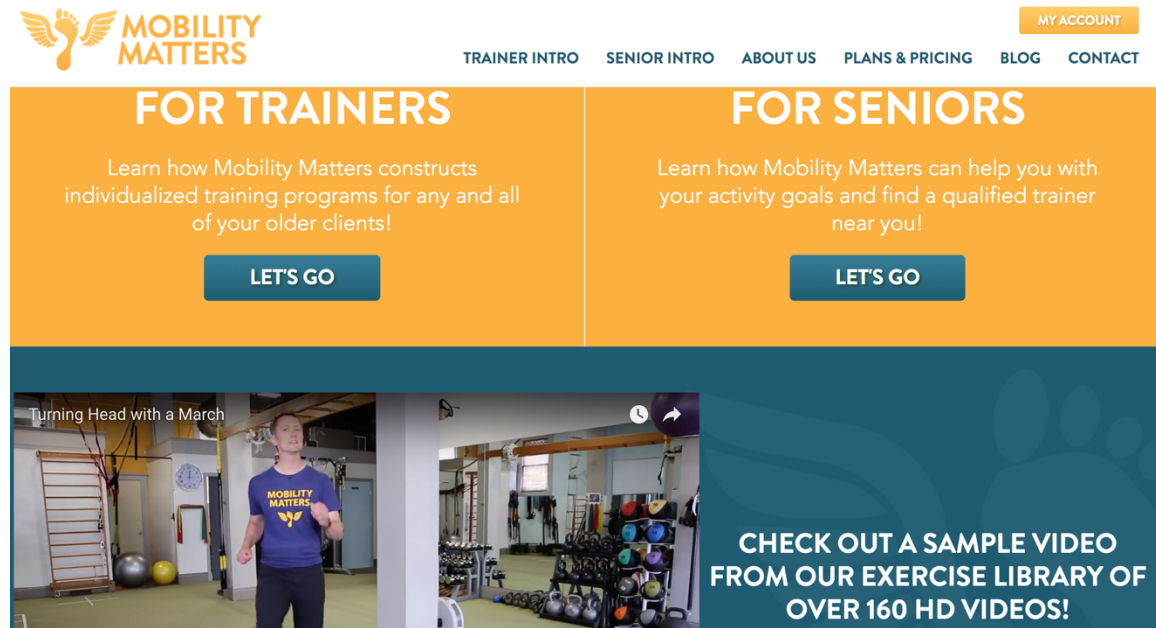
exercise programs, the following loading is recommended for each domain of exercise:

Exercise Domain	Time or Sets & Reps
Joint Mobility	60 seconds (total and/or each side)
Sensory Stimulation	2 sets of 45-60 seconds (total and/or each side)
Muscle Strength	2-4 sets of 8-12 repetitions
Muscle Power	2-4 sets of 45-60 seconds (total and/or each side)
Static Balance	2 sets of 45-60 seconds (total and/or each side)
Dynamic Balance	2 sets of 45-60 seconds (total and/or each side)
Gait Enhancement	2 sets of 45-60 seconds (total and/or each side)

Mobility Matters – An Online Fall Prevention Exercise Solution

An excellent fall prevention exercise programming resource is Mobility Matters, subscription website (<http://www.mobilitymatters.fit/>) that develops individualized fall prevention exercise programs for older adults. The online platform guides fitness professionals and clinicians through implementing the 3 functional fitness assessments described previously and uses a scientifically proven algorithm to construct a multi-component, customized

falls prevention exercise program for older adults of virtually all levels of function.



The Mobility Matters exercise library contains over 160 different balance training and fall risk reduction exercises and it will draw from that library to create a customized exercise program consisting of 18 exercises selected from the domains of Joint Mobility, Sensory Stimulation, Muscle Strength/Power, Static Balance, Dynamic Balance, and Gait Enhancement. Subscribers can manage their clients/patients using the site's administrator tools, send homework video links via email, and track progress over time. People completing this CEC course will get an extra month added for free on any 3-month subscription and will get 2 extra months added on any annual subscription. Contact chris@mobilitymatters.fit for more details.

