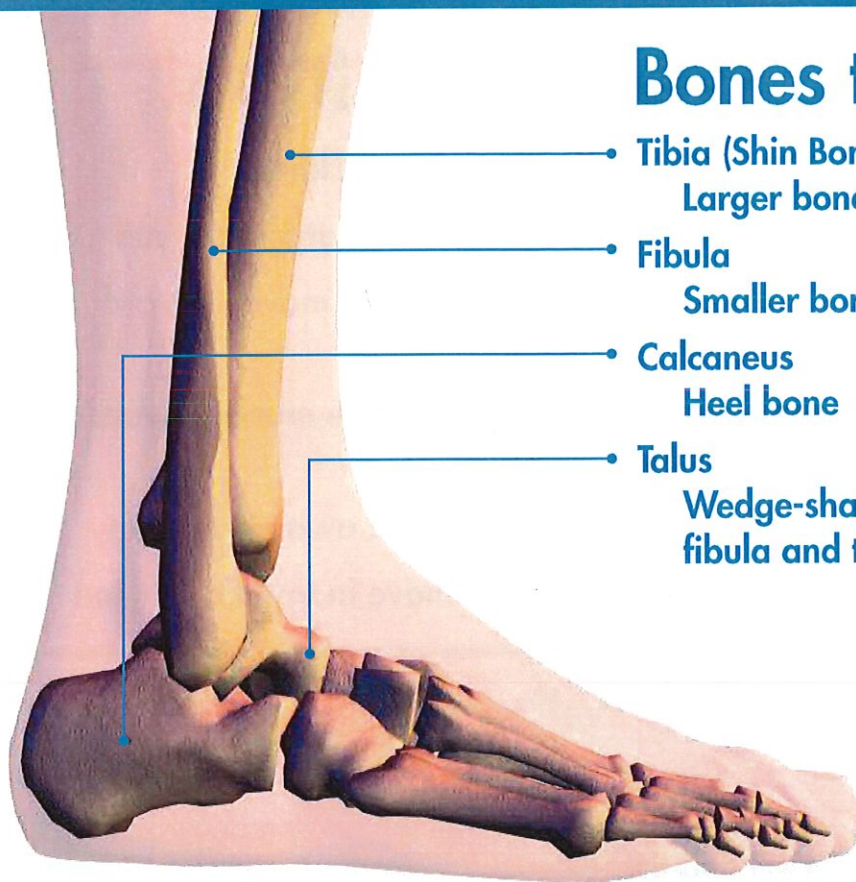


GET TO KNOW SERIES

Get to know... THE ANKLE JOINT



Bones to Know:

• **Tibia (Shin Bone)**

Larger bone in lower leg

• **Fibula**

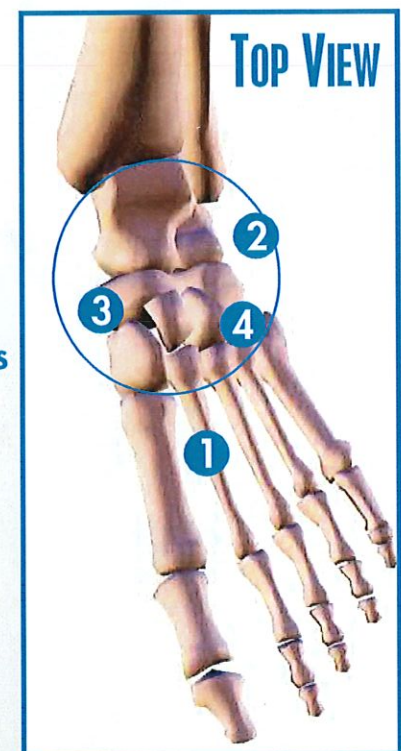
Smaller bone on outside of lower leg

• **Calcaneus**

Heel bone

• **Talus**

Wedge-shaped bone between the heel and the fibula and tibia



1 Metatarsals

Set of 5 long bones in midfoot that connects ankle to toes

2 Tarsals

Set of 7 hind and mid foot bones that help bear weight

3 Navicular

boat-shaped bone on inner foot that creates arch and helps hold weight

4 Cuboid

Cube-shaped bone that provides stability to outer foot and ankle

Why Is It Important?

