



Exercise #11 STANDING PULL

Cadence: Moderate 4 Counts

Starting Position

Feet hip width apart, toes pointing forward.



Count 1

Raise arms to shoulder height, palms facing.



Count 2

Form fist; pull arms back to sides.



Count 3

Release fist; return to Count 1 position.



Count 4

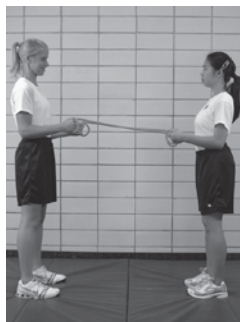
Return to Starting Position.



SIDE VIEW – PARTNERS (with tubing)

Starting Position

Facing partner, each holds tubing with elbows planted against sides.



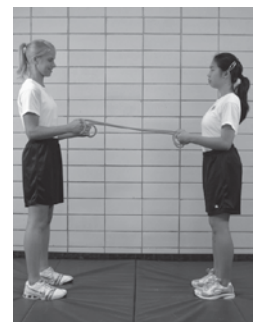
Count 1

One pulls arms back until hands are next to side. Other person stays still.



Count 2

Slowly return to Starting Position.



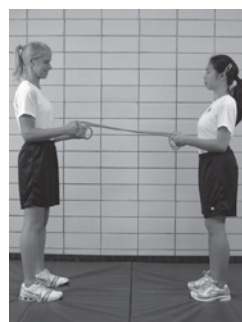
Count 3

Other pulls arms back until hands are next to side. First person stays still.



Count 4

Slowly return to Starting Position.



Exercise #11 STANDING PULL

Purpose: To teach proper “pulling” movement while retaining spinal integrity, shoulder girdle stability, abdominal stability and scapular placement

Common uses for emphasized muscles in daily activity: Pulling

Muscular Emphasis: Biceps Brachii

Primary Muscle Mover(s): Biceps Brachii (elbow flexion) and Posterior Deltoid and Triceps Brachii (humerus extension)

Secondary Muscle Mover(s): Brachialis

Muscle Stabilizers: Transverse abdominis to compress abdomen and stabilize lumbo-pelvic region; Rhomboids, Latissimus dorsi to prevent elevation of shoulder, Shoulder girdle stabilizers to maintain scapulae in neutral

Postural Landmarks:

- Hips, knees and feet stay in alignment
- Maintain neutral cervical vertebrae
- Watch for loss of abdominal connection, evidenced by excessive lumbar lordosis (excessive curve in the lower back and bulging abdominals)
- Special focus must be given to keeping the scapula in a neutral position (avoiding protraction or retraction of the shoulders)

Anatomy:

Biceps Brachii

Biceps means two heads and *brachium* means arm (Latin). Both heads of the biceps originate on the scapula and cross the elbow to insert on the radius (forearm). The biceps act to flex the elbow and supinate (rotate, palm up) the arm. <http://www.exrx.net/Muscles/BicepsBrachii.html>

Brachialis

Brachialis is the strongest flexor of the elbow. It originates on the lower half of the humerus, crosses the elbow and inserts on the ulna. <http://www.exrx.net/Muscles/Brachialis.html>

Triceps Brachii

Triceps brachii is actually three muscles on the back of the humerus. The long head originates on the scapula. The lateral and medial head originate on the humerus. All three cross the elbow and insert on the ulna (forearm). The triceps extends the elbow. <http://www.exrx.net/Muscles/TricepsBrachii.html>

Posterior Deltoid

Posterior deltoid originates on the spine (or top ridge) of the scapula and inserts on the humerus. It extends, horizontally abducts and laterally rotates the humerus <http://www.exrx.net/Muscles/DeltoidPosterior.html>

Latissimus Dorsi

Latissimus dorsi originates from the middle of the spine, reaching from the top of the lower 6 thoracic vertebrae all the way down to the sacrum (tailbone) and iliac crest, and inserts on the humerus. “Latissimus” means widest and “dorsi” means back in Latin. It is the widest muscle of the back. Special attention is given to this muscle because it pulls the shoulder girdle down, keeping the shoulder girdle stable while enabling good posture. <http://www.exrx.net/Muscles/LatissimusDorsi.html>