

## ■ CATEGORY 1 *Range of Motion and Strengthening Exercises*

- These exercises should be done slowly.
- Try to achieve full joint range of motion with a gentle stretch at the end ranges (follow the recommended hold times).
- Do 4-10 repetitions of each exercise.
- In the illustrations that accompany the exercise descriptions, the solid line shows the start position and the dotted line shows the movement.
- These exercises can be done in either a sitting or standing position. Be sure to maintain correct posture for whichever starting position is chosen. Correct postural alignment includes:
  - Chin in.
  - Chest up.
  - Shoulders back, down and relaxed.
  - Arms relaxed at sides (or in lap if sitting).
  - Abdominals tight – Tighten your abdominals by visualizing the belly button pulling toward the spine. Place your fingers below the belly button and feel the abdomen draw in.
  - Neutral spine – Visualize your pelvis as a water glass. If the pelvis is tipped forward, the water would spill out the front; if the pelvis is tipped backward, the water would spill out the back. Try to keep the water glass level. If you have difficulty rocking your pelvis, or have back pain while in the “level glass position,” stand in a slight squat position or sit with your back against a wall. Slowly rock your pelvis forward and back to find the most comfortable functional position of the low back. Contraction of abdominals and buttock muscles can further support this position stabilizing it there. If you have spinal deformities that make this pelvic movement painful or difficult, contract your buttock/gluteal and abdominal stabilization muscles to support your back in the position it is in.
  - Feet on the floor, if sitting.
  - Knees soft (slightly bent, not locked) if standing.
  - Breathe normally and don’t hold breath.

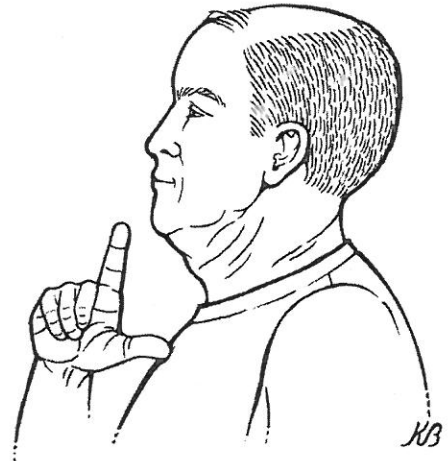
**a NECK EXERCISES (#1-3)****1. Chin Tuck (axial extension)**

Purpose: ROM, Posture

- Look straight ahead. Make an "L" with index finger on chin and thumb on breastbone.
- Glide chin back, away from index finger, to make a double chin.
- Hold 3 seconds.
- Relax.

**! PRECAUTIONS**

■ Dizziness, Neck pain



NECK

**2. Head Turn (rotation)**

Purpose: ROM, ADLs – Driving, dressing, cleaning

- Look straight ahead.
- Turn head to look over shoulder.
- Hold 3 seconds.
- Return to front.
- Repeat to other side.

**! PRECAUTIONS**

■ Dizziness, Neck pain



### 3. Head Tilt (lateral flexion)

Purpose: ROM, ADL – Looking under cabinet or around an object

- Look straight ahead.
- Tilt head gently sideways toward shoulder. (Do not raise shoulder toward ear.)
- Hold 3 seconds.
- Repeat to other side.

#### PRECAUTIONS

■ Dizziness, Neck pain



## **b** JAW EXERCISES (#4-5)

### 4. Jaw Open (jaw ROM)

Purpose: ROM, ADLs – Eating, yawning, laughing

- Open mouth slowly (may cover mouth as in yawn).
- Hold 3 seconds.
- Note: A three-finger opening is functional.

#### PRECAUTIONS

■ Jaw joint surgery



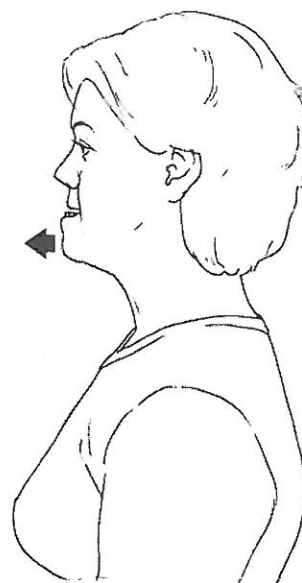
**5. Jaw Forward (jaw ROM)**

Purpose: ROM, ADLs – Eating, yawning, laughing

- Move lower jaw forward gently. (Be careful not to jut neck out.)
- Hold 3 seconds.
- Relax.

**PRECAUTIONS**

■ Jaw joint surgery



SHOULDER GIRDLE

**6. SHOULDER GIRDLE EXERCISES (#6-8)**

Do R shoulder hold  
Do L shoulder hold

**6. Shoulder Shrug (elevation and depression)**

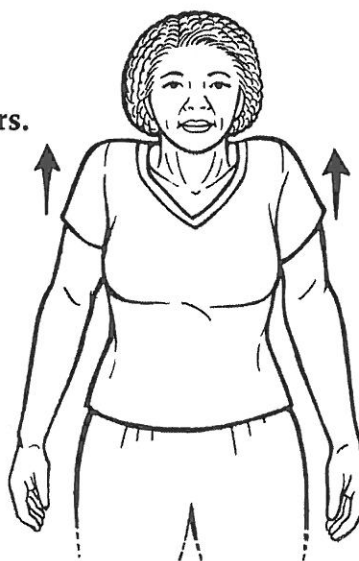
Purpose: ROM, Relaxation (Version A), Strength (Version B)

**VERSION A**

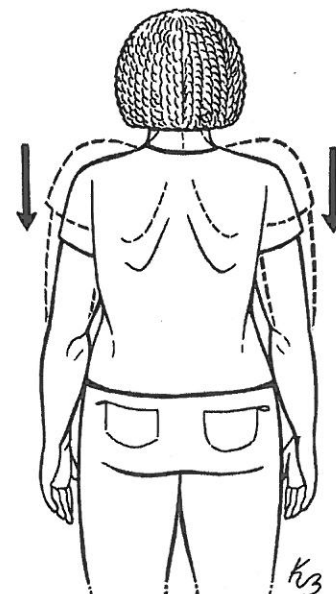
- Raise both shoulders up toward ears.
- Hold 3 seconds.
- Slowly lower shoulders and relax.

**VERSION B**

- Raise both shoulders up toward ears.
- Hold 3 seconds.
- Lower shoulder blades back and down as if putting them in your back pockets.
- Hold 3 seconds.
- Relax.



A



B

**PRECAUTIONS**

■ None



## 7. Shoulder Backward Circle

(scapular range of motion)

Purpose: ROM, Posture

- Sit at edge of chair or stand with correct posture.
- Move shoulders slowly up, back and around in a circular motion.
- Note: Do not go the other way as this encourages a rounded shoulder posture.

### PRECAUTIONS

■ None



## 8. Shoulder Blade Pinch (retraction)

Purpose: ROM, Strength, Posture

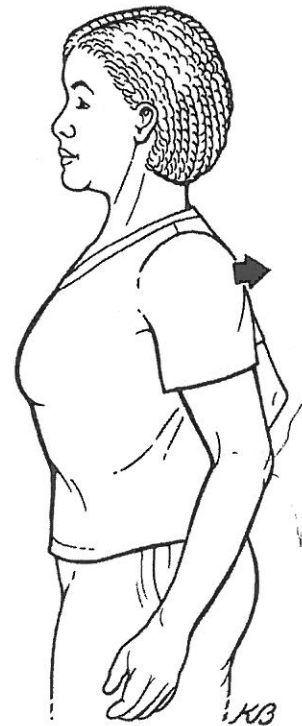
### VERSION A

- Sit at edge of chair or stand with arms relaxed at sides.
- Pull shoulder blades back and toward each other.
- Hands should remain relaxed at sides.
- Hold 6 seconds.
- Relax.

### PRECAUTIONS

■ None

CONTINUED



CONTINUED

## 8. Shoulder Blade Pinch (retraction)

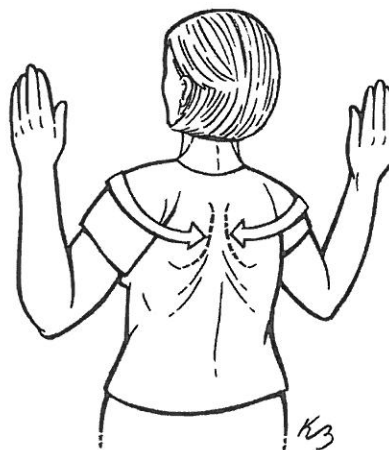
Purpose: ROM, Strength, Posture

### VERSION B

- Sit at edge of chair or stand correctly.
- Place arms in a “W” position, with shoulders relaxed.
- Bring elbows back, pinching shoulder blades together.
- Hold 6 seconds.
- Relax.

### PRECAUTIONS

■ None



## **d** ARM EXERCISES FOR SHOULDER AND ELBOW (#9-25)

### **9. Forward Arm Reach** (shoulder flexion)

Purpose: ROM, Relaxation, ADL - Reaching

#### VERSION A

- Position arms out front, palms facing one another.
- Raise one or both arms forward and up as high as possible (one arm may help the other, if needed).
- Lower slowly.

#### VERSION B

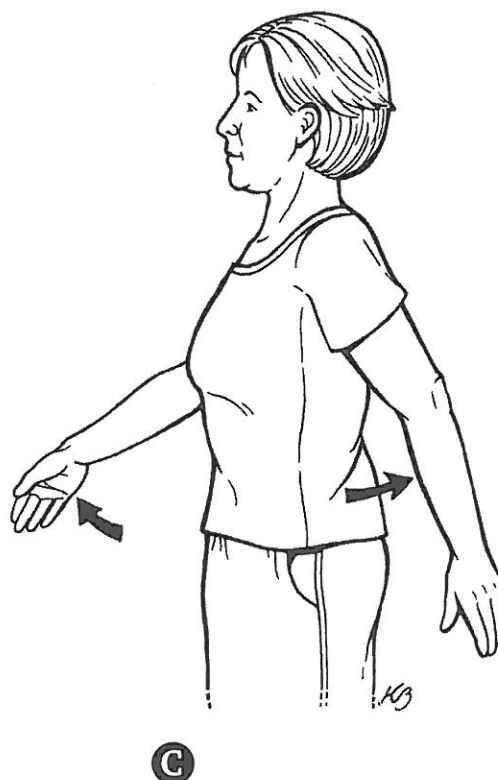
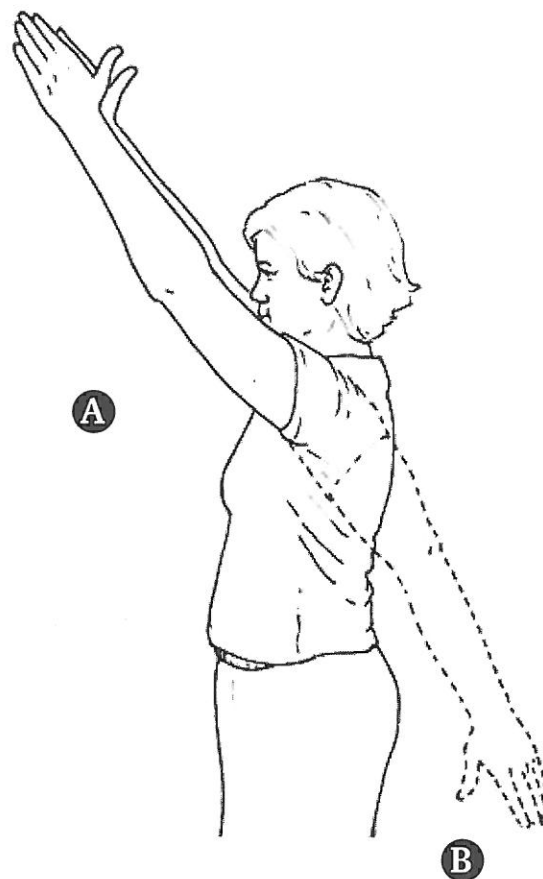
- Repeat Version A.
- Continue motion by bringing arms behind the body.

#### VERSION C

- Alternate one arm forward and one behind.

