



Exercise #8 UNILATERAL BALANCE (One-leg Balance)

Cadence: Moderate 8 Counts

Starting Position

Feet hip width apart, toe pointing forward.



Count 3

Hold balance.



Count 1

Keeping hips and shoulders level, balance on right foot, bend left knee. Keep upper legs parallel.



Count 4

Return to Starting Position.



Count 2

Hold balance.



Count 5-8

Repeat with other leg.

Exercise #8 UNILATERAL BALANCE

Purpose: To develop balance by challenging the body unilaterally

Common uses for emphasized muscles in daily activity: Good balance is essential in all activities, from standing to running

Muscular Emphasis: Although the Hamstrings will be the primary movers, the muscle stabilizers of the support (non-gesture) side, Obliques will be the primary focus of the exercise

Primary Muscle Mover(s): Hamstrings (Biceps femoris, Semimembranosus and Semitendinosus)

Secondary Muscle Mover(s): None

Muscle Stabilizers: Transverse abdominis to compress abdomen and stabilize lumbo-pelvic region; Obliques, Quadriceps, and Gluteals of support (non-gesture) side

Postural Landmarks:

- Goal of the exercise is to flex the gesture leg while maintaining spinal integrity
- Attempt to keep the pelvis from shifting from side to side
- Try to keep the supporting knee directly over the ankle
- Torso should remain perpendicular to the ground with the shoulders level
- Femur of the gesture leg points down and is parallel to supporting leg

Anatomy:

Hamstrings

All three *hamstrings* cross both the hip and knee joints. All muscles attach to the ischial tuberosity (bottom of the pelvis). The Biceps femoris inserts on the head of the fibula, while the semimembranosus and semitendinosus attach to the tibia. Inability to touch the toes while keeping the knees extended is usually due to shortened hamstrings. <http://www.exrx.net/Muscles/Hamstrings.html>

Internal Oblique

Internal oblique muscles originate on the anterior iliac crest (front of the pelvis) and insert along the lower 4 ribs. If you cross your arms over your abdomen with your hands inserted into your front pockets, your fingertips will assume the direction of these fibers. Internal oblique muscles are responsible for flexion of the spine on the same-side. <http://www.exrx.net/Muscles/Obliques.html> (this is for both external and internal obliques)

External Oblique

External oblique muscles originate on the lower 8 ribs and insert on the abdominal aponeurosis and linea alba (the middle of the abs). If you place your hands in your front pockets, your fingers will assume the direction of these fibers (obliquely downward and medialward). External oblique muscles are responsible for opposite side spinal flexion.