Exercise Program Examples

Here is a selection of exercises from each training domain for balance and fall risk reduction exercise programming. Level 1 through Level 5 options are listed with informative cueing along with a video link for each exercise.

Joint Mobility Exercises

Open Chain Ankle Mobility

Level 1: Seated Ankle Point/Flex/Rotation With Heel on Floor



- Sit forward in chair, one leg extended, heel on floor
- Point and flex foot maximally, rotate foot in each direction maximally
- Sense exertion in muscles of lower leg
- Perform for 15-30 seconds per movement on each leg
- Video Link:

https://player.vimeo.com/external/255787248.hd.mp4?s=e83a37a7d399e5b9491f92e24d07a595ce07a703&profile_id=175

Level 2: Seated Ankle Point/Flex/Rotation



- Sit forward in chair, one leg extended, foot lifted slightly off floor
- Point and flex the foot maximally, rotate the foot in each direction maximally
- Sense exertion in muscles of lower leg
- Perform for 15-30 seconds per movement on each leg
- Video Link:
https://player.vimeo.com/external/255787471.hd.mp4?s=9adca3bf5083f280a4703f147e9599539dc54c92&profile_id=175

Level 3: Standing Ankle Point/Flex/Rotation With Hand on Chair



- Stand alongside chair, one leg extended slightly off floor, hand on chair for balance

- Point and flex the foot maximally, rotate the foot in each direction maximally
- Sense exertion in muscles of lower leg
- Perform for 15-30 seconds per movement on each leg
- Video Link: <
https://player.vimeo.com/external/255787625.hd.mp4?s=2afe3c24e92422ef6f9a3855eeefb2dc579d2f9d&profile_id=175

Level 4: Standing Ankle Point/Flex/Rotation With Finger on Chair



- Stand in an athletic posture, one leg extended slightly off floor, fingertip on chair for balance
- Point and flex the foot maximally, rotate the foot in each direction maximally
- Sense exertion in muscles of lower leg
- Perform for 15-30 seconds per movement on each leg
- Video Link: <
https://player.vimeo.com/external/255788299.hd.mp4?s=fec2d1464df92e7fecdbd7e3bb1fd9379a9e5123&profile_id=175

Level 5: Standing Ankle Point/Flex/Rotation - No Hands



- Stand in an athletic posture, one leg extended slightly off floor
- Point and flex the foot maximally, rotate the foot in each direction maximally
- Sense exertion in muscles of lower leg, contract gluteals and abdominals for balance
- Perform for 15-30 seconds per movement on each leg

• Video Link:

https://player.vimeo.com/external/255788423.hd.mp4?s=540629e0b2779871bd1a39c4a24cd496d8635ea8&profile_id=175

Open Chain Hip Mobility

Level 1: Seated Hip Slides



- Sit forward in chair, feet and knees hip width apart, upper body tall remains tall
- Slide one leg as a unit to the side keeping the knee over the foot
- Sense exertion hip muscles
- Perform for 30 seconds on each leg
- Video Link:
https://player.vimeo.com/external/255789694.hd.mp4?s=ad9447e8b5626562953039355f00107918355ad3&profile_id=175

Level 2: Seated Hip Steps



- Sit forward in chair, feet and knees hip width apart, upper body remains tall
- Step one leg as a unit to the side keeping the knee over the foot
- Muscles in the hip joint should sense exertion
- Perform for 30 seconds on each leg
- Video Link:
https://player.vimeo.com/external/255789809.hd.mp4?s=163c7b460a6eedd3c8381c2a302fa0cb89595a0a&profile_id=175

Level 3: Seated Hip Circles



- Sit forward in chair, feet and knees hip width apart, upper body remains tall
- Lift one leg as a unit off the floor and keep the knee over the foot
- Rotate the bent leg in clockwise circles
- Keep upper body sitting tall during the exercise
- Sense exertion hip muscles
- Perform for 30 seconds on each leg in each direction
- Video Link:

https://player.vimeo.com/external/255789884.hd.mp4?s=ac9249bdce2c83f6b07dd476143fbcff11a7f226&profile_id=175

