



## Exercise #9 SHOULDER FLEXION

Cadence: Moderate 4 Counts

### Starting Position

Feet hip width apart, toe pointing forward.



### Count 3

Return to Count 1 position.



### Count 1

Raise arms to shoulder height, palms facing.



### Count 4

Lower arms to Starting Position.



### Count 2

Open arms to form straight line from hand to hand.



## Exercise #9 SHOULDER FLEXION

**Purpose:** To teach proper movement of the shoulder while maintaining spinal integrity and connection with the shoulder girdle stabilizer

**Common uses for emphasized muscles in daily activity:** Lifting the arm, opening a door, waving etc., many sports applications

**Muscular Emphasis:** Anterior deltoid (humerus flexion) and Posterior deltoid (horizontal abduction)

**Primary Muscle Mover(s):** Anterior deltoid (humerus flexion) and Posterior deltoid (horizontal abduction)

**Secondary Muscle Mover(s):** Pectoralis major, Coracobrachialis and Biceps (humerus flexion);

**Muscle Stabilizers:** Transverse abdominis to compress abdomen and stabilize lumbo-pelvic region, Latissimus dorsi to prevent elevation of shoulder

### Postural Landmarks:

- Hips, knees and feet stay in alignment
- Arms raise to height of the shoulders without elevation of the humerus
- Maintain neutral cervical vertebrae (head directly over torso) when opening the arms to the side
- Avoid protraction of the shoulders when arms are extended in front of the body
- Watch for loss of abdominal connection, evidenced by excessive lumbar lordosis (excessive curve in the lower back and bulging abdominals)

### Anatomy:

#### *Anterior Deltoid*

*Anterior deltoid* originates on the clavicle (collarbone) and inserts on the humerus. It flexes, horizontally adducts and medially rotates the humerus. <http://www.exrx.net/Muscles/DeltoidAnterior.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>