#### **! PRECAUTIONS**

- Shoulder joint surgery



## 10. Wall Arch

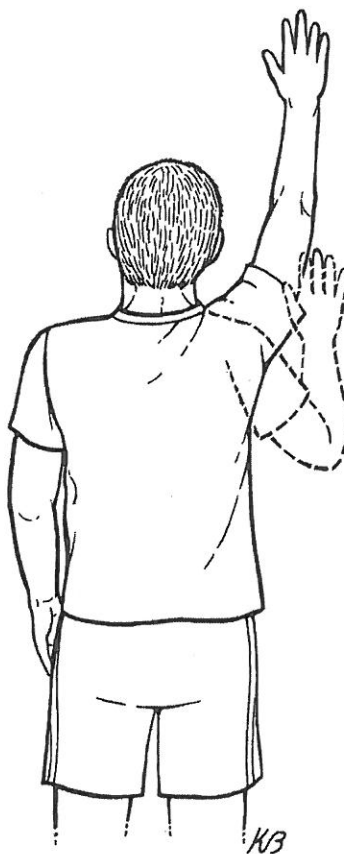
(shoulder and upper back ROM)

Purpose: ROM, Posture

- Stand with feet six inches from wall and shoulder-width apart, with abdominals tight.
- Reach one arm up on wall or walk fingers up wall slowly.
- Feel a gentle stretch in shoulder and upper back (do not arch lower back).
- Hold for 10 seconds.
- Bring hand down.
- Repeat with other arm.

### PRECAUTIONS

■ Shoulder joint surgery, Balance

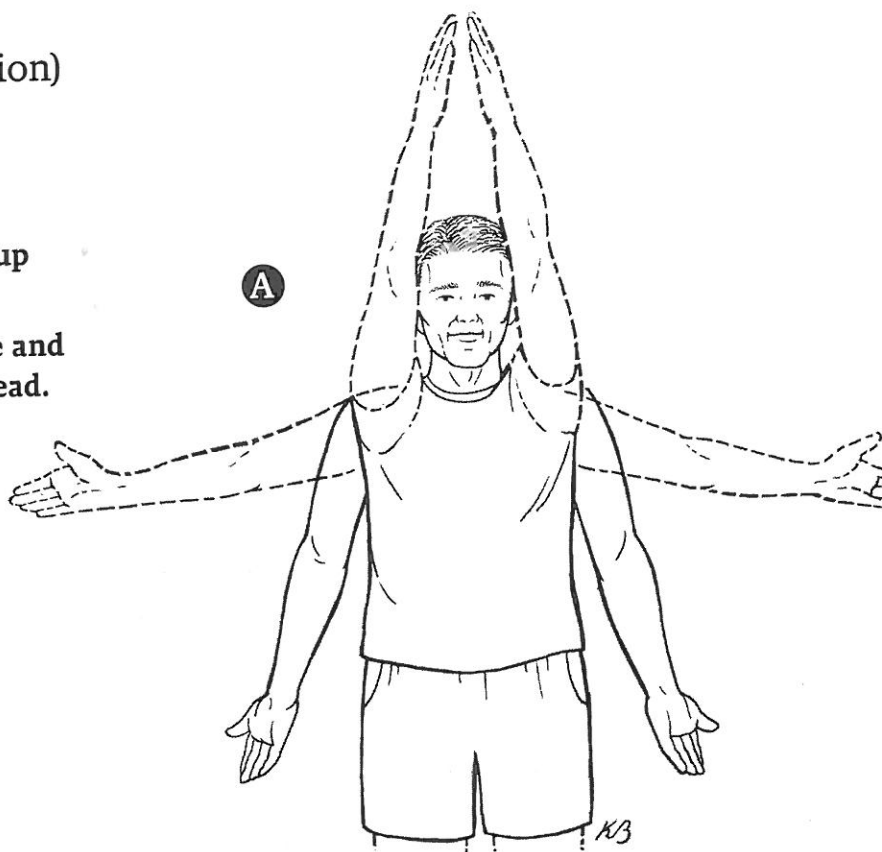


## 11. Overhead Arm Reach (shoulder flexion, abduction)

**Purpose:** ROM, Relaxation,  
ADLs – Dressing, reaching

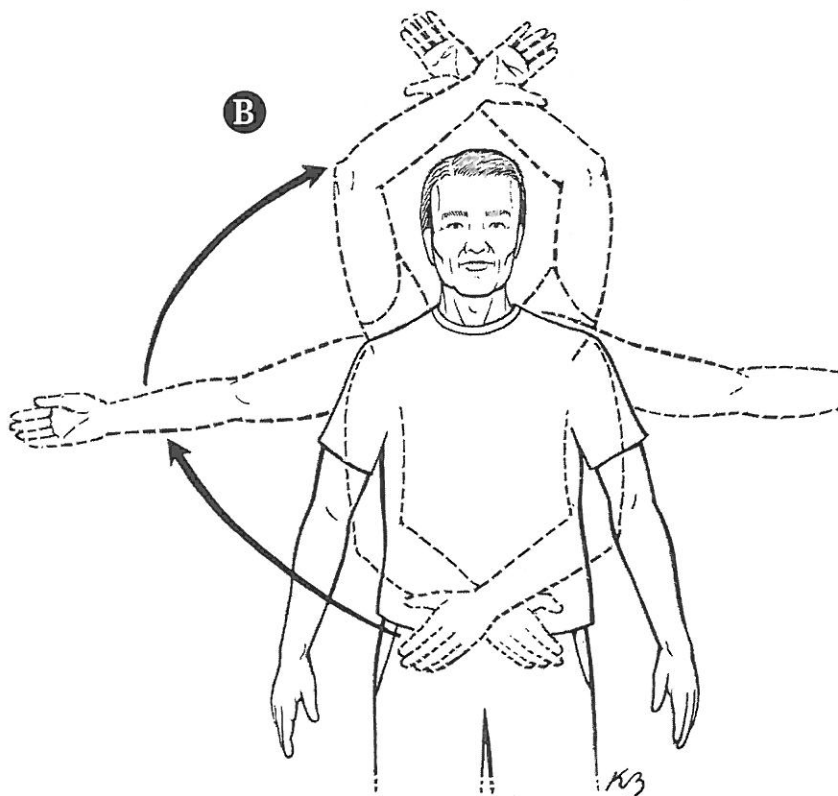
### VERSION A

- Hold arms at side, palms up and elbows straight.
- Raise arms out to the side and up as if clapping above head.
- Lower slowly.



### VERSION B

- Do Version A, then cross arms above head.
- Bring arms down and cross arms while down.



### PRECAUTIONS

- Shoulder joint surgery

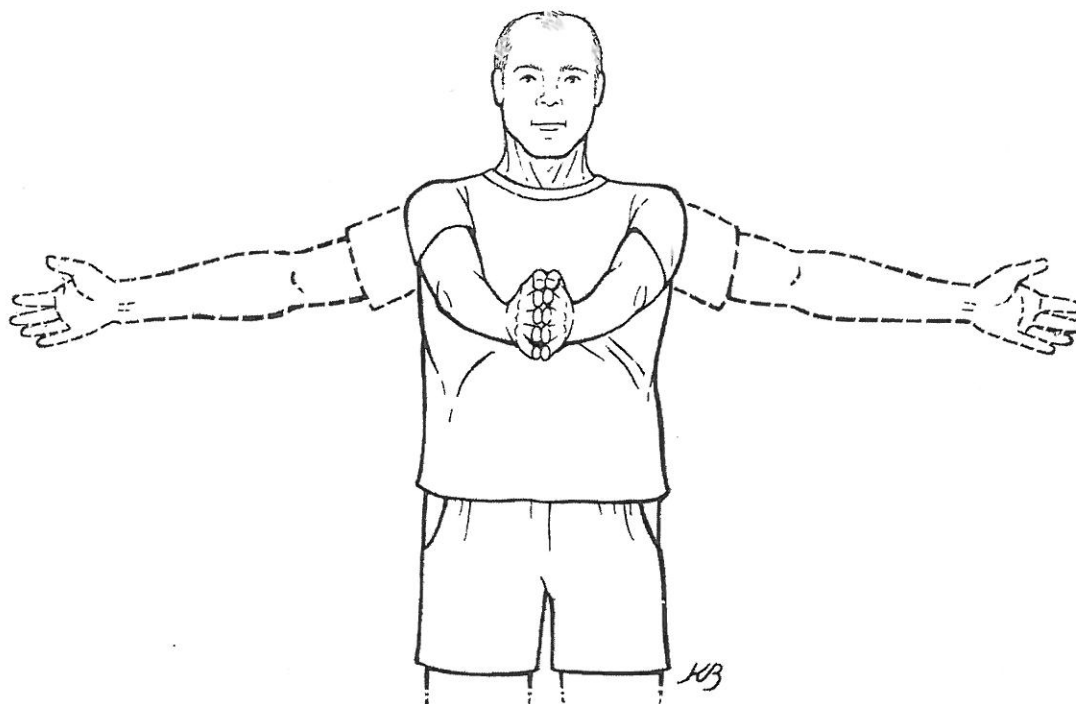
## 12. Sideways Arm Reach (horizontal abduction and adduction)

Purpose: ROM

- Straighten elbows, arms at shoulder level in front.
- Spread arms out to side, opening chest.

### PRECAUTIONS

■ None





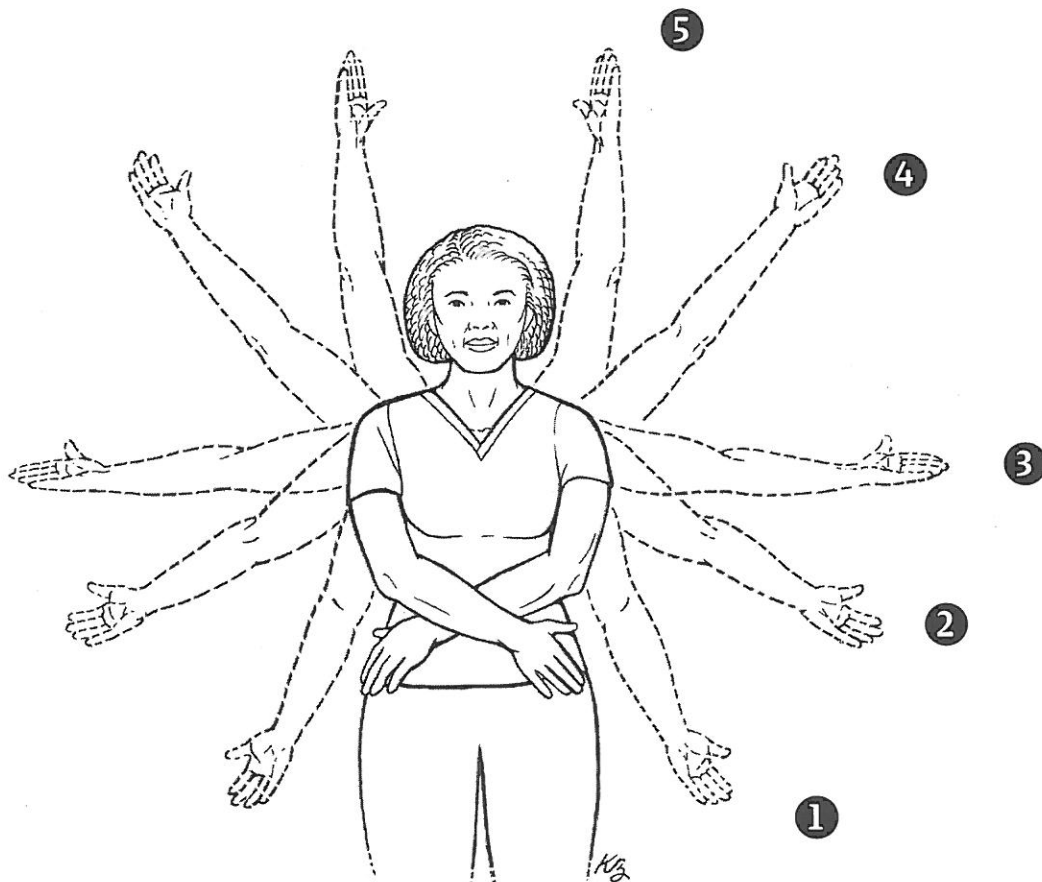
### 13. Scissors (combined shoulder abduction, adduction, external rotation and scapular retraction)

Purpose: ROM, Strength, Posture, ADL – Dressing

- Cross arms at hips.
- Uncross arms with thumbs pointing back (like a hitchhiker) to position #1. (You will feel the shoulder blades pull together.)
- Hold 3 seconds.
- Alternate crossing arms at hips with moving arms into positions #2–5 and holding at each position 3 seconds.