Level 4: Standing Hip Circles with Hand on Chair



- Stand alongside chair, outer leg lifted off floor with 90 degree knee bend, hand on chair for balance, upper body remains tall
- Rotate the bent leg in clockwise circles
- Sense exertion hip muscles
- Perform for 30 seconds on each leg in each direction
- Video Link: <
https://player.vimeo.com/external/255789994.hd.mp4?s=af621e942b773217b8ce3440a72252fec81cbe80&profile_id=175

Level 5: Alternate Step Hip Circles



- Stand with feet shoulder width apart, upper body standing tall
- Lift leg off floor with 90 degree knee bend and rotate the leg outward
- Return leg to floor and alternate legs
- Sense exertion hip muscles
- Alternate legs for 60 seconds on each leg in each direction
- Video Link:
https://player.vimeo.com/external/255790104.hd.mp4?s=3247d0749ab2c75c954f54506ca262132ddeea8a&profile_id=175

Closed Chain Rotational Mobility

Level 1: Seated Reach Backs/Reach Forwards



- Sit forward and tall in chair, feet and knees hip width apart
- Reach right arm back and up, torso rotates to the right
- Switch to left arm reaching back and up, torso rotates to left
- Reach right arm forward and up, torso rotates to left
- Switch to left arm reaching forward and up, torso rotates to right, then switch sides
- Sense a stretch in torso, chest and back
- Move in and out of these positions, perform for 60 seconds
- Video Link:

https://player.vimeo.com/external/255792654.hd.mp4?s=6a7dd71facf0941b687b0587f0cd36df00729da9&profile_id=175

Level 2: Rotating Punches



- Stand with feet hip width apart, upper body standing tall, lift arms with hands in fists
- Rotate to left and punch with right hand, transfer weight to left foot, right foot rotates onto toe
- Sense a stretch in torso and back, maintain balance on stance foot
- Return to start position and switch sides
- Move in and out of this position, perform for 60 seconds
- Video Link:

https://player.vimeo.com/external/255792721.hd.mp4?s=f92a63f24be25a247c0e7138a4a76f137757304e&profile_id=175

Level 3: Rotating Punches - High & Low



- Stand with feet hip width apart, upper body standing tall, lift arms with hands in fists
- Rotate to left and punch upwards with right hand, transfer weight to left foot, right foot rotates onto toe
- Rotate to left and punch downwards with right hand, transfer weight to left foot, right foot rotates onto toe
- Return to start position and switch sides
- Sense a stretch in torso and back, maintain balance on stance foot
- Move in and out of positions, perform for 60 seconds
- Video Link:

https://player.vimeo.com/external/255792817.hd.mp4?s=eeaed363857f8f7ea237dba2f860935a6afd52ad&profile_id=175

Level 4: Standing Reach Backs/Reach Forwards

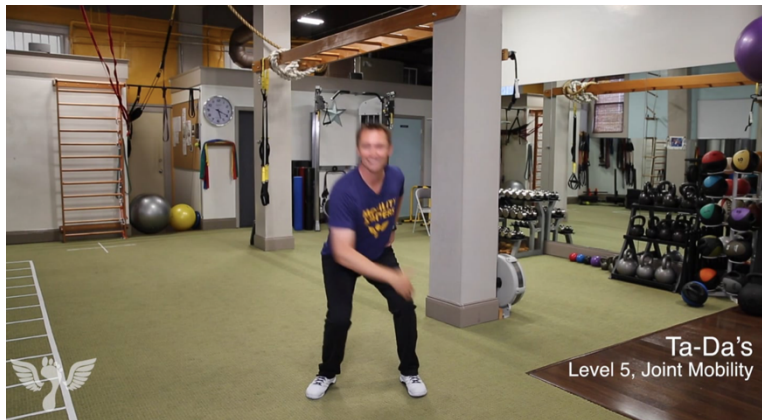


- Stand with feet hip width apart, upper body standing tall
- Reach right arm back and up, torso rotates to right
- Switch to left arm reaching back and up, torso rotates to left
- Reach right arm forward and up, torso rotates to the left
- Switch to left arm reaching forward and up, torso rotates to right, then switch sides

