Falls **Free**

Keys to Better Balance: Instructor and Community Resource

Static, Dynamic, Dynamic Gait, Dual Tasking, & Confidence

Static Balance:

1. Semi/full tandem standing exercises: Stand behind a sturdy chair or counter for support if needed, keeping arms in a comfortable position. Start with a semi-tandem stance by placing the heel of the forward foot next to the inner part of the back foot. Hold this position for 10 seconds, gradually increasing the duration as tolerated, up to one minute, while alternating which foot is in front place. To progress to the full tandem position, place one foot directly in front of the other, aligning the heel of the front foot with the toes of the back foot. Hold this position for 10 seconds, gradually increasing the duration as tolerated, up to one minute, while alternating which foot is in front. Use support as needed (such as chair to hold on) and progress at own pace.

2. Single leg standing exercise: Stand behind a sturdy chair or counter for support, positioning arms in a comfortable manner, such as extended to the sides or resting on hips. Lift one foot by bending the knee to approximately calf height, maintaining balance in this position. Begin with a 10-second hold, gradually increasing the duration as tolerated, up to 30 seconds. Alternate between lifting each foot to promote equal balance training. Use support as necessary and progress at own pace.

3. Toe standing exercise: Stand behind a sturdy chair or counter for support, position feet comfortably about shoulder-width apart. Position arms extended to the sides or resting on the hips. Slowly rise onto toes, holding the position for five seconds initially and gradually increasing as able, up to 10 seconds. Use proper form and balance, and use support as necessary, progressing at a comfortable pace.

Dynamic Balance:

1. Sit to stand exercise:
    - Sit on a chair that is approximately 17-18 inches high to ensure ease of movement.
    - Scoot to the edge of the chair, leaving space between the back of knees and the seat.
    - Position feet shoulder-width apart, tucked under knees, with one foot slightly ahead of the other, if needed.
    - Lean forward, aligning your nose over toes to initiate movement.
    - Use armrests, if necessary, and stand up slowly. As strength improves, gradually reduce hand support from both hands to one, then to a light touch, and lastly, cross both hands over the chest.
    - Maintain standing position for five seconds.
    - Before sitting down, ensure the chair touches the back of legs to confirm proper positioning.
    - Bend at the hips and reach for the armrests if needed.
    - Lower slowly using legs, relying on arms only to avoid plopping.
    - Repeat the exercise 5-10 times.

2. Lateral stepping exercise:
    - Stand upright with good posture, looking straight ahead.
    - Place hands on hips for stability.
    - Move sideways by stepping to the right with the right foot, then following with the left foot.
    - Continue this movement, taking 10 steps to the right.
    - Reverse direction and take 10 steps to the left using the same technique.

3. Directional Lunges: "In and Out of the Doghouse"
    - Begin with feet shoulder-width apart and knees slightly bent.
    - Step forward (north) with the right leg, leaning onto it, then return to the starting position ("back into the doghouse"). Repeat with the left leg.
    - Step diagonally forward to the northeast with the right leg, shifting weight before returning to the starting position. Repeat northwest with the left leg.

- Continue the sequence by stepping laterally to the east with the right leg and to the west with the left leg, always returning to the starting position before switching legs.
- Progress to stepping diagonally to the southeast with the right leg and to the southwest with the left leg, maintaining control with each movement.
- Finally, step backward (south) with the right leg, then return, and repeat with the left leg.
- Focus on proper form: shift weight fully onto the stepping leg, point the knee the same direction as the foot, and maintain an upright posture with eyes looking straight ahead. Adjust speed, as needed, for control and challenge.

Dynamic Gait Training:

1. Figure-Eight Walking: Place two markers (such as cones) approximately six feet apart in a straight line. Walk toward the first cone, passing it on the right, then continue to the second cone, passing it on the left. Turn and repeat, tracing a figure-eight pattern. To increase the challenge, reduce the distance between the cones or walk closer to the cones while maneuvering.

2. Walking with Head Turns: While walking at a comfortable pace, look to the right only turning the head and continue walking for approximately 10 feet. Then, turn and look to the left, walk for another 10 feet before returning to a forward-facing position. This exercise can also be performed looking upward and downward while walking. To increase the difficulty, walking speed can be adjusted. Caution should be taken with rapid head movements, as they may cause dizziness or vertigo.

3. High-Stepping March: March in place or while moving forward, bringing each knee toward the chest in a controlled manner, like stepping over an object. To increase the challenge, vary the speed and height of the steps. Slower movements will enhance the balance challenge, while faster steps can improve coordination and endurance.

Dual Task Training:

Dual tasking involves performing a cognitive task while engaging in a physical activity, such as walking while talking. For optimal benefits, the cognitive task should be somewhat challenging rather than automatic, encouraging the brain to shift focus between the motor and cognitive tasks. This process enhances brain activity, improves balance, and supports overall brain health.

Examples of cognitive tasks include singing a song, calling out exercise steps, or counting in another language. A great introductory activity in a fitness class could involve memorizing and repeating group members' names while performing stretches – similar to a campfire game that pairs names with arm motions. The key to effective dual tasking is finding the right level of challenge; the task should be engaging but not so difficult that it disrupts the physical activity. Likewise, if either task is too simple, the full cognitive and motor benefits may not be realized.

Examples of Cognitive Tasks Integrated into Exercise:

1. Auditory Identification: Recognizing and naming sounds, such as playing a "Name That Tune" game.
2. Spontaneous Exercise Changes: Adjusting movements dynamically as exercises are called out.
3. Word or Picture Puzzles: Identifying objects, solving word puzzles, or engaging with visual challenges displayed on a screen, poster, or book.
4. Visual Searches: Engaging in activities like those found in adult puzzle books, such as crossword clues or pattern recognition.
5. Varied Counting Sequences: Counting repetitions in different patterns, such as backward, in another language, or in increments of twos or threes.
6. Memory-Based Challenges: Recalling group members' names, remembering new dance steps, or retaining sequences of exercises.
7. Storytelling with Added Complexity: Creating and continuing a story as a group, incorporating rhymes or requiring each participant to build on the previous contribution.

Confidence:

Research tells us that psychological factors, such as balance confidence and fear of falling are predictive for future falls. It is important to remain active both at home and within the community. Engaging in activities and programs that keep us active and moving is important for both physical and psychological reasons. When someone experiences a fall, this often increases the fear of falling. The fear of falling may lead to limiting or avoiding activity, which can result in functional decline (Landers, et al, 2016). Keep moving! And keep reading to learn more about the types of activities that provide the greatest benefit.

For examples of the balance exercise components visit our YouTube channel:

http://bit.ly/47rH9Ht