#### PRECAUTIONS

- Shoulder joint surgery

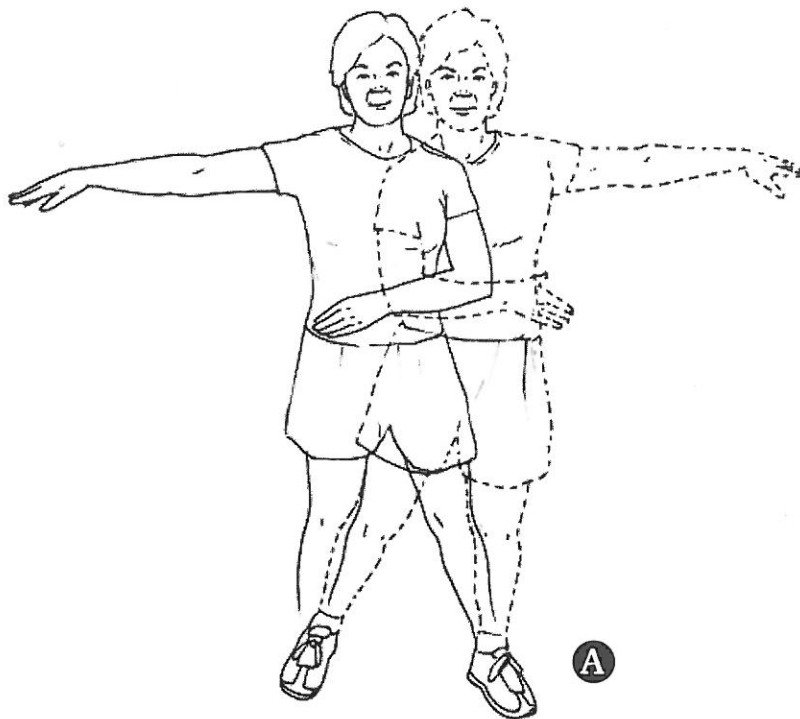


## 14. Arm Swing (combined shoulder abduction, adduction and horizontal movements)

Purpose: ROM

### VERSION A

- Shift weight as you sway arms from one side to the other.



### VERSION B

- Sway one or both arms in a figure 8 in front of you.

#### PRECAUTIONS

- Shoulder joint surgery, Balance if standing



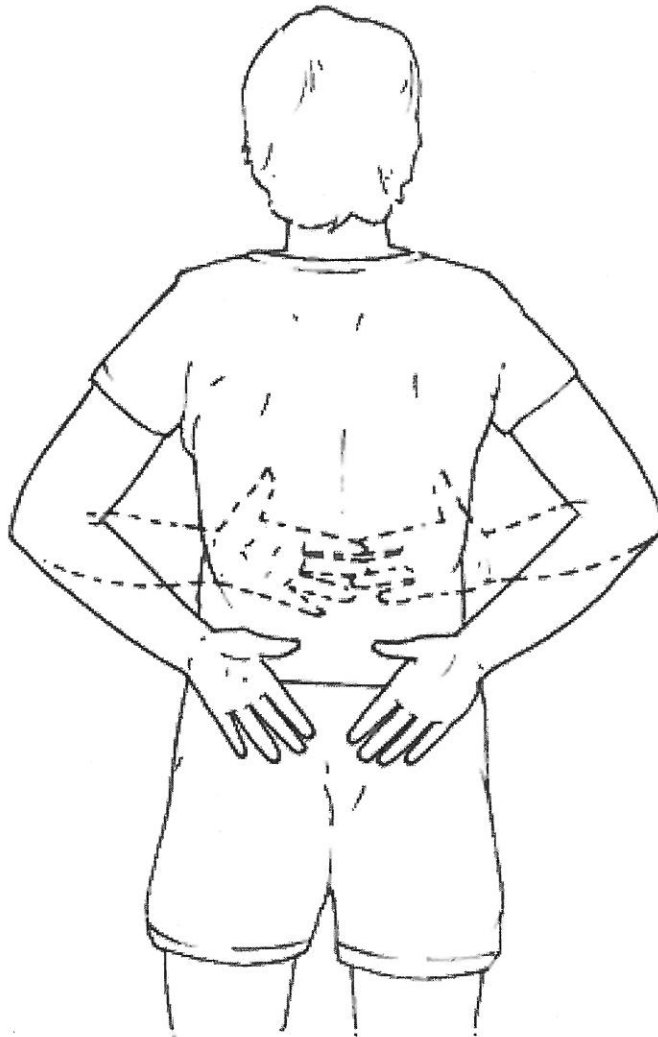
## 15. Self Back Rub (internal rotation)

Purpose: ROM, ADLs - Dressing, hooking bra, scratching back

- Place back of hands on buttocks.
- Slowly slide hands up back and down.

### ! PRECAUTIONS

- Shoulder joint surgery



## 16. Shoulder Rotator (external rotation)

Purpose: ROM, ADLs – Brushing hair, passing a plate

### VERSION A

- Bend elbows and tuck them into side of waist.
- Position forearms parallel to floor (with palms facing up).
- Rotate arms away from abdomen.
- Return to start position.

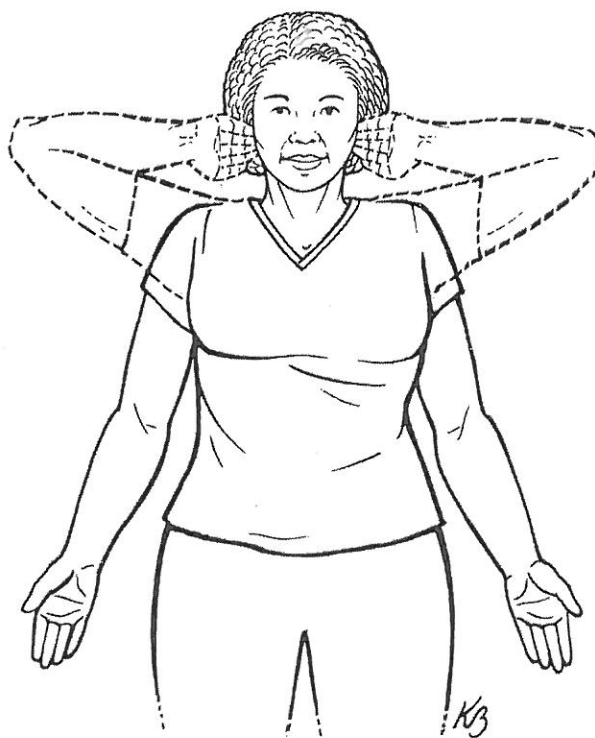


### VERSION B

- Start with arms at side.
- Place hands behind ears with elbows apart.
- Move elbows toward each other.
- Open elbows out to the sides.

#### PRECAUTIONS

- Shoulder joint surgery



## 17. Shoulder Rotator Stretch

(combined shoulder internal and external rotation)

Purpose: ROM, ADL – Dressing

- Sit or stand with correct posture.
- Reach one arm up to pat back.
- Reach other arm behind lower back.
- Slide hands toward each other.
- Hold 3 seconds.
- Alternate arms.

### PRECAUTIONS

- Shoulder joint surgery



## 18. Diagonal Arm Reach (shoulder abduction and adduction)

Purpose: ROM, ADL - Reaching

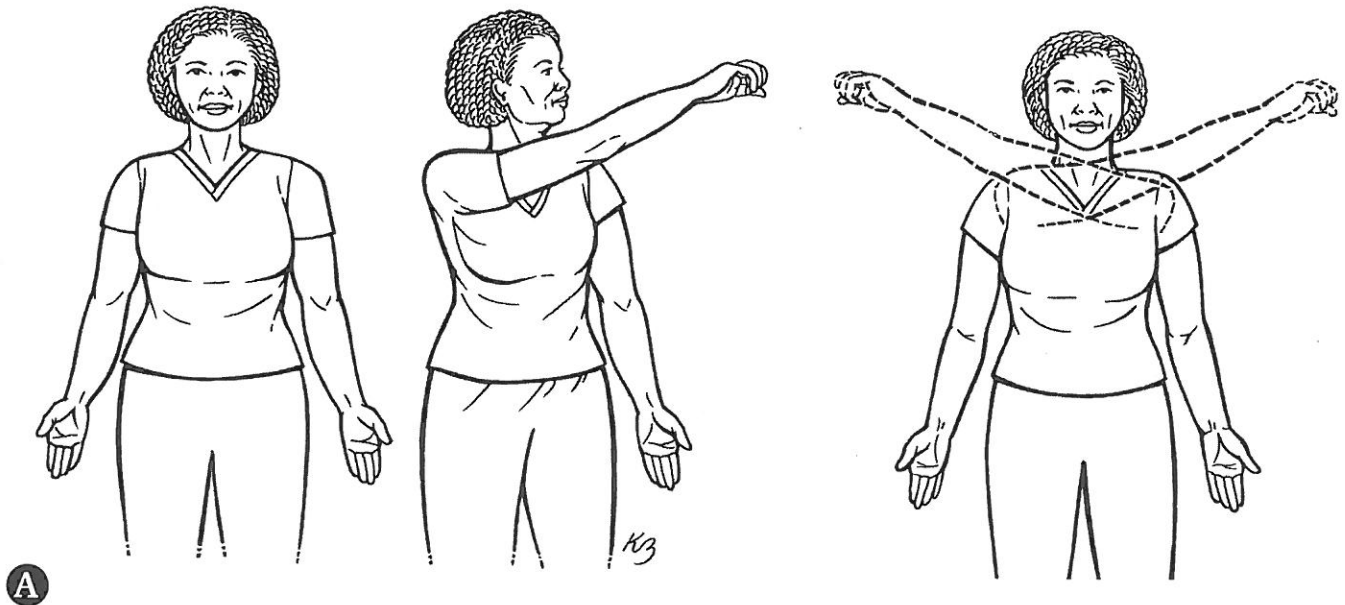
### VERSION A

- Start with arms at sides.
- While watching your hand, raise one arm above opposite shoulder (as if you were picking an apple from a tree).
- Repeat with other arm.
- Note: This exercise may also be done moving both arms at the same time.

### PRECAUTIONS

- Shoulder joint surgery

CONTINUED





CONTINUED

## 18. Diagonal Arm Reach (shoulder abduction and adduction)

### VERSION B

- Start with one hand on opposite hip.
- While watching your hand, move arm across body and above the shoulder (as if you were drawing a sword).
- Repeat with other arm.
- Note: This exercise may also be done moving both arms at the same time.

### PRECAUTIONS

- Shoulder joint surgery



B

## 19. Arm Circle (abduction with circling)

Purpose: ROM, Posture, ADLs – Dressing, reaching

### VERSION A

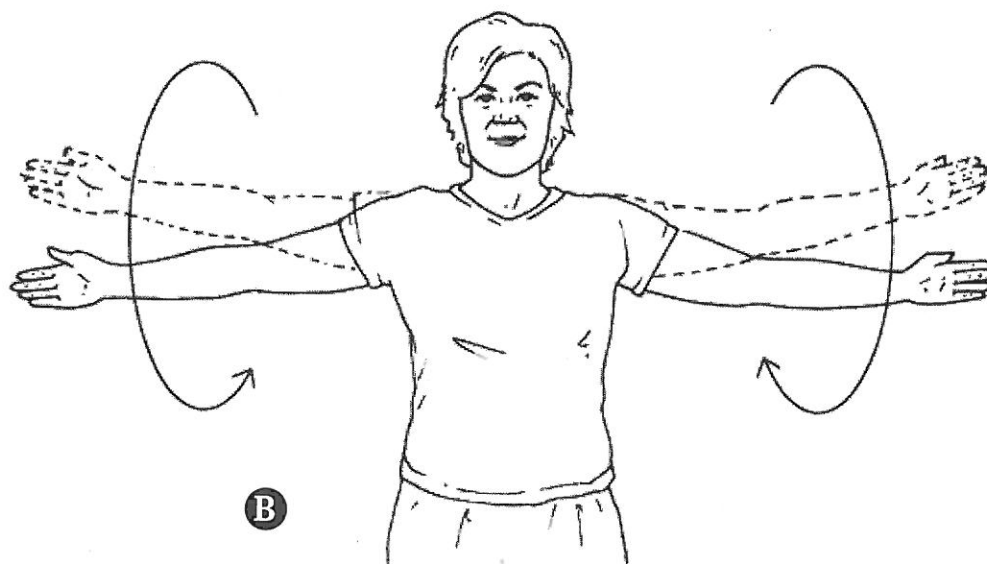
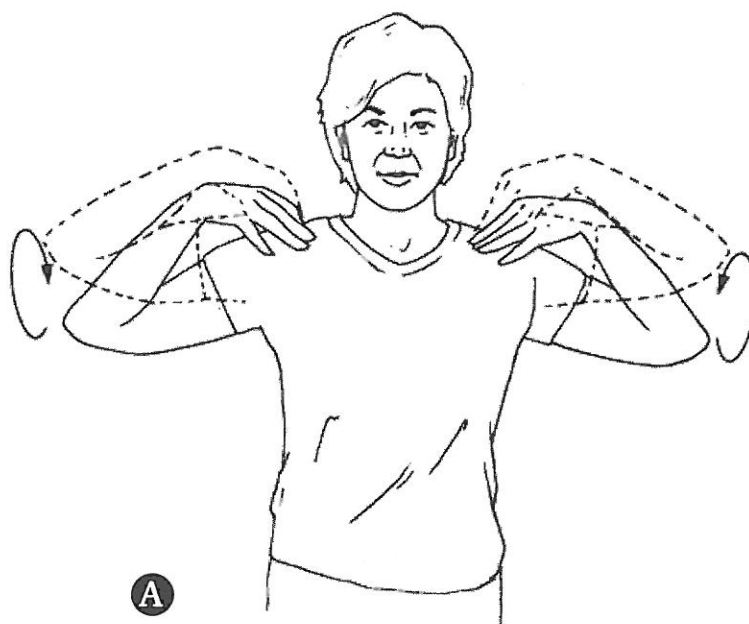
- Rest hands on shoulders, elbows pointed out.
- Make circles with elbows.
- Vary size and direction of circles.

### VERSION B

- Position straight arms out at shoulder level.
- Make circles.
- Vary size and direction of circles.

### PRECAUTIONS

■ None



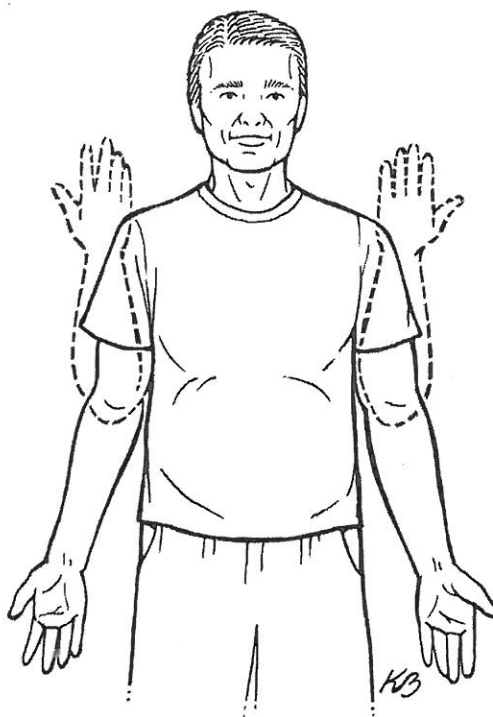
## 20. Elbow Bend (flexion and extension)

Purpose: ROM, ADLs - Eating, lifting

- Sit or stand with arms at side and palms up.
- Bend elbows, bringing palms toward shoulders.
- Straighten elbows down beside you.

### PRECAUTIONS

■ None



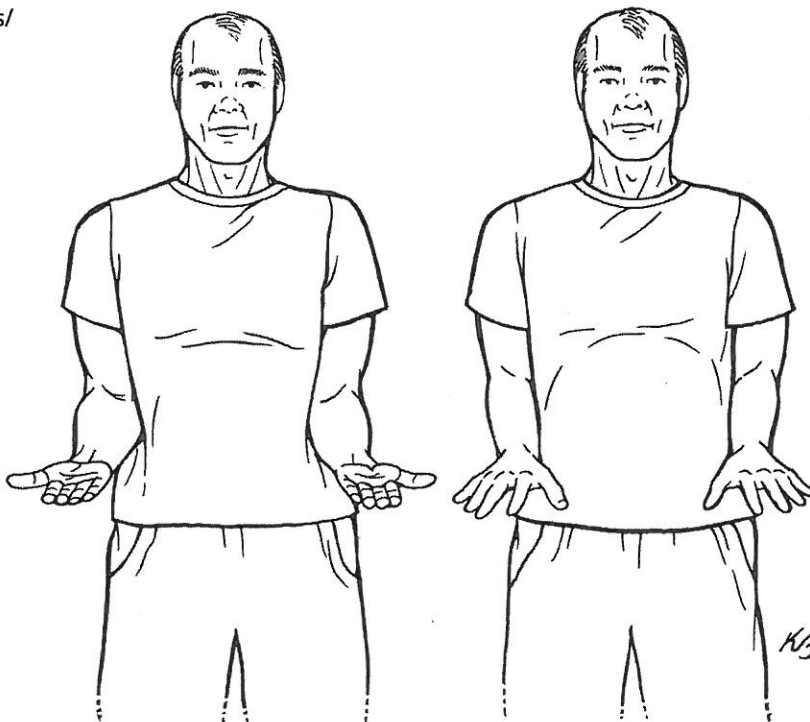
## 21. Elbow Turn (elbow pronation and supination)

Purpose: ROM, ADLs - Turning doorknobs/screwdriver, taking change

- Tuck elbows at sides.
- Turn palms up.
- Turn palms down.

### PRECAUTIONS

■ None



## 22. Elbow Bend and Turn (combined elbow motion)

Purpose: ROM, ADL – Picking up objects

This exercise combines #20 and #21.

### VERSION A

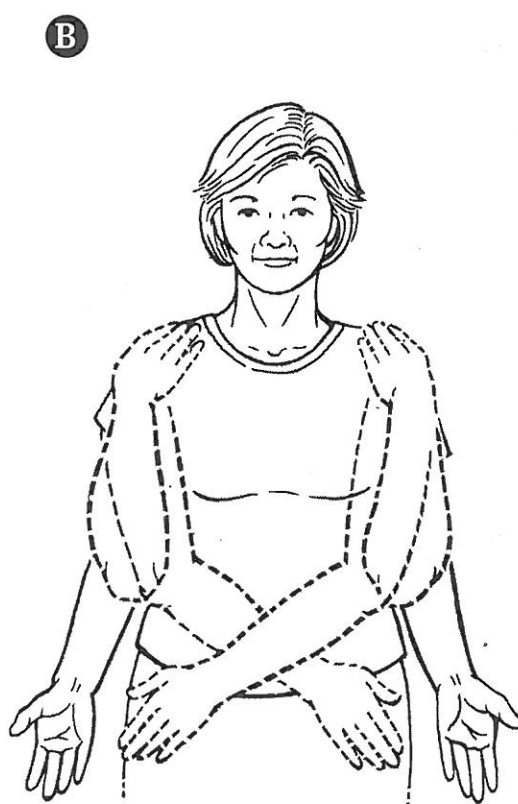
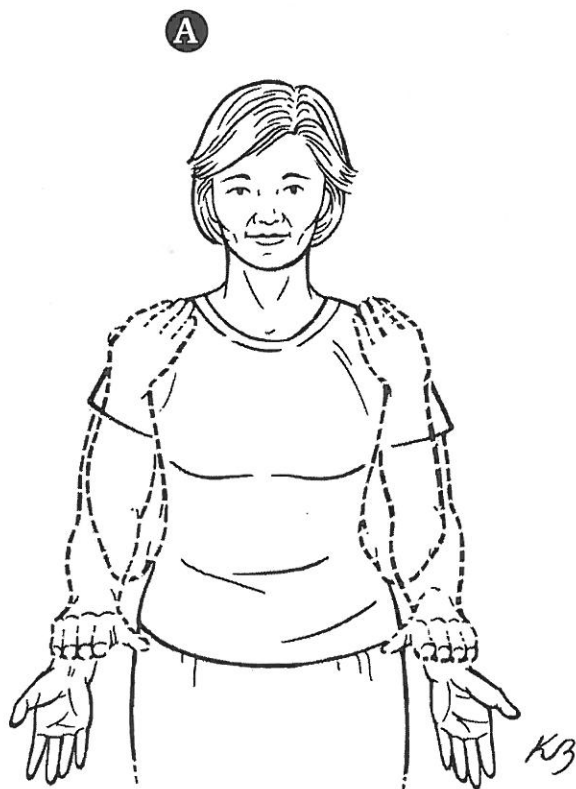
- Touch fingers to shoulders, palm toward you.
- Turn palms down as you straighten elbows.

### VERSION B

- Touch fingers to shoulders, palms toward you.
- Turn palms down as you straighten elbows and cross hands to opposite hips.

### PRECAUTIONS

- None



## 25. The Hug

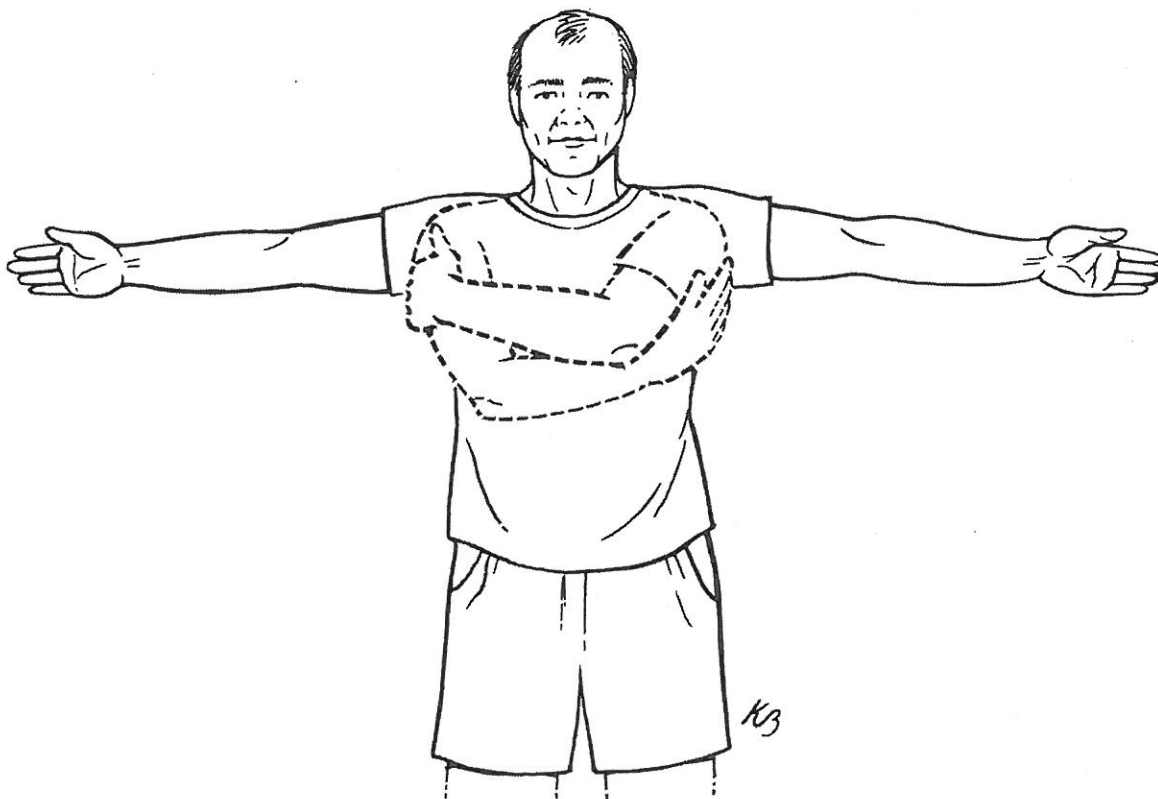
(combination elbow flexion and shoulder horizontal movements)

Purpose: ROM, ADLs – Eating, dressing

- Start with straight arms out to the side and palms facing forward.
- Bring arms together, touching opposite shoulder to hug yourself.
- Repeat with other arm on top.

### ! PRECAUTIONS

■ None



## **e** WRIST EXERCISES (#26–27)

### **26. Wrist Bend** (flexion and extension)

Purpose: ROM

- Sit or stand with elbows tucked to sides and palms facing down.
- Bend wrist up.
- Hold 3 seconds.
- Bend wrist down.
- Hold 3 seconds.

#### **PRECAUTIONS**

- Numbness of wrist or fingers



WRIST

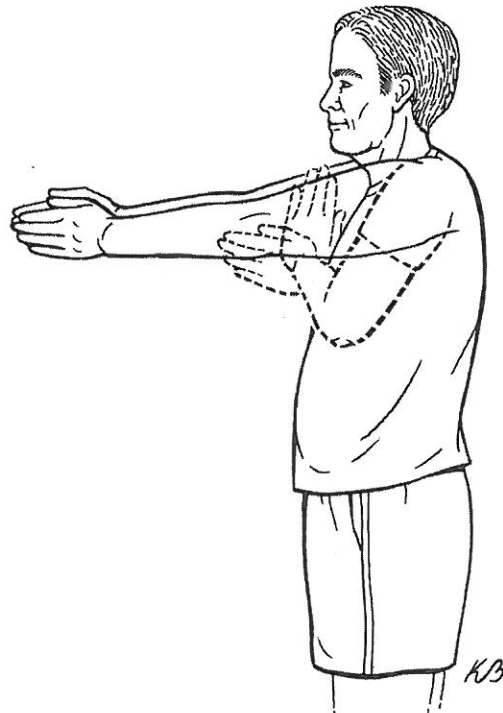
### **27. Wrist Stretch (extension)**

Purpose: ROM, ADL – Pushing down on chair arms to come to a standing position

- Sit or stand with palms together and arms straight out in front.
- Keeping palms together, pull hands in toward chest and point hands up toward ceiling.
- The elbows will go out to the side.

#### **PRECAUTIONS**

- Numbness of wrist or fingers





## **f** FINGER EXERCISES (#28–35)

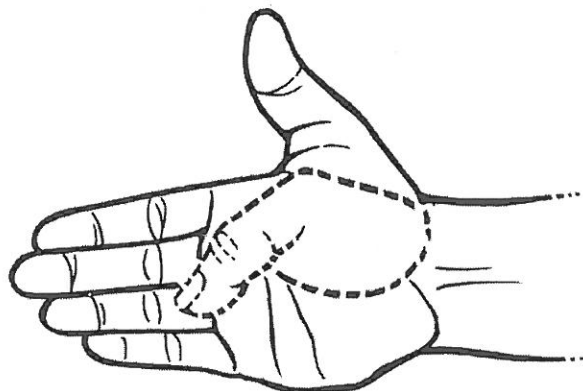
### **28. Thumb Bend** (thumb flexion)

**Purpose:** ROM, ADLs – Grasping, picking up objects

- Open hands, fingers relaxed.
- Reach thumb across palm toward base of middle or ring finger.
- Hold 3 seconds.
- Move thumb out again.

#### **PRECAUTIONS**

■ None



*we lose strength of our grip*

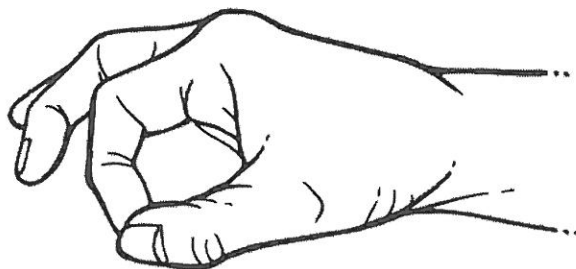
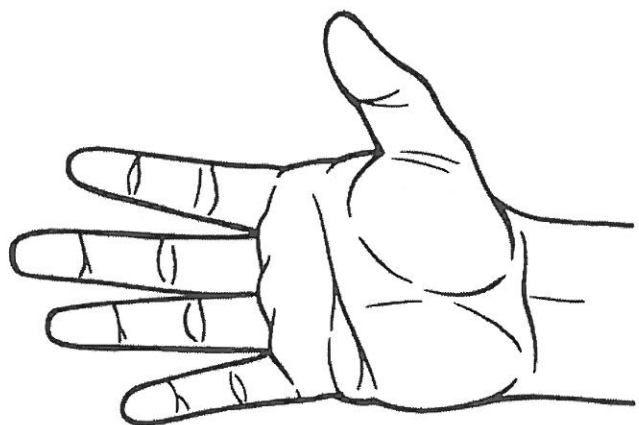
### **X** **29. Finger O** (opposition)

**Purpose:** ROM, ADLs – Grasping, picking up objects

- Start with open hand, fingers apart.
- Touch tip of thumbnail to tip of index fingernail (make an “O” shape).
- Repeat with each finger.
- Open hand wide after each “O.”

#### **PRECAUTIONS**

■ None



### 30. Finger Curl (flexion/extension)

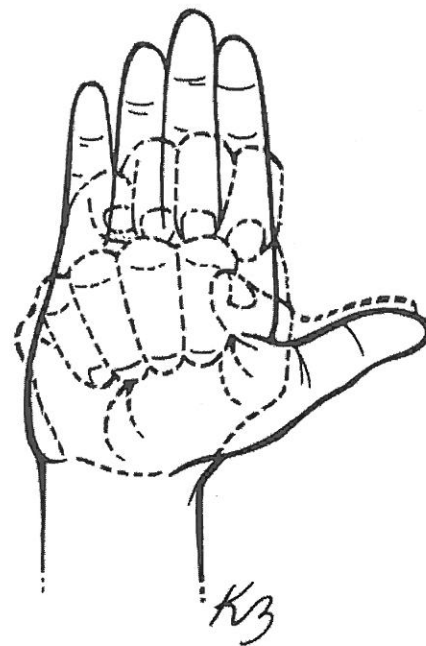
**Purpose:** ADL – Picking up and holding objects, ROM (Version A), Strength (Version B)

#### VERSION A

- Start with open hand flat, fingers straight.
- Bend each joint slowly to make a loose fist.
- Hold 3 seconds.
- Straighten fingers again.

#### VERSION B (PAPER CRUNCH)

- Hold an 8 1/2 x 11" sheet of paper in one hand.
- Crunch paper into a small ball in the palm of your hand.
- Using the same hand, unfold the paper, opening up to its original size. (No shaking allowed!)
- Repeat with the other hand, using a new sheet of paper.



#### PRECAUTIONS

■ None

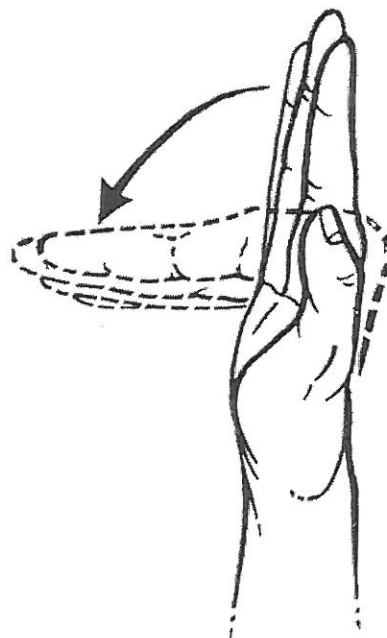
### 31. Knuckle Wave (lumbrical muscles)

**Purpose:** ROM, Strength, ADL - Holding cards or books

- With wrists and fingers straight, bend at the large knuckles while keeping the middle and end joints straight.
- Straighten knuckles.

#### PRECAUTIONS

■ None

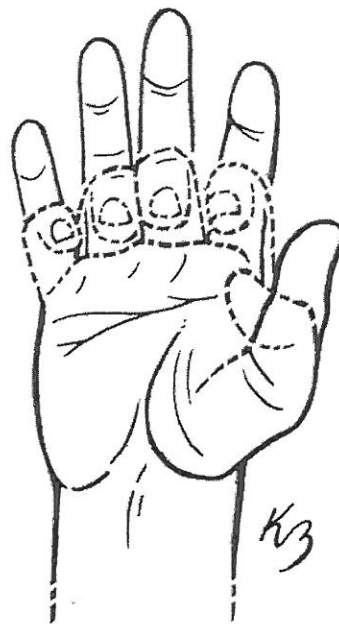


**32. Cat's Claw (intrinsic)****Purpose:** ROM, Strength, ADL – Maintain grasp

- Sit or stand.
- Open hand wide.
- Bend fingertips and thumb toward the base of the fingers.
- Keep large knuckles straight.
- Hold 6 seconds.

**PRECAUTIONS**

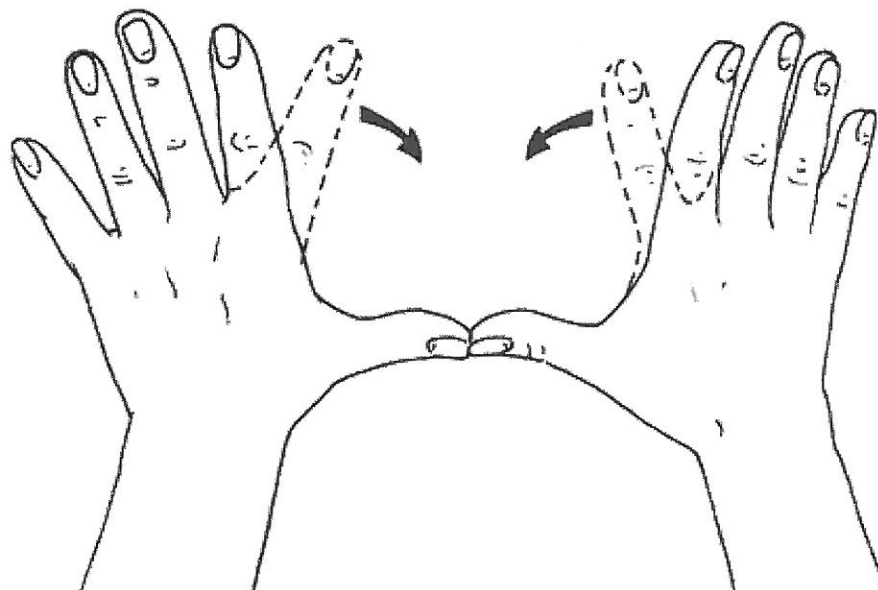
■ None

**33. Finger Walk (intrinsic, abduction, adduction)****Purpose:** ROM, Strength, ADLs – Grasping, preventing ulnar drift deformities

- Rest palms on thighs with thumbs toward each other.
- Slide one finger at a time toward thumb.
- Relax. Do NOT slide the other way (prevents ulnar drift deformity).

**PRECAUTIONS**

■ None



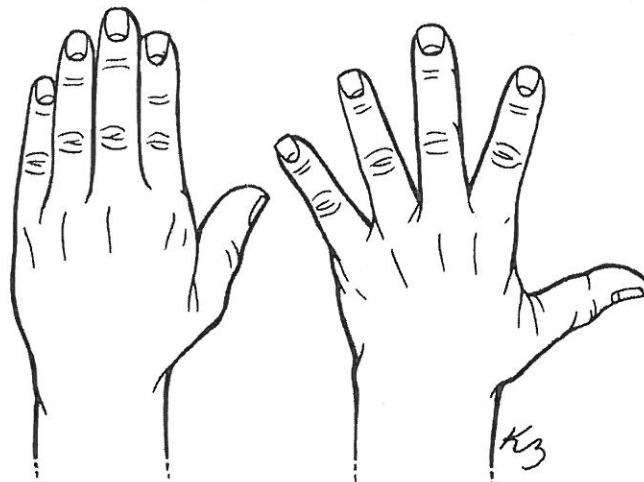
### 34. Finger Spread (finger abduction, adduction)

Purpose: ROM, Strength

- Rest palms on thighs or table.
- Spread fingers apart.
- Move fingers back together.

#### PRECAUTIONS

■ None



FINGER

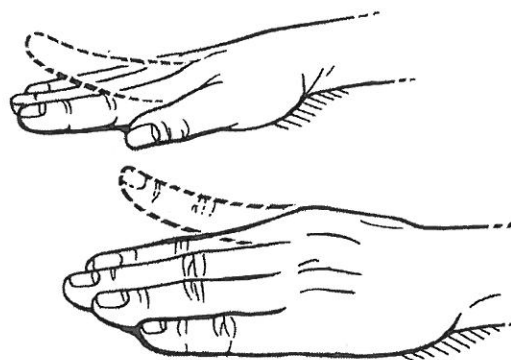
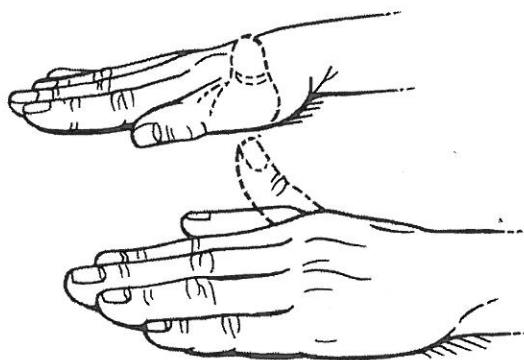
### 35. Finger Lift (finger extension)

Purpose: ROM, Strength

- Rest palms on thighs.
- Lift both thumbs up.
- Hold for 3 seconds.
- Relax and repeat with each finger.

#### PRECAUTIONS

■ None



## **h** TRUNK EXERCISES (#38–43)

### **38. Side Trunk Bend** (lateral trunk flexion)

Purpose: ROM, Strength, ADL – Reaching

#### VERSION A

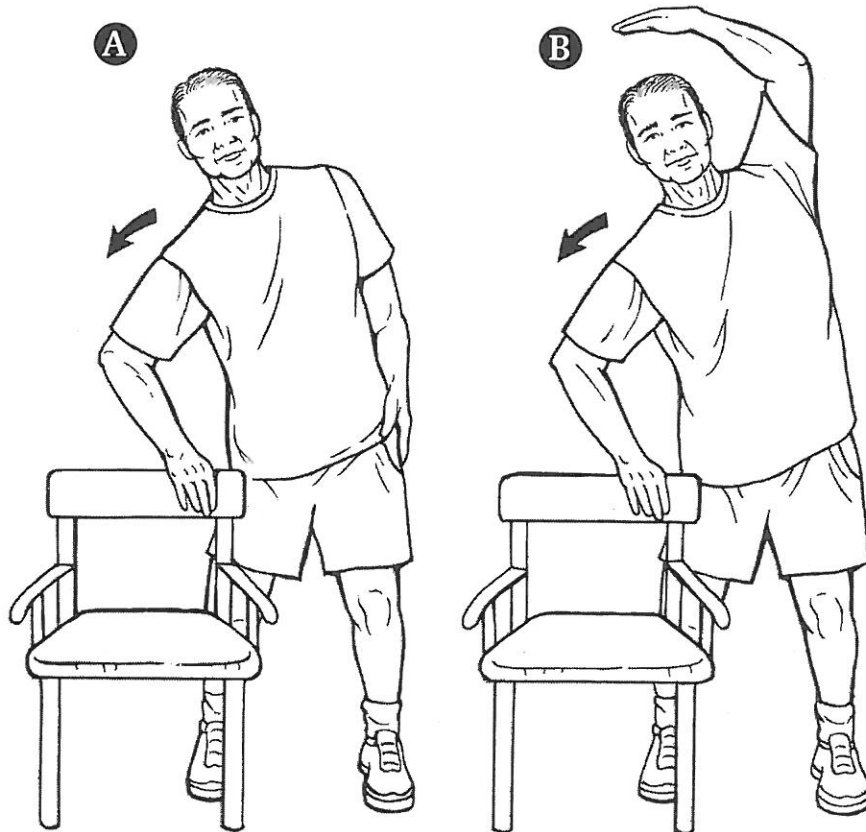
- Hold on to back of chair if standing.
- If sitting, hold on to arm or seat of chair.
- Lean trunk sideways, slowly bending at waist.
- Repeat to other side.

#### VERSION B

- Raise one arm overhead as you bend to opposite side.

#### **PRECAUTIONS**

- Osteoporosis, Balance, Back pain



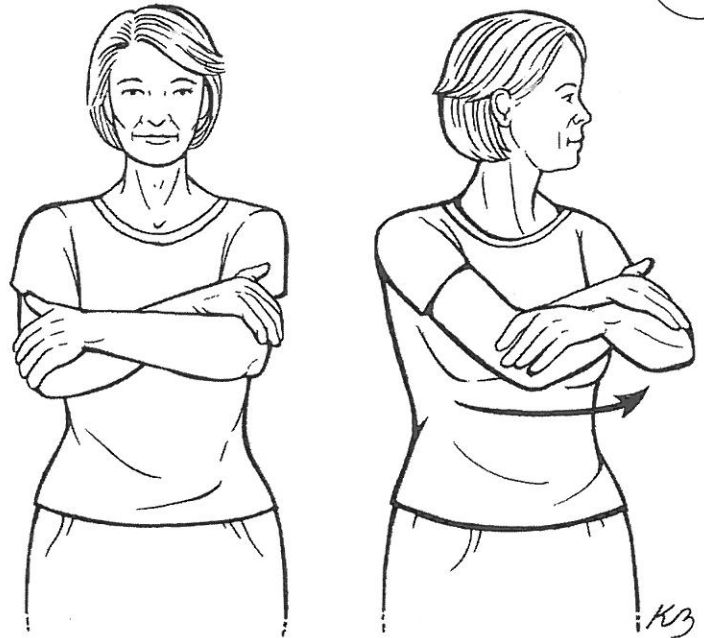
### 39. Trunk Rotation (rotation)

Purpose: ROM, ADLs – Driving, looking behind you

- Sit or stand.
- Cross hands or place them on hips.
- Twist trunk around to look over one shoulder.
- Be sure you are turning at the waist and not the neck or hips.
- Repeat to opposite side.

#### PRECAUTIONS

- Back pain, Osteoporosis (if done sitting)



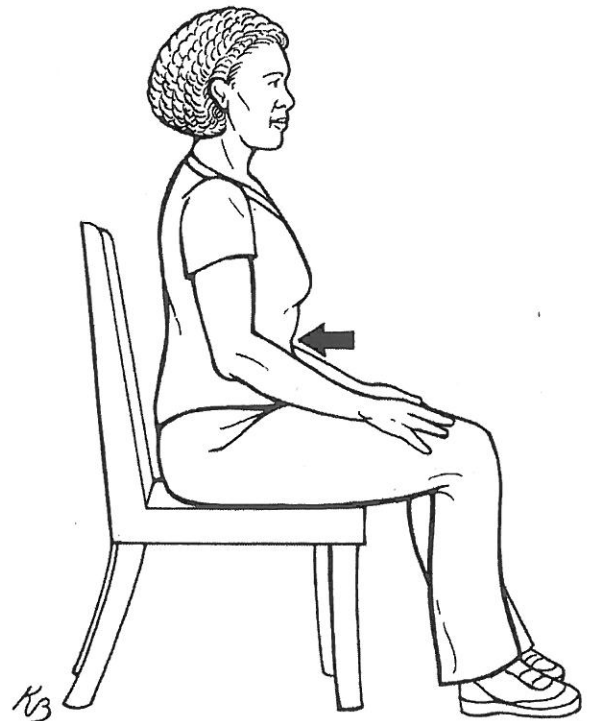
### 40. Abdominal Tightener (transverse abdominal muscle)

Purpose: Strength, Posture

- Standing or sitting in chair, tighten abdominal muscles, moving navel toward spine. (*Place your fingers below the belly button and feel the abdomen draw in.*)
- Hold 6 seconds.
- Relax.
- Note: There is no pelvic movement— the spine remains in neutral.

#### PRECAUTIONS

- None





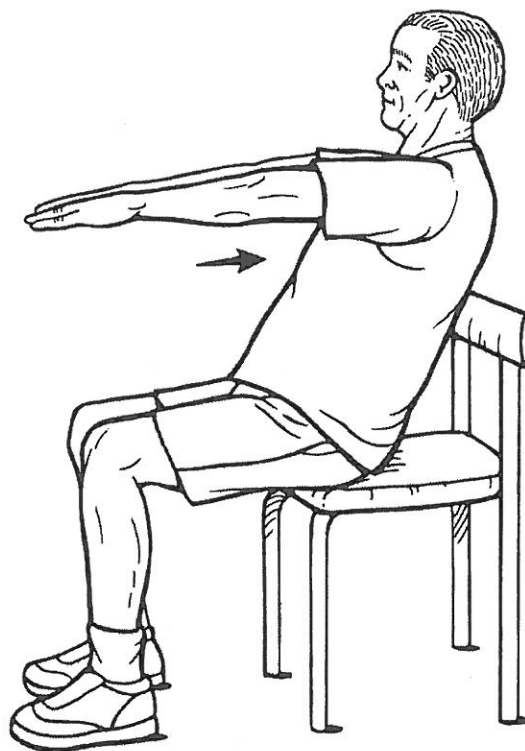
## 41. Abdominal Strengtheners (rectus abdominal muscle)

Purpose: Strength

- Sit at edge of chair, arms straight out in front.
- Pull navel to spine.
- Keeping back straight, lean back until you feel abdominal muscles tighten. Don't touch back of chair.
- Hold 6 seconds while continuing to breathe normally.

### PRECAUTIONS

- Back pain



## 42. Gluteal Set (gluteus muscle)

Purpose: Strength, ADLs – Climbing stairs, sliding up in bed, standing up

### VERSION A

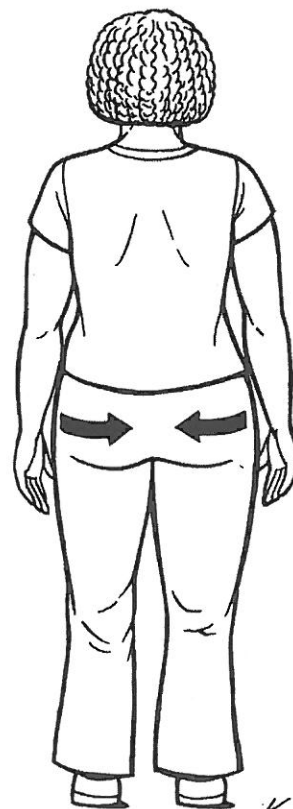
- Sit or stand.
- Squeeze buttocks tightly together.
- Hold 6 seconds while continuing to breathe normally.
- Relax.

### VERSION B

- Tighten your pelvic floor muscles. The sensation will be similar to when you need to urinate but are holding it.
- Hold 6 seconds.
- Relax.
- Note: You may also do this on your own by tightening and relaxing your pelvic muscles as rapidly as possible (up to 10 times) several times a day.

### PRECAUTIONS

- None



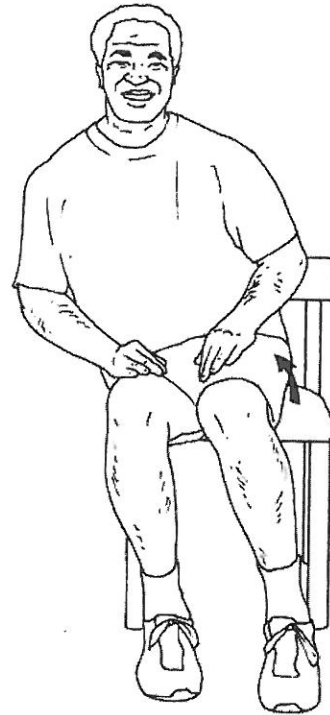
**43. Hip Walk (pelvic mobility)**

**Purpose:** ROM, Strength, ADLs – Bed mobility, standing up

- Sit up straight against back of chair.
- “Walk” forward to edge of chair by alternating lifting one hip up and moving forward.
- “Walk” back.

**PRECAUTIONS**

- Osteoporosis, Hip joint replacement



HIP

**i HIP EXERCISES (#44–52)****44. March (hip flexion)**

**Purpose:** ROM, Strength, ADLs – Climbing stairs, walking

**VERSION A**

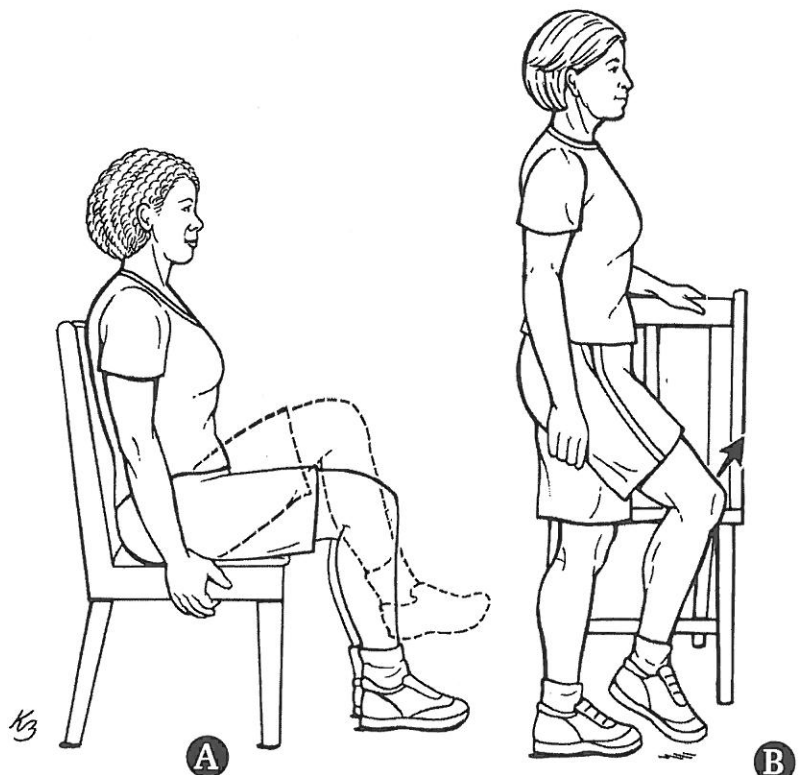
- Sit straight up.
- Alternate lifting knee up and down as if marching in place.
- You may help by lifting with your hands under the thigh.

**VERSION B**

- Stand holding on to chair.
- Alternate lifting knees up and down as if marching in place.

**PRECAUTIONS**

- Hip joint replacement



## 45. Heel to Shinbone Slide

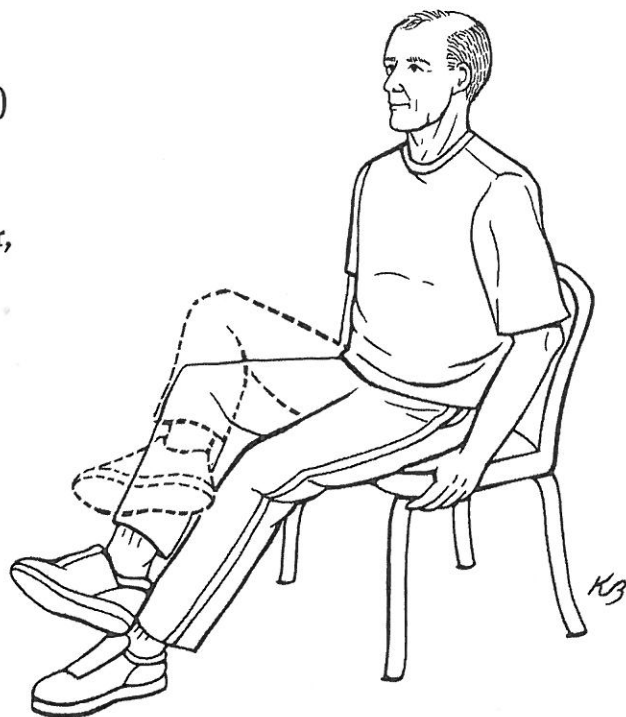
(hip external rotation, knee flexion)

Purpose: ROM, ADL – Getting in/out of a car

- Sit up straight with one leg slightly extended, foot resting on floor, knee bent.
- Slide heel of other foot up the shinbone of extended leg.
- Slide down.
- Repeat with other leg.

### PRECAUTIONS

- Hamstring muscle cramp



## 46. Hip Flexor Stretch

(psoas stretch and hip extension)

Purpose: ROM, ADLs – Standing straight, walking

- Sit sideways in chair, holding on to arm rest or seat.
- Move outside leg back and behind you, stretching the front of that hip (do not arch back or twist pelvis).
- Hold 10-20 seconds.
- Slide to opposite side of chair and repeat with other leg.

### PRECAUTIONS

- Hip joint replacement, Balance



## 47. Quad Stretch

(hip flexor and quadriceps stretch)

Purpose: ROM

- Holding back of chair, step backward with one foot, keeping both knees bent and feet flat.
- Tuck buttocks tightly under hips.
- You will feel a stretch on the front of the thigh and hip of your back leg.
- Hold 10-20 seconds and then repeat with other leg.

### PRECAUTIONS

■ Joint surgery, Balance



## 50. Inner Thigh Stretch (hip abduction)

**Purpose:** ROM, Strength, ADLs –  
Bathing, getting in/out of a car

### VERSION A

- Sit up straight.
- Spread knees apart.
- Hold 3 seconds.
- Bring knees together.

### VERSION B

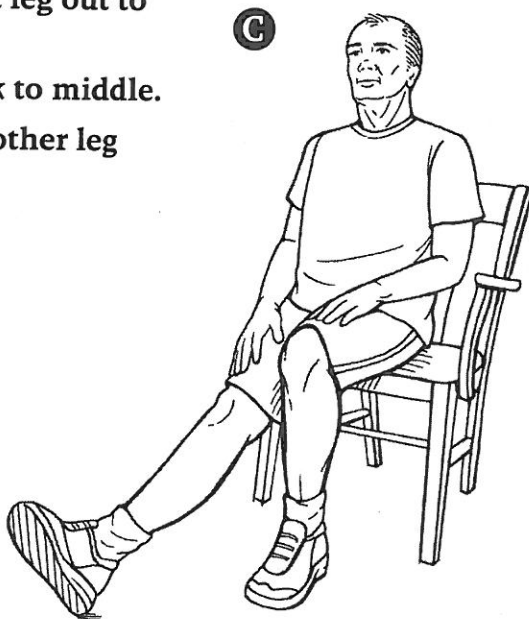
- Sit up straight.
- Lift one foot two inches off floor.
- Move that leg slowly out to the side.
- Return to center.
- Repeat with other leg.

### VERSION C

- Sit up straight with one leg extended to the front, heel resting on floor and toes pointed up.
- Slide straight leg out to side.
- Slide leg back to middle.
- Repeat with other leg

### PRECAUTIONS

■ None



**51. Standing Side Leg Lift** (hip abduction, adduction)

Purpose: ROM, Strength, ADLs – Getting in/out of a car, walking

**VERSION A**

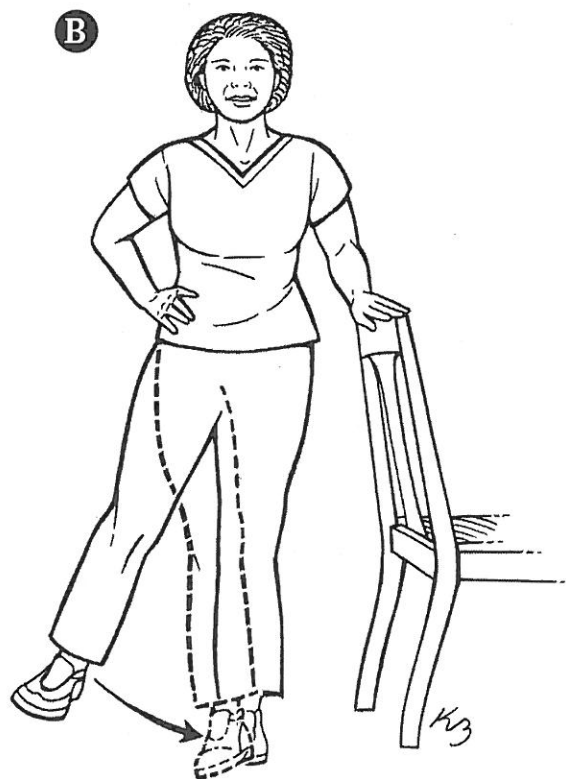
- Standing straight, hold on to chair.
- Stand on one leg with soft knees.
- Lift other leg up and out to side.
- Lower to the floor.

**VERSION B**

- Do Version A.
- Cross lifted leg in front of other leg.

**PRECAUTIONS**

- Hip joint surgery, Balance



Standing X

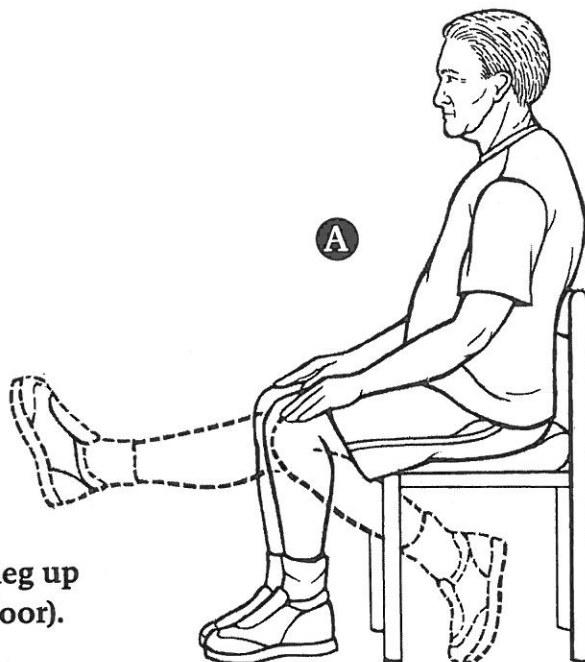
## KNEE EXERCISES (#53–55)

### 53. Knee Bend and Straightener (knee flexion/extension)

**Purpose:** ROM, Strength, ADLs- Getting in and out of chair, climbing stairs, walking

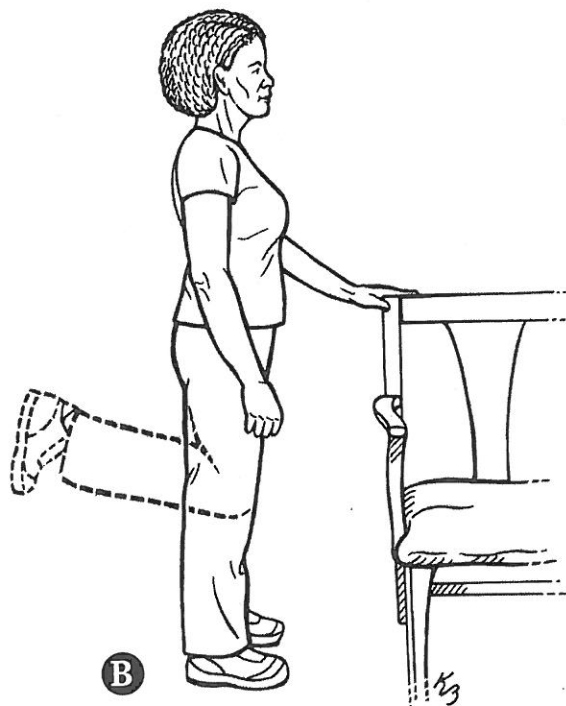
#### VERSION A (SITTING)

- Sit up straight.
- Bend knee, putting heel under chair.
- Hold 3 seconds.
- Straighten knee out in front.
- Hold 3 seconds.