- Sense a stretch in torso, chest and back
- Move in and out of these positions, perform for 60 seconds
- Video Link:

https://player.vimeo.com/external/255792908.hd.mp4?s=892d2e84bee0e6e66034b2a5766922f02dbdf7bd&profile_id=175

Level 5: Ta-Da's



- Stand with feet hip width apart, upper body standing tall, hands on hips
- Drop into a shallow squat as right hand touches left knee
- Reach right arm up and out to right as torso rotates to right
- Sense a stretch in ankle, hip, torso, and shoulders
- Move in and out of this position, perform for 30 seconds per side
- Video Link:

https://player.vimeo.com/external/255792985.hd.mp4?s=60b308959b44acaaa6ed9f26a17721768f9ef134&profile_id=175

Sensory Stimulation Exercises

Visual & Somatosensory

Level 1: Staggered Stance Shifting Eyes with Chair Support



- Stand with feet in a staggered position, upper body standing tall, one hand on chair for balance support
- Lift opposite arm in front of face with index finger lifted
- Move arm side-to-side and track index finger with eyes, keep head still
- Removing vision and narrow base of support will challenge balance
- Perform for 30 seconds, repeat with opposite foot position
- Video Link:

https://player.vimeo.com/external/255818888.hd.mp4?s=0e68e43fb938b2f0e4ccae6ea22351826285efbb&profile_id=175

Level 2: Tandem Stance Shifting Eyes with Chair Support



- Stand with feet in tandem (heel-to-toe) position, upper body standing tall, one hand on chair for balance support
- Lift opposite arm in front of face with index finger lifted
- Move arm side-to-side and track index finger with eyes, keep head still
- Removing vision and narrow base of support will challenge balance
- Perform for 30 seconds, repeat with opposite foot position
- Video Link:

https://player.vimeo.com/external/255818968.hd.mp4?s=84a2aac1fd6dbc3d21f2a1423b8f69a181d35d9d&profile_id=175

Level 3: Staggered Stance Shifting Eyes



- Stand with feet in a staggered position, upper body standing tall
- Lift opposite arm in front of face with index finger lifted, opposite arm at side or on hip
- Move lifted arm side-to-side and track index finger with eyes, keep head still
- Removing vision and narrow base of support will challenge balance
- Perform for 30 seconds, repeat with opposite foot position

- Video Link:

https://player.vimeo.com/external/255819012.hd.mp4?s=e6bbe16736e51d324c7bada46d855407d4c00ee7&profile_id=175

Level 4: Staggered Stance Shifting Eyes on Unstable Surface



- Stand with feet in staggered position on foam pad or towel on floor, upper body standing tall
- Lift opposite arm in front of face with index finger lifted, opposite arm at side or on hip
- Move lifted arm side-to-side and track index finger with eyes, keep head still
- Removing vision and narrow and unstable base of support will challenge balance
- Perform for 30 seconds, repeat with opposite foot position
- Video Link: <

https://player.vimeo.com/external/255819059.hd.mp4?s=8cf9855ee3cd5d933c08fff68802ea4d1b8d070e&profile_id=175

Level 5: Tandem Stance Shifting Eyes on Unstable Surface



- Stand with feet in tandem position on foam pad or towel on floor, upper body standing tall
- Lift opposite arm in front of face with index finger lifted, opposite arm at side or on hip
- Move lifted arm side-to-side and track index finger with eyes, keep head still
- Removing vision and narrow and unstable base of support will challenge balance
- Perform for 30 seconds, repeat with opposite foot position

• Video Link:

https://player.vimeo.com/external/255819143.hd.mp4?s=cd6228becf2f97ade1edf07ee8c80a0da6ad1c82&profile_id=175