- Adjusts to changing surfaces and how to move across
- Absorbs pressure that occurs when your feet hit the ground
- Stabilizes body weight
- Stiffens up when full range of motion is not utilized or simply from not moving enough

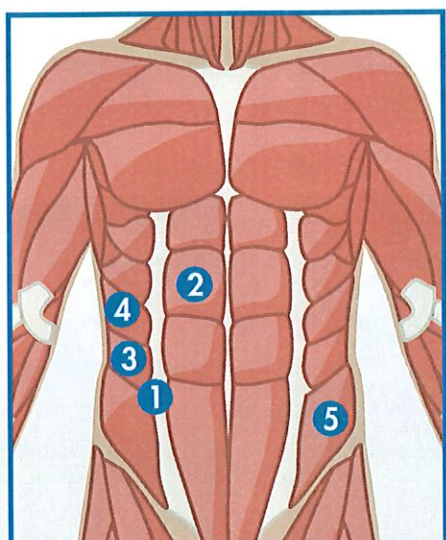
Get to know...

THE CORE

A MUSCULAR CORSET INCLUDING THE ABDOMINALS,
LOWER BACK, PELVIS AND HIPS

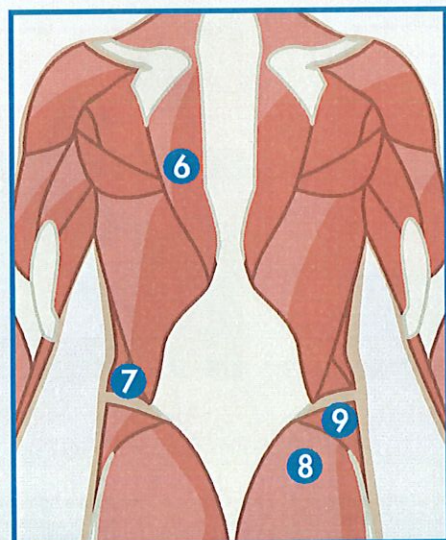
EVERY MOVEMENT BEGINS WITH THE CORE.

When you are sitting, you are using core muscles to maintain good posture. When you stand up, the core gets you started. Any time you turn, bend, reach, carry an object, walk, exercise or do any act of daily living, your core is the power source.



FRONT VIEW

- ① Transverse Abdominals
Stabilize abdominal wall; posture
- ② Rectus Abdominals
Flex/bend trunk forward
- ③ Internal Obliques
Twist/rotate trunk
- ④ External Obliques
Twist/rotate trunk
- ⑤ Iliosoas
Rotate pelvis, bend at hips, stabilize body while standing



