

Progressive Core Stability

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OUR PURPOSE:

Learn how to lead functional and progressive exercises to train stability and balance. Use the stabilization continuum to gradually increase the challenge of each exercise. Apply this skill set and achieve success for personal clients or participants with varying abilities in your classes.

Skills we are challenging:

Muscular Strength, balance, coordination, sensory stimulations, recovery reactions, posture focus, multi-tasking, reaction time, balance.

WHAT do we train? STABILITY and MOBILITY

Stability = the foundation of movement (posture, setup before adding movement)

Stability exercise examples: weight machines, stretching, balance & isometric training

Mobility = movement with flexibility, agility, coordination, and choreography

Mobility exercise examples: Yoga, dynamic stretching, agility drills, Arthritis Foundation classes

DESIGNING YOUR EXERCISES

Exercise Progressions: Stable to Unstable

Upper Body	Lower Body
<ul style="list-style-type: none">• 2 Arms (bilateral)• Alternating/Reciprocal Arms• 1 Arm (unilateral)• 1 Arm with Rotation• No Arms <p><i>*Progress the lower body one level, and repeat all upper body steps.</i></p>	<ul style="list-style-type: none">• 2 Legs Stable (wide squat or lunge)• Narrowed Stance• Tandem Stance• 1 Leg Stable• 2 Legs unstable• 1 Leg unstable (foam, uneven surface)
Additional Challenges	
<ul style="list-style-type: none">• Close one eye• Close both eyes (fear of water, touch wall)• Short to long levers• Distract brain with cognitive challenges (Pledge of allegiance, count by 6's, hum a song, name objects beginning with "R", Recite a poem or rhyme, etc.)• Add unpredictable perturbations – someone behind them pressing water or touching at random.• Move arms/legs in 2 different planes• Increase surface area and resistance with equipment• Use a stable stance to strengthen, reduce the base of support to challenge stability.	

PROPRIOCEPTION CHALLENGES: Arms creating turbulence around the body while balancing, turning head and looking a different direction when walking, closing eyes.
Unpredictable perturbations – someone behind them pressing water, tapping at random, directional changes.

EQUIPMENT USE

Equipment amplifies the stability challenge with buoyancy and increased surface area.

- If you can't stabilize the core muscles without equipment, then adding additional equipment/resistance will not be helpful.
- Watch for the body wobbling, holding of breath, compensations, and posture shifts.
- If a participant cannot maintain control, the equipment should be removed.

TEACHING TIPS

1. Start with simple exercises that most of your group can successfully perform with minimal risk. As they become more conditioned, introduce one progression at a time.
2. Use bilateral movements and a wide stance to strengthen, unilateral movements and narrower stances to challenge stability.
3. Life is multidirectional. Our exercises need to simulate our daily activities. Incorporate unilateral and diagonal movements to simulate the asymmetrical lifting, reaching, pushing, and pulling of our daily life.
4. Supplement this aquatic training with land programming--*where we live!* The exercise continuum works similar on land.
5. Make it clear to your participants: "Choose the intensity you need today for YOU. All progressions are optional".

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Progressive Core Stability: Choreography

CARDIO STABILITY OPTIONS

Arm Progressions:

- Bilateral Symmetrical (unison arms)
- Bilateral Reciprocal (opposite joint actions at the same time)
- Unilateral (Single Arm)
- No Arms (core challenge)

TRANSITIONS BETWEEN REBOUNDED AND ANCHORED

1. Step-touch L/R with knee lift. Allow time to pause & stabilize (3-4 seconds)
 - Progress to a sideways hop, holding balance
 - eliminate arm use with sidestep or hop
2. Front to Back Kick – rebounding then anchored
 - integrate bilateral/unilateral arm use
 - repeat with other leg
3. “Hitchhike”
 - rebounding with a center bounce, alternating sides
 - eliminate center bounce
 - grounded hip abduction / lean and reach to the side
4. 3 jacks, on 4 lift opposite arm and leg, hold balance

STRENGTH AND STABILITY WORK

Upper Body Muscle Groups:

- Biceps/Triceps: elbow flexion/extension
- Chest/Upper Back – transverse shoulder abduction/adduction (sweeps)
- Rotator Cuff - shoulder rotation (wiper arms)
- Shoulders & Latissimus Dorsi - shoulder flexion/extension (scoop & press)
- Latissimus Dorsi/ Shoulders – shoulder abduction/adduction (lateral raise)

STANCES

- Squat (wide to narrow)
- Lunge
- Tandem/Tightrope
- Single Leg Balance
- Tree Pose

**utilize the progression chart to combine and progress these movements.*



COGNITIVE CHALLENGES

- Recite the Pledge of Allegiance
- Count by 6's to 100 (or any number)
- Hum or Whistle a Song: "Heigh Ho", "Happy Birthday" or "You Are My Sunshine"
- Lunge Left Leg, Look Left-hands push/pull
- Walk F- Arms or Dumbbell moves side to side (wipers)
- 1 leg balance –write the alphabet with your foot or ankle.
A-M Right side, N-Z Left Side

EXERCISE COMBINATIONS

1. Side Leg Raise / Lateral Arm Raise
 - integrate arm progressions
 - work in opposition, i.e. R Leg, L arm
2. Standing Hip Transverse Abduction & Adduction / Wiper arms
 - 1 hand on hip, 1 arm rotates
 - both hands on hips
 - head turns side to side or nod up and down
 - lower body progression: Figure 8 hip / Figure 8 arms
3. Heel & Toe Taps / Scoop & Press
 - arm progressions
 - one hand on hip, other arm swings
 - lower body progressions: bent knee swing, extended leg swing
4. Standing Single Leg Bicycle
5. Tree Pose
 - arms wave, bilateral then unilateral
 - arms sweep open/close (palms up, palms down)
6. 1 Leg Balance with forward reach – right side, then left
7. Tightrope Walk – small steps or hip circles
 - arms scull, float at surface, arms up in "surrender"
 - cognitive challenge: count by 6's to 100

EQUIPMENT

Hand Buoys:

- Use same joint actions and progressions as the above "strength and stability work".
- Partner proprioception exercise:
 - Person #1 holds a hand buoy up and moves it around slowly.
 - Person #2 balances and follows the buoy with their eyes.
 - 1st round: buoy is close by. 2nd round: person #1 steps back 10 feet.