Muscle Strength/Power Exercises

Lower Body Concentric

Level 1: Chair Stands using Hands



- Sit forward and tall in chair, feet and knees hip width apart, hands on chair
- Push off the chair with hands and stand up fully, driving hips forward
- Sit back down with control using hands to assist
- Feel exertion in upper and lower legs
- Perform 2-3 sets of 8-12 repetitions
- Video Link:

https://player.vimeo.com/external/255820236.hd.mp4?s=7068f1a650146289a0287970c21cf32791ccbf5c&profile_id=175

Level 2: Chair Stands with a Hand Push



- Sit forward and tall in chair, feet and knees hip width apart, hands on lap
- Push off the lap with hands and stand up fully, driving hips forward
- Sit back down with control using hands to assist if necessary
- Feel exertion in upper and lower legs

- Perform 2-3 sets of 8-12 repetitions
- Video Link:

https://player.vimeo.com/external/255820273.hd.mp4?s=6777c582a8260a7a3745beed166c8caba849a098&profile_id=175

Level 3: Chair Stands with an Arm Swing



- Sit forward and tall in chair, feet and knees hip width apart, hands at side
- Swing arms forward to stand up fully, driving hips forward
- Sit back down with control using hands to assist if necessary
- Feel exertion in upper and lower legs
- Perform 2-3 sets of 8-12 repetitions
- Video Link:

https://player.vimeo.com/external/255820313.hd.mp4?s=37f1ed90ce82a84bf62ca965b53e42352dbc0378&profile_id=175

Level 4: Chair Stands with Arms Across Chest



- Sit forward and tall in chair, feet and knees hip width apart, arms across chest
- Stand up fully, driving hips forward, keep arms firmly against chest at all times
- Sit back down with control
- Feel exertion in upper and lower legs
- Perform 2-3 sets of 8-12 repetitions
- Video Link:

https://player.vimeo.com/external/255820370.hd.mp4?s=82792ffc042f13056a0a58176e865c2a1beb5748&profile_id=175

Level 5: Chair Stands to Calf Raise



- Sit forward and tall in chair, feet and knees hip width apart, arms across chest
- Stand up fully, driving hips forward, keep arms firmly against chest at all times
- Rise up to toes from standing position and sit back down with control
- Feel exertion in upper and lower legs
- Perform 2-3 sets of 8-12 repetitions
- Video Link:
https://player.vimeo.com/external/255820380.hd.mp4?s=88259695a4f344dc2eac242e6140344602803883&profile_id=175

Lower Body Power

Level 1: Multidirectional Foot Stomps with Hand on Chair



- Stand to the right of chair, left hand on chair for balance
- Quickly stomp right foot forward, side, and back
- Transfer weight to right foot on each stomp
- Feel exertion in muscles of stance leg and speed in stomping leg
- Repeat rapidly for 30 seconds then switch legs

- Video Link:

https://player.vimeo.com/external/255820651.hd.mp4?s=1e0309366ae273d0cc1f7074086c54e1ce8f1fc1&profile_id=175

Level 2: Multidirectional Foot Stomps with Fingertip on Chair



- Stand to right of chair, left finger on chair for balance
- Quickly stomp right foot forward, side, and back
- Transfer weight to right foot on each stomp
- Feel exertion in muscles of stance leg and speed in stomping leg
- Repeat rapidly for 30 seconds then switch legs
- Video Link:

https://player.vimeo.com/external/255820689.hd.mp4?s=b038c10a687c336eaddce4b3f48f0198591c5ef1&profile_id=175

Level 3: Multidirectional Foot Stomps



- Stand to the right of chair, hands on hips
- Quickly stomp right foot forward, side, and back
- Transfer weight to right foot on each stomp
- Feel exertion in muscles of stance leg and speed in stomping leg
- Repeat rapidly for 30 seconds then switch legs
- Video Link:

https://player.vimeo.com/external/255820728.hd.mp4?s=2f592ec80dfe80e2106c5bd7933a6b89d26da789&profile_id=175