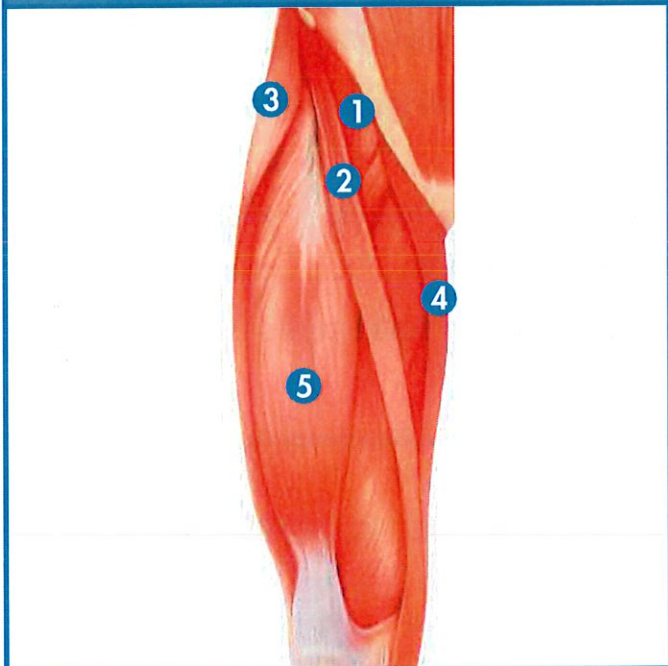
BACK VIEW

- ⑥ Spinal Erectors
Stand upright
- ⑦ Quadratus Lumborum
Flex trunk to sides; stabilize pelvis
- ⑧ Gluteus Maximus
Extend hips, rotate thighs
- ⑨ Gluteus Medius/Minimums
Rotate hips, stabilize pelvis

Get to know...

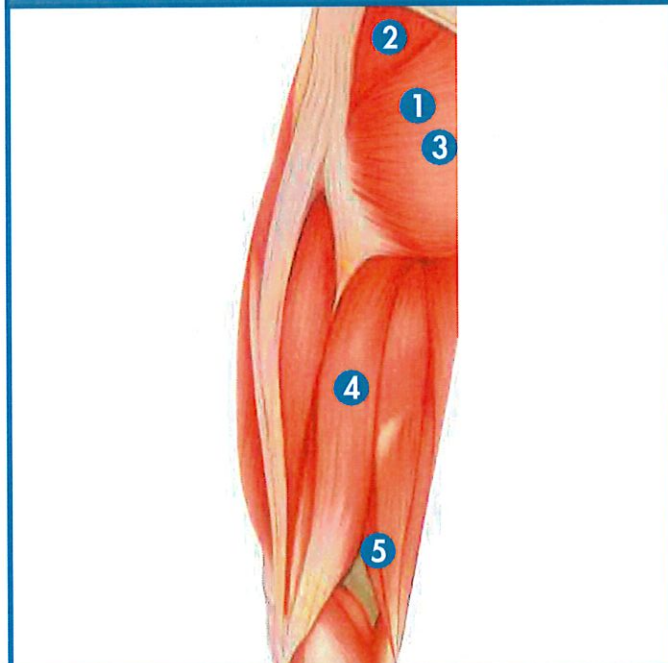
THE HIP

MUSCLES TO KNOW (FRONT)



- ① **Psoas Group**
Flexes the hip lifting the thigh up and forward, externally rotates, and stabilizes the spine and hip joints.
- ② **Sartorius**
Flexes externally rotates and abducts the hip. Also extends the knee.
- ③ **Tensor Fascia Latae**
Hip flexion, abduction and internal rotation.
- ④ **Adductor Group**
Adducts and internally rotates the hip
- ⑤ **Rectus Femoris – long head of the quadriceps muscles**
Hip flexion and knee extension.

MUSCLES TO KNOW (BACK)

