

# AEA Arthritis Exercise Guide



**AEA**  
Aquatic Exercise Association

 **Arthritis  
Foundation**<sup>SM</sup>

**AEA Arthritis Exercise Guide.** The works of this guide are adapted from AEA Arthritis Foundation Program Leader: A Training Guide for Exercise & Aquatic Programming.

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Exercise Notice. This guide is not intended as a substitute for the medical advice of your physician or other medical professionals. The reader should regularly consult his/her physician regarding health, wellness and exercise, especially in regards to any symptoms that may required diagnosis or medical attention. Please progress gradually and exercise with caution. The Aquatic Exercise Association is not responsible for injuries resulting from the use of this guide.

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## EXERCISE AND YOU

Exercise is an important part of a healthy lifestyle. Staying physically active is one of the best things that you can do if you are living with arthritis, a related rheumatic disease, or a musculoskeletal condition. The benefits of the Arthritis Foundation Exercise Program have been documented through several research studies and include the following:

- Reduced levels of pain, stiffness and fatigue.
- Improved strength, balance, flexibility and body composition.
- Improved ability to function independently in activities of daily living.
- Decreased levels of depression.

This booklet is designed to help you make exercise part of your daily routine by sharing 15 key exercises that target various joints of the body plus two easy-to-follow routines. If you are already taking an Arthritis Foundation Exercise Program class, these exercises are some of the same ones that your Program Leader teaches, so you will be familiar with them.

## EXERCISE PRECAUTIONS

When exercising, always follow the recommendations, limitations and guidelines provided by your health care provider. Note that the exercises included here do not replace any therapeutic exercise program prescribed by your health care provider. Please pay attention the following exercise precautions. NOTE: Re-evaluating an exercise may include correcting alignment, adjusting body stance, changing hand or arm positioning, eliminating resistance equipment or adding supportive equipment, and altering movement speed.

- **Arm, Wrist or Hand Pain.** Stop an exercise if it increases pain in the arm, wrist or hand. Re-evaluate the exercise; discontinue the exercise if the condition persists.
- **Back Pain.** Stop an exercise if it increases back pain or causes leg pain, numbness or a tingling sensation. Re-evaluate the exercise; discontinue the exercise if the condition persists.
- **Balance.** If you feel unsteady while performing an exercise, hold onto a stable object, such as a chair or the wall.
- **Dizziness.** Stop an exercise if you begin to feel dizzy. If a balance issue causes the dizziness, stop exercising and focus on an object at eye level. Discontinue the exercise if the condition persists.
- **Joint Surgery/Joint Replacement.** If you have had joint surgery, consult with your doctor or surgeon prior to performing exercise.
- **Knee Pain.** Stop an exercise if it increases knee pain. Re-evaluate the exercise; discontinue the exercise if the condition persists.
- **Muscle Cramps.** Stop an exercise if it causes a muscle cramp. Gently stretch the muscle if the cramp does not stop immediately.

## EXERCISE PRECAUTIONS (CONTINUED)

- **Neck Pain.** Stop an exercise if it causes neck, arm or hand pain, numbness or a tingling sensation. Re-evaluate the exercise; discontinue the exercise if the condition persists.
- **Numbness.** Stop an exercise if it causes any numbness or tingling. Re-evaluate the exercise; discontinue the exercise if the condition persists.
- **Osteoporosis.** If you have osteoporosis or a compression fracture of the spine, consult with your healthcare professional before performing exercises and movements that involve forward bending, side bending or trunk rotation.
- **Shoulder Pain or Impingement.** Stop an exercise if it causes pain in the shoulder or numbness or tingling in the arm. Re-evaluate the exercise; discontinue the exercise if the condition persists.

## EXERCISE TIPS

The following tips will provide additional guidance to help ensure that your personal exercise routine is safe, effective and enjoyable:

### LISTEN TO YOUR HEALTHCARE PROVIDER

- Everyone has a different pain-free range of motion and different abilities. Only perform exercises that you are comfortable performing and in your pain-free range of motion.
- The exercises in this booklet do not replace exercises prescribed by your healthcare provider. Continue with prescribed treatments including medication, rest, joint protection, heat and/or cold treatments, etc.
- Do not perform any movements you've been told to avoid by your healthcare provider.
- Only your healthcare provider should perform assisted exercises/movements.

### LISTEN TO YOUR BODY - PAIN IS A WARNING

- Remember the Two-Hour Pain Rule. Some muscle soreness is a normal response to exercise; if you develop joint pain that lasts for two hours or more after exercising, reduce exercise intensity and/or duration during the next class.
- If pain suddenly gets worse during an exercise, stop the exercise.
- Normal reactions to exercise include increased breathing and heart rate, some sweating, and mild muscle aches. Stop exercising immediately if you experience chest pain, severe shortness of breath, dizziness or nausea.
- Other unhealthy reactions and signs of overexertion include excessive pain, fatigue, increased weakness and joint swelling.
- If you have an inflamed joint (one that is hot, red, swollen and painful), gently move it only through a pain-free range of motion.

## EXERCISE TIPS (CONTINUED)

### MOVE SLOWLY & GENTLY AT YOUR OWN PACE

- Move your joints to the point where you feel a gentle stretch.
- Avoid moving in a range of motion that causes more pain than you usually experience.
- Give your muscles time to relax between each repetition.
- Avoid quick, jerky movements. It is more important to try to reach your joint's full range of motion than it is to increase the speed of the movement.
- Begin slowly with just a few repetitions of each exercise and gradually add more repetitions.
- Remember that many people with arthritis have ups and downs, so setbacks may occur. An exercise done easily one day may be too hard the next. Avoid becoming discouraged or stopping - just cut back and do what you can.
- If you notice a big change in what you can do, contact your healthcare provider.

### COMBINE BREATHING WITH EXERCISING

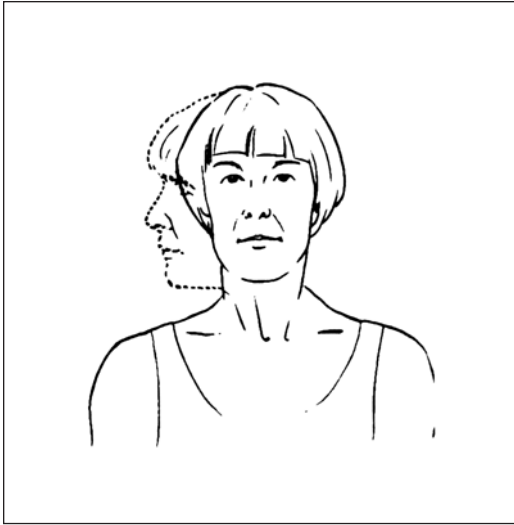
- Breathing correctly will help reduce the risk of holding the breath and decrease muscle fatigue.
- Exhale on the exertion phase of each exercise and inhale as the movement returns to neutral.
- Counting out loud will help you avoid holding your breath by making you exhale to count.

## EXERCISES

The following are some of the exercises included in the Arthritis Foundation Exercise Program. Each exercise is named for easy reference and includes a diagram and written directions for performing the movement. In the exercise diagrams, the solid line shows the start position and a dotted line or an arrow shows the movement. Progressions, variations and specific cautions are included for some exercises.

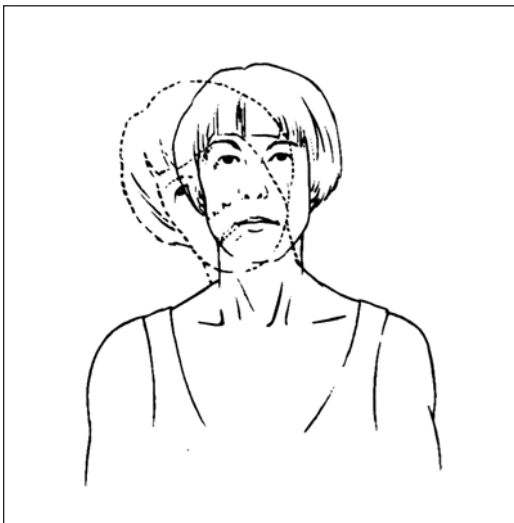
Each of these selected exercises can be performed while sitting or standing. Below is a general starting position for standing or seated exercises. Be sure to return to the start position and repeat the exercise on the opposite side, or in opposite direction, as appropriate.

- Chin in.
- Chest up.
- Shoulders back, down and relaxed.
- Arms relaxed at sides (or in lap if sitting).
- Abdominals tight, but breathing normally.
- Tall spine maintaining the normal curves of the back.
- Feet on the floor, if sitting.
- Knees soft (slightly bent, not locked) if standing.



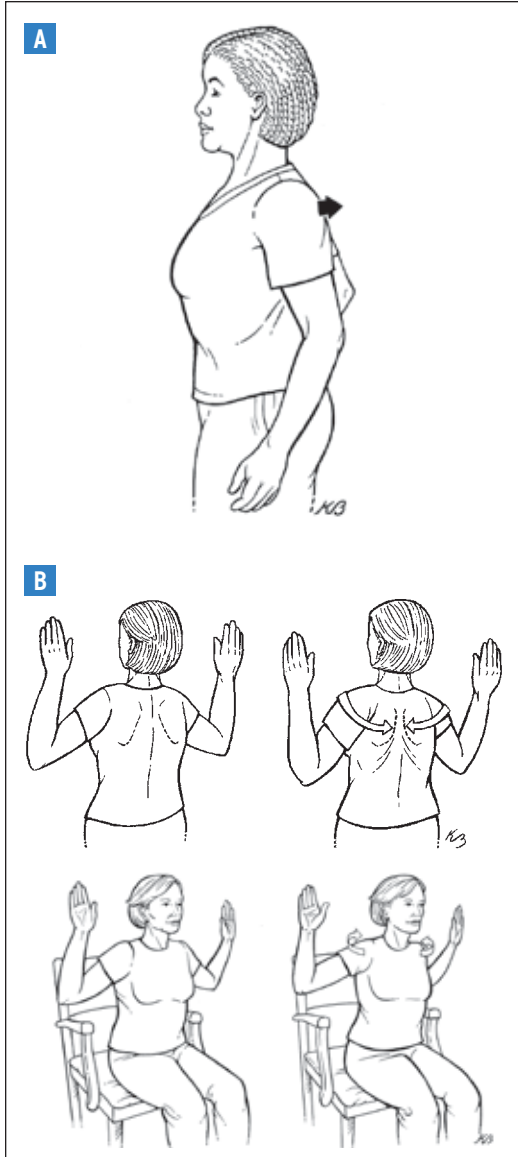
### HEAD TURN

- Turn head to side as if to look over shoulder.
- Return to center start position and pause before turning to other side.
- TIP: Cue left, pause, center, pause, right, pause, center, pause.
- CAUTION: Do not raise shoulders to ears during movement.



### SIDE NECK BEND

- Tilt head sideways towards shoulder until you feel a gentle stretch.
- Pause, and then return to start position.
- Pause, then tilt head to opposite side.
- CAUTION: Do not lift shoulder to ear during movement.



## SHOULDER BLADE SQUEEZE

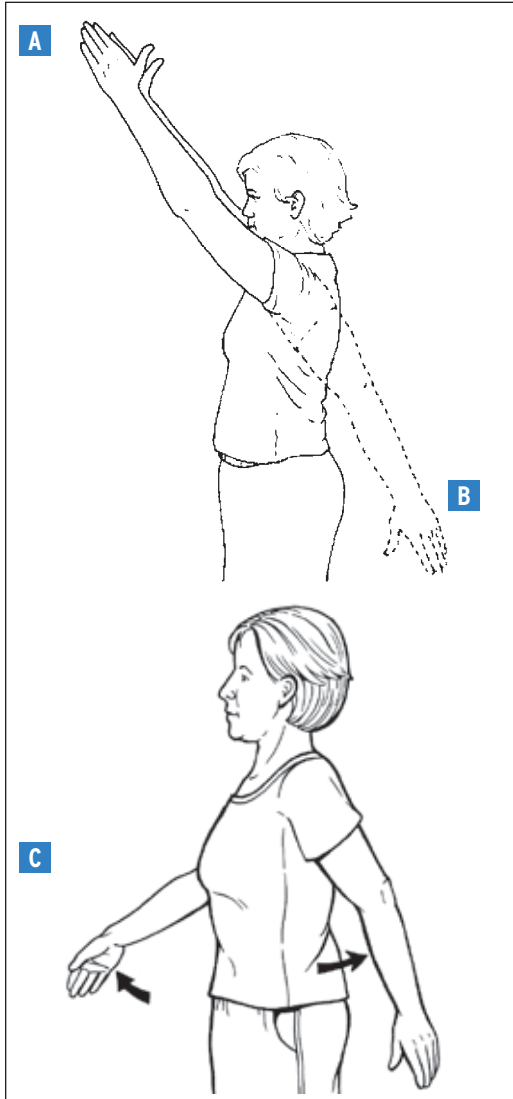
### VARIATION A

- With arms at sides, pull shoulder blades down, back and toward each other.
- Return to starting position and relax.

### VARIATION B

- Place arms in a "W" position with shoulders relaxed.
- Move elbows back, bringing shoulder blades together.
- Relax.





## FORWARD ARM REACH

### VARIATION A

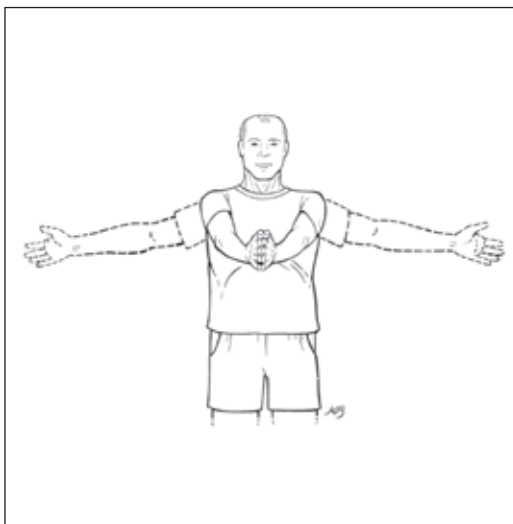
- Position arms out front, palms facing one another.
- Raise one or both arms forward and up as high as possible (one arm may help the other, if needed).
- Lower slowly.

### VARIATION B

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

### VARIATION C

- Alternate one arm forward and one arm behind.
- CAUTION: Avoid arching the back.