#### VERSION B (STANDING HAMSTRING CURL)

- Stand, holding on to chair.
- With one knee “soft,” bring heel of other leg up toward buttocks (keep knee pointing to floor).
- Lower foot to floor.



#### PRECAUTIONS

- Hamstring muscle cramp

## 54. Quad Set (quad strengthener)

Purpose: ROM, Strength, ADLs – Rising from chair, climbing stairs, walking

### VERSION A

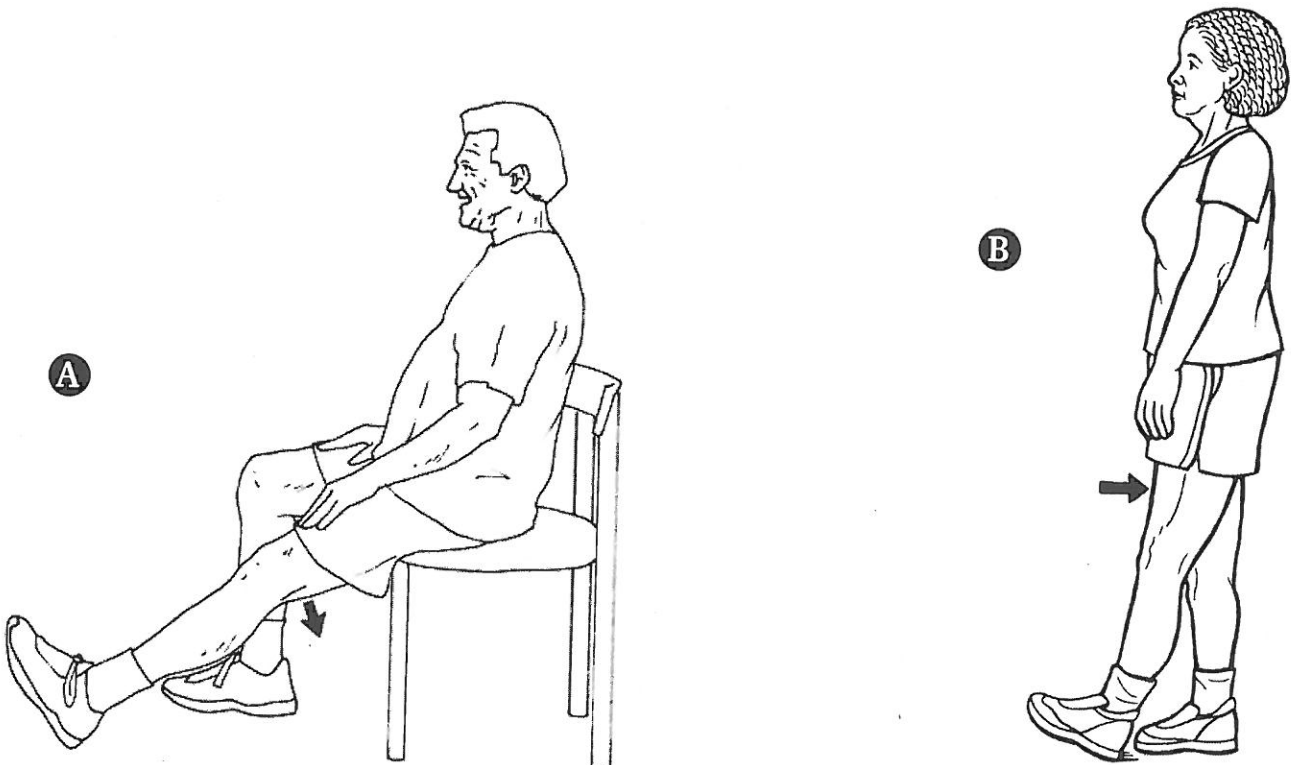
- Sit at edge of chair, one leg out straight, and heel on floor.
- Point toes toward ceiling.
- Straighten knee by tensing the muscles on top of thigh.
- Hold 6 seconds.
- Relax.

### VERSION B

- Stand with one foot slightly in front of the other, heel of forward leg on ground and toes pointing toward ceiling (as if you are going to take a step).
- Straighten knee of forward leg by tensing the muscles on the front of thigh.
- Hold 6 seconds.
- Relax.

### PRECAUTIONS

None





## **K** ANKLE EXERCISES (#56-58)

### **56. Heel-Toe Lift** (ankle dorsiflexion/plantarflexion)

Purpose: ROM, Balance, Strength, ADLs – Walking, climbing stairs

#### VERSION A (SITTING)

- Sit with feet flat on floor.
- Lift heels, keeping toes on floor.
- Return to flat.
- Lift toes, keeping heels on floor.
- Return to flat.

#### VERSION B (STANDING)

- Stand up straight holding on to chair.
  - Rise up and stand on toes.
  - Hold 3 seconds.
  - Lower slowly to flat feet.
  - Challenge: Stand on one leg and raise heel.
- Repeat on other leg.

#### **PRECAUTIONS**

- Muscle cramp, Balance in standing position, Ankle joint surgery



*Note: illustration shows bare feet to indicate movement, but exercise is done in shoes.*

## 57. Ankle Circle (inversion/eversion/circumduction)

Purpose: ROM, Balance, Improved circulation, ADLs – Walking, climbing stairs

### VERSION A

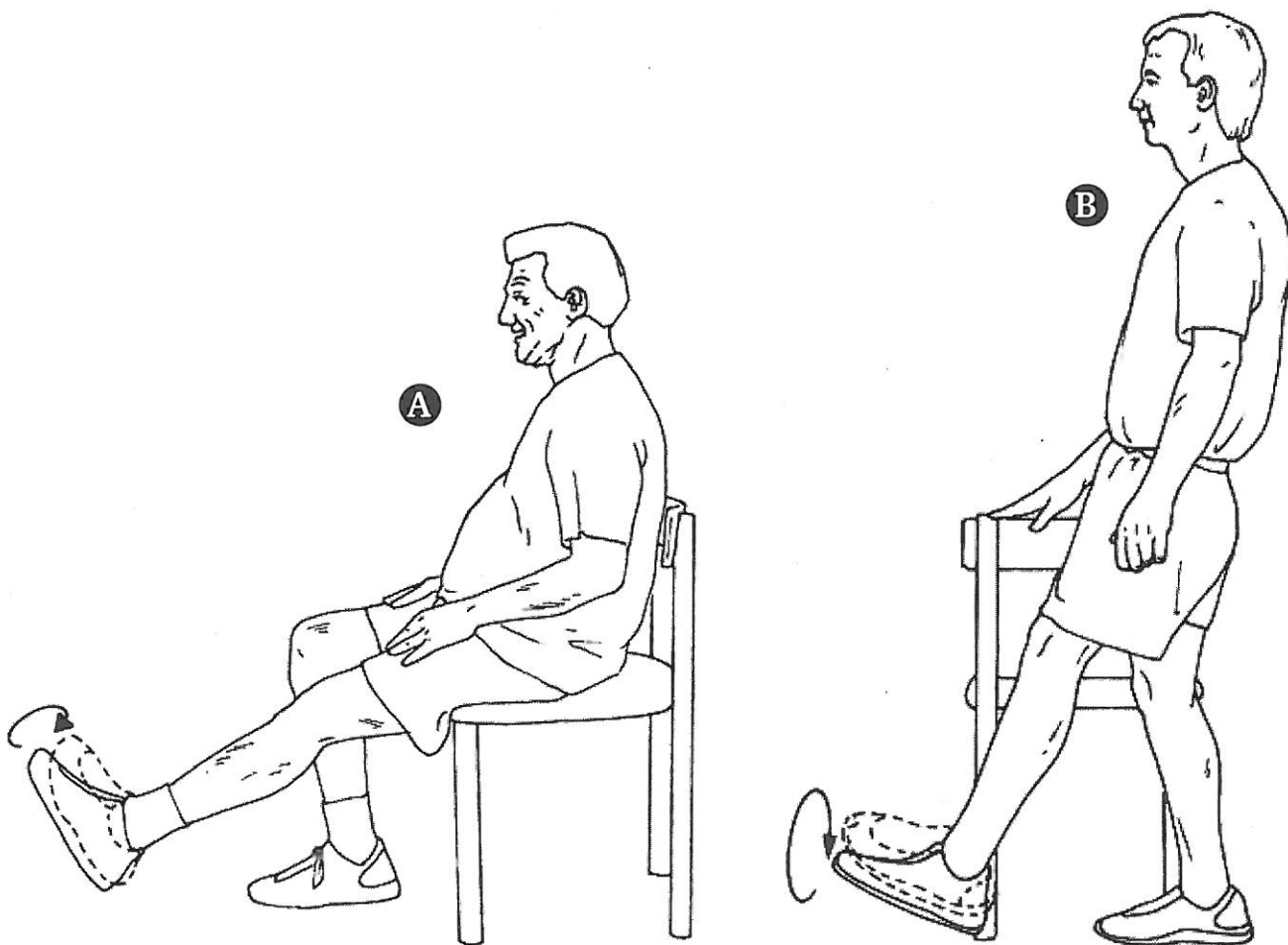
- Sit up straight, one foot extended in front.
- Move foot around in a slow, large circle or draw alphabet letters.
- Change directions.

### VERSION B

- Stand on one foot with soft knee.
- Extend other leg in front of you.
- Move foot around in a slow, large circle.

### PRECAUTIONS

- Balance (standing version)

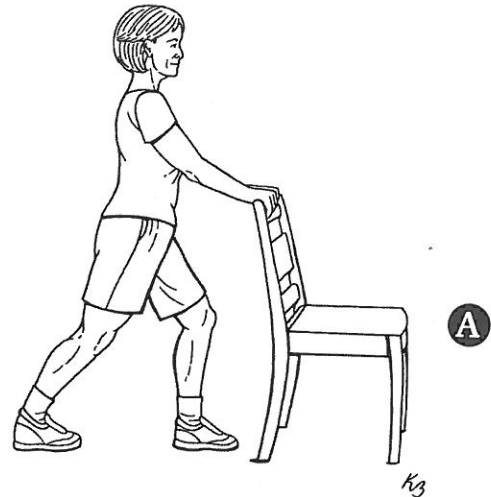


## 58. Calf Stretch (gastrocsoleus stretch)

Purpose: ROM, ADL – Walking

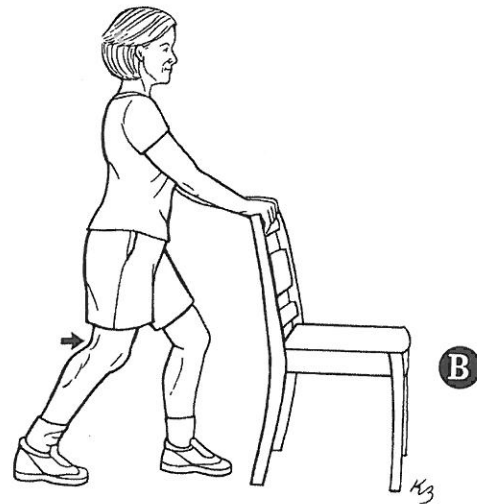
### VERSION A (GASTROC)

- Stand straight, holding on to back of chair.
- Put one leg behind you, keeping heel on floor.
- Bend front knee toward chair, keeping knee above ankle. (You will feel the stretch in the calf of the leg in back.)
- Hold 10-20 seconds.



### VERSION B (SOLEUS)

- Do Version A, but then slightly bend back leg before you stretch.
- Hold 10-20 seconds.



### PRECAUTIONS

- Balance

TOE

## TOE EXERCISES

### 59. Toe Bend and Lift (toe flexion/extension)

Purpose: ROM, Strength, ADL – Walking (helps arch support)

- Sit or stand.
- Curl toes down.
- Hold 3 seconds.
- Lift toes up.
- Hold 3 seconds.
- Variations: Gather a towel with your toes or pick up marbles with your toes.



Note: illustration shows bare feet to indicate movement, but exercise is done in shoes.

### PRECAUTIONS

- Toe joint surgery, Muscle cramp