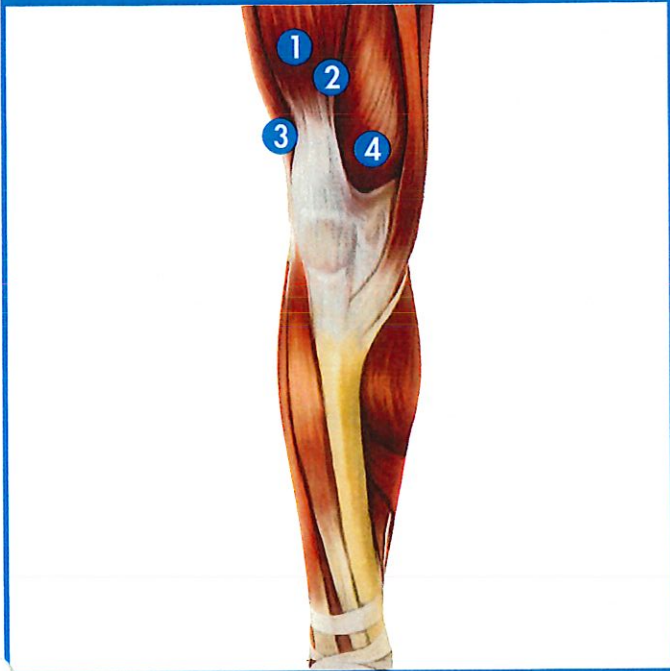


- ① **Gluteus Maximus**
Hip extension and internal rotation.
- ② **Gluteus Medius**
Hip abduction, internal rotation, assists gait action of lifting the hip for leg swing.
- ③ **Gluteus Minimus**
Hip abduction and internal rotation.
- ④ **Biceps Femoris – Long Head**
Hip extension and knee flexion
- ⑤ **Biceps Semimembranosus**
Hip extension and knee flexion.

Get to know...

THE KNEE

MUSCLES TO KNOW (FRONT)

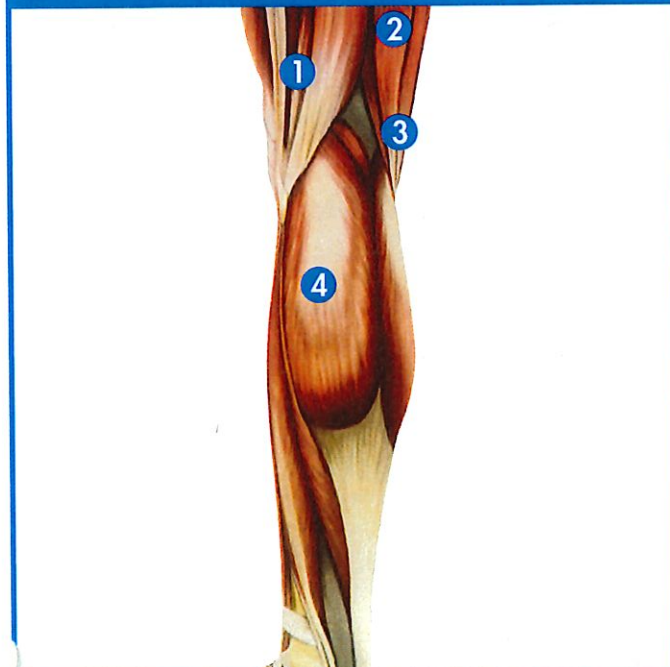


Quadriceps Muscle Group includes:

- ① Rectus Femoris – Long Head
- ② Vastus Intermedius
- ③ Vastus Lateralis
- ④ Vastus Medialis

All 4 muscles in the group extend the knee

MUSCLES TO KNOW (BACK)



Hamstring Muscle Group includes:

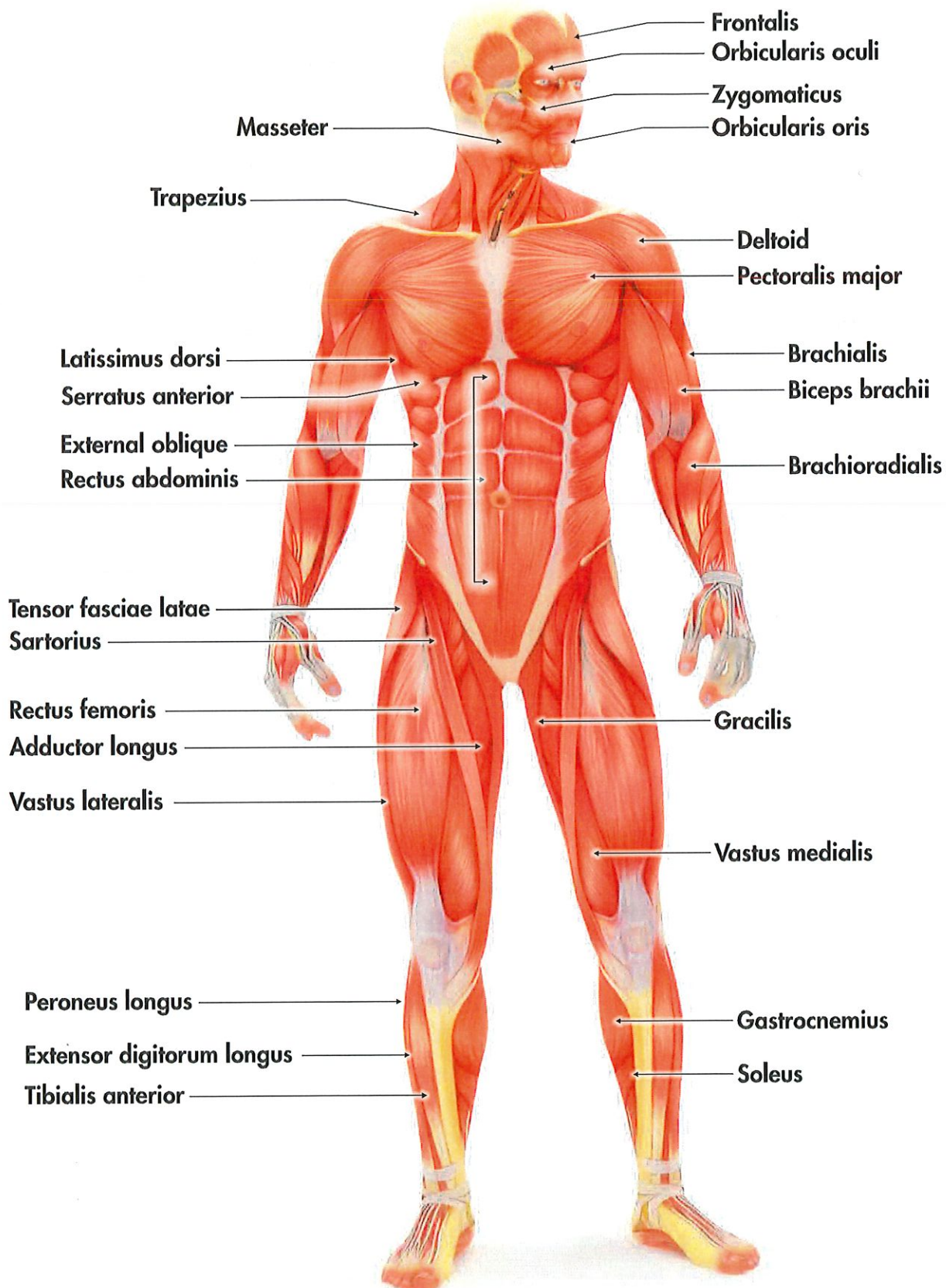
- ① Semimembranosus
- ② Biceps Femoris – Long Head,
- ③ Biceps Femoris – Short Head

The primary action for all 3 is knee flexion.

- ④ Gastrocnemius
Stabilizes the knee joint.

Get to know...

MUSCLES (FRONT)

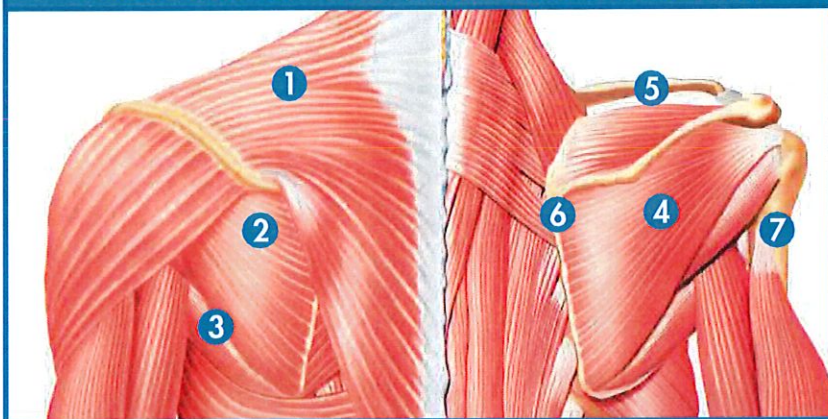


Get to know...

THE SHOULDER

It's easy to shrug off the importance of shoulders until you can't open a door, tuck in a shirt or play catch with a grandchild without wincing from discomfort in this vulnerable joint. The wear-and-tear of repetitive movements, old injuries, weak muscles and poor posture are only a few of the causes for discomfort and limited range of motion.

THE ROTATOR CUFF (SLEEVE OF SHOULDER)

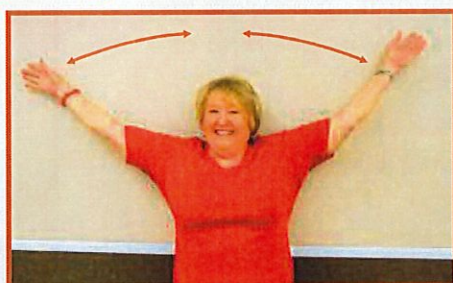


- 1 **Supraspinatus**
Stabilize joint
- 2 **Subscapularis**
Holds upper arm to shoulder
- 3 **Teres minor**
Rotation away from the body
- 4 **Infraspinatus**
Rotation and extension of arm
- 5 **Collarbone (clavicle)**
- 6 **Shoulder blades (scapula)**
- 7 **Upper arm (humerus)**

TIPS TO KEEP SHOULDERS HEALTHY

1. Stretch muscles in upper back, chest and shoulders

Try the angel wing stretch as an example:



- Stand with head, neck, upper back and tailbone against wall, feet 6-7 inches from wall
- Place arms at sides with hands and elbows touching wall, raise overhead by sliding them up against wall in a wide arc
- Pause and slowly return to start position and continue for 30-60 seconds

2. Do upper body resistance exercise using body weight, bands or hand weights regularly

3. Insert micro moves to enhance good posture several times a day

- Think of a bean bag on top of your head and push it toward the sky
 - Stretch your shoulders away from your ears
 - Squeeze shoulder blades together gently as you lift up your chest and hold 10-30 seconds
- ### 4. See your health care professional if you have chronic aches or pain.

Fit and Fall Proof™

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SHOULDER STRENGTHENING EXERCISES

You will need a light object (soup can, bean bag, 1 lb. dumbbell), resistance band and a sturdy chair for balance assistance

Fitness Fix

- Repeat 8-12 repetitions on each side, add additional repetitions as strength increases (work up to three sets of ten)
- Complete each exercise slowly without momentum
- If anything feels uncomfortable, stop
- See your health care provider if you have persistent discomfort in or around joint

External Rotation

(lying down on bed, sitting or standing tall with a light weight)

- Raise forearm to 90 degree angle and hug elbow tight against side of body
- Hold light weight in hand and slowly rotate arm away through full range of motion
- Keep elbow glued to side of body as you return to start position

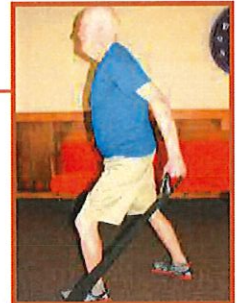
Change it up: hold a light weight in each hand, bend elbows to 90 degree angle, place elbows close to side, rotate arms out to side and slowly return to start position like slow-moving bird wings



Lawnmower Pull

(use chair for assistance if needed)

- Stand with one foot in front of the other and anchor end of band under front foot
- Hold band in opposite hand, palm facing forward
- Pull band back as if starting a lawnmower slowly, pause and release



Shoulder Lift and Pull

- Bend at hips, bend slightly forward at hips and reach arms forward
- Press hands at shoulder height and hold 3-5 seconds (press hard)
- Pull elbows back as you squeeze shoulder blades together
- Combine with partial squat or slow walking



Front and Side Shoulder Raises

- Place feet on end of band and hold other end of band with palm facing thigh
- Raise arm out to front at shoulder height with thumb up
- Lower arm slowly to start position
- Raise arm to side at shoulder level with elbow soft and thumb up
- Lower arm slowly to start position

Change it up: Alternate from raise with side raises.

