

Heel Rise

Name: _____ Date: _____

During walking, the plantar flexors slow down the forward motion of the tibia over the foot during the stance phase and propel the body forward during push-off. People with weak plantar flexors usually present a crouch gait pattern during walking, difficulty in performing activities involving lower limbs or even inability to perform such activities, or inadequate standing balance.

Equipment:

- Metronome set at 60 bpm, wall

Purpose:

- Assess the functional strength of the gastrocnemius muscle group
- Assesses endurance, strength, fatigue, function and performance that could be as gait and balance

Procedure:

 One Leg Heel Raise	1. Subject is barefoot and must be able to observe the leg past knee 2. Assess bilateral exertion first. Have them rise up on both toes to see exertion rise available 3. Test each leg separately 4. Subject may lightly place hands on the wall for balance support 5. Instruct the subject to rise up on the ball of the foot at a rate of 1 rep every 2 sec metronome beat (up on first beat, down on second beat) 6. Document total number of rises completed successfully up to 25.
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7. Test stops if:

- a. Knee flexes
- b. Range of rise decreases to >50% of bilateral rise
- c. Subject rocks back and forth
- d. Loss of balance
- e. Fingers press into support surface
- f. Unable to keep up rhythm

SCORE **RIGHT** _____ **LEFT** _____

Scoring: (*based on 20-59 year olds)

Norms:

Females:

21-40 yrs = 16.1 (SD 6.7)
41-60 yrs = 9.3 (SD 3.6)
61-80 yrs = 2.7 (SD 1.5)

Males:

21-40 yrs = 22.1 (SD 9.8)
41-60 yrs = 12.1 (SD 6.6)
61-80 yrs = 4.1 (SD 1.9)