Level 4: Rotating Foot Stomps



- Stand with feet hip width apart in athletic position
- Stomp forward with right foot, pivoting on left foot
- Rotate and stomp backward with right foot, pivoting on left foot

- Feel exertion in muscles of stance leg and speed in stomping leg
- Repeat rapidly for 30 seconds then switch legs
- Video Link:

https://player.vimeo.com/external/255821622.hd.mp4?s=3b79eb08b628099a01ad1d8bdc939064cca5fdb9&profile_id=175

Level 5: Multidirectional Hops



- Stand with feet together in athletic position, hands on hips
- Quickly hop with feet together forward, side, and back
- Feel exertion in muscles of stance leg and speed in stomping leg
- Repeat rapidly for 30 seconds then switch hopping direction
- Video Link:

https://player.vimeo.com/external/255821670.hd.mp4?s=ae1a7f78cf5c72afd38fe98db9651505ac212067&profile_id=175

Static Balance Exercises

Upper Body Displacement

Level 1: Narrow Stance Forward Reach with Chair Support



- Stand with feet close together, upper body standing tall, left hand on chair
- Slowly reach right hand forward at chest height, hinge from hips, keep feet flat on floor
- Slowly return back to start position
- Sense weight shift in feet
- Move in and out of this position, perform for 30 seconds with each arm
- Video Link:

https://player.vimeo.com/external/255828850.hd.mp4?s=313e466aad2263c3575dfe190912b6d0d7a3371e&profile_id=175

Level 2: Narrow Stance Multidirectional Reach with Chair Support



- Stand with feet close together, upper body standing tall, left hand on chair

- Slowly reach right hand forward at chest height, hinge from hips, keep feet flat on floor
- Slowly return back to start position, then reach to right and return, then reach to left and return
- Sense weight shift in feet
- Move in and out of these positions, perform for 30 seconds with each arm
- Video Link:

https://player.vimeo.com/external/255828935.hd.mp4?s=b7717769d2199833334d6af4fcd31f8b35951695&profile_id=175

Level 3: Narrow Stance Forward Reach



- Stand with feet close together, upper body standing tall, left hand on hip
- Slowly reach right hand forward at chest height, hinge from hips, keep feet flat on floor
- Slowly return back to start position
- Sense weight shift in feet
- Move in and out of this position, perform for 30 seconds with each arm

- Video Link:

https://player.vimeo.com/external/255829002.hd.mp4?s=b7d812c4f4223376f880e2f5eae8de2ed079325&profile_id=175

Level 4: Narrow Stance Multidirectional Reach



- Stand with feet close together, upper body standing tall, left hand on hip
- Slowly reach right hand forward at chest height, hinge from hips, keep feet flat on floor
- Slowly return back to start position, then reach to right and return, then reach to left and return, repeat reaching at head height and at knee height
- Sense weight shift in feet
- Move in and out of these positions, perform for 30 seconds with each arm
- Video Link:

https://player.vimeo.com/external/255829091.hd.mp4?s=1adad97fc8ac9a1e310c6a59405bcffa79853765&profile_id=175

Level 5: Staggered/Tandem Stance Unstable Multidirectional Reach



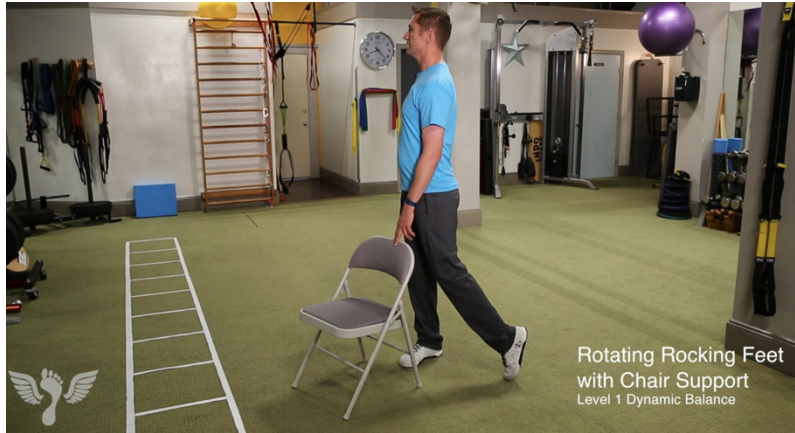
- Stand on towel or foam pad, feet staggered or in heel/toe arrangement, upper body standing tall
- Slowly reach right hand forward at chest height, hinge from hips, keep feet flat on floor
- Slowly return back to start position, then reach to right and return, then reach to left and return, repeat reaching at head height and at knee height
- Sense weight shift in feet
- Move in and out of these positions, perform for 30 seconds with each arm
- Video Link:

https://player.vimeo.com/external/255829176.hd.mp4?s=a76b57cd15adfe9370f2a9eb38ffea46d43bd8b1&profile_id=175

Dynamic Balance Exercises

Rotational Motion

Level 1: Rotating Rocking Feet with Chair Support



- Stand with feet shoulder width apart, feet rotated perpendicular to each other, upper body standing tall, hand(s) on chair for balance support
- Shift balance and rotate body in line with right foot with left foot rocking onto toe
- Shift balance and rotate body in line with left foot with right foot rocking onto toe
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257206625.hd.mp4?s=3e63e8158d425c19a283e48af9b654a6db594c5e&profile_id=175

Level 2: Rotating Rocking Feet



- Stand with feet shoulder width apart, feet rotated perpendicular to each other, upper body standing tall
- Shift balance and rotate body in line with right foot with left foot rocking onto toe
- Shift balance and rotate body in line with left foot with right foot rocking onto toe
- Perform for 60 seconds in a slow and controlled manner
- Video Link:
https://player.vimeo.com/external/257206696.hd.mp4?s=95b35768ed78bae4ad287e85df113b14eeb78482&profile_id=175

Level 3: Rotational Step To Balance with Finger on Chair



- Stand with feet shoulder width apart, feet rotated perpendicular to each other, upper body standing tall, finger(s) on chair for balance support
- Shift balance and rotate body in line with right foot and bring left foot alongside off floor
- Shift balance and rotate body in line with left foot and bring right foot alongside off floor
- Hold for 1-3 seconds in single leg position

- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257206824.hd.mp4?s=b76391cff0f3e9e9a8d0884be850ac9edafc9b76&profile_id=175

Level 4: Rotational Step To Balance



- Stand with feet shoulder width apart, feet rotated perpendicular to each other, upper body standing tall
- Shift balance and rotate body in line with right foot and bring left foot alongside off floor
- Shift balance and rotate body in line with left foot and bring right foot alongside off floor
- Hold for 1-3 seconds in single leg position
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257206843.hd.mp4?s=42331e27b04158ee4667155ce82a1b2da94f73b7&profile_id=175

Level 5: Rotational Quick Step/Hop To Balance



- Stand with feet together, upper body standing tall
- Perform a rotating hop to right onto right foot and bring left foot alongside off floor
- Perform a rotating hop to left onto right foot and bring right foot alongside off floor
- Hold briefly in each single leg position
- Perform for 60 seconds
- Video Link:

https://player.vimeo.com/external/257206907.hd.mp4?s=fe47cf0e953e74486604241417ebd72a9a23bf75&profile_id=175

Gait Enhancement Exercises

Frontal Plane Motion

Level 1: Side Steps With Support



- Stand with feet together, upper body standing tall, fingertips tracing along a table or wall throughout
- Perform high knee step with right leg to right then step with left leg so feet come together
- Perform 3-5 steps to right and then perform 3-5 steps back to left
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257207755.hd.mp4?s=2c1ec864fd30cfb476609c3232a87196b2553c83&profile_id=175

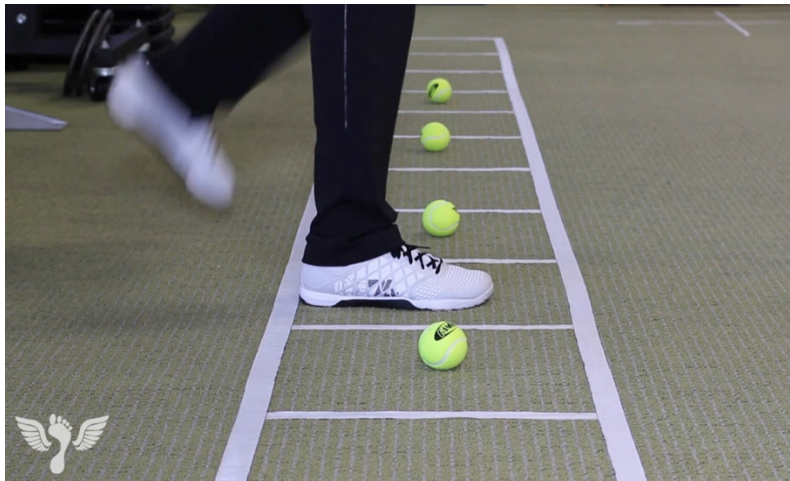
Level 2: Side Steps With Forward Reach



- Stand with feet together, upper body standing tall, arms lifted with palms forward next to chest
- Perform high knee step with right leg to right, extend arms forward for counterbalance
- Match step with left leg so feet come together, bring palms back to chest
- Perform 3-5 steps to right and then perform 3-5 steps back to left
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257207810.hd.mp4?s=a991c17c830d7dd2711a72c2d25b4886e001b70a&profile_id=175

Level 3: Forward & Backward Side Steps



- Stand with feet together, upper body standing tall, arms bent at sides
- Perform high knee step with right leg diagonally back to right then match with left leg so feet come together
- Perform high knee step with right leg diagonally forward to right then match with left leg so feet come together
- Perform 3-5 sets to right and then perform same number of steps back to left

- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257207888.hd.mp4?s=d4cd368c94543c313f1fea9464a531466d5c1629&profile_id=175

Level 4: Side Steps with Hip Drop



- Stand with feet together, upper body standing tall, arms lifted with palms forward next to chest
- Perform high knee step with right leg to right, extend arms forward for counterbalance, drop into squat position
- Match step with left leg so feet come together while returning to tall standing, bring palms back to chest
- Perform 3-5 steps to right and then perform 3-5 steps back to left
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257207888.hd.mp4?s=d4cd368c94543c313f1fea9464a531466d5c1629&profile_id=175

Level 5: Forward & Backward Side Steps with Hip Drop



- Stand with feet together, upper body standing tall, arms bent at sides
- Perform high knee step with right leg diagonally back to right, drop hips in staggered squat position
- Match step with left so feet come together and return to tall standing
- Perform high knee step with right leg diagonally forward to right, drop hips in staggered squat position
- Match step with left leg so feet come together and return to tall standing
- Perform 3-5 sets to right and then perform same number of steps back to left
- Perform for 60 seconds in a slow and controlled manner
- Video Link:

https://player.vimeo.com/external/257208068.hd.mp4?s=a5dc8c0c4ee9cabd7c288e11321bf0725e5238cc&profile_id=175

What Happens If A Fall Does Occur?

The goal of this training is to help you to help your older clients NOT to fall! However, given that there are so many risk factors out there in the world, it might happen despite an excellent exercise program and hard work. Here are some recommendations in case that they do have a fall:

- Don't try to get up too quickly. Take a few breaths and try to relax. Then take inventory of the body by moving the legs, feet, arms, and hands. If anything is immobile or very painful it is possible that a broken bone has been sustained.
- If not seriously injured, try to crawl to a stable object (e.g., chair, bench) and use it to help get off the ground.
- Place the hands on the object and come up into a half-kneeling position.
- Rotate the body around and sit on the object.
- Do a more thorough inspection of the body in this seated position and take some time to rest before getting up.
- A good tutorial for getting up from a fall can be found at:
<https://www.techenhancedlife.com/articles/fallen-how-get-up>
- It is also a good idea to have a medical alert system installed in the home and to wear an alert bracelet/necklace that can be activated in the case of a fall that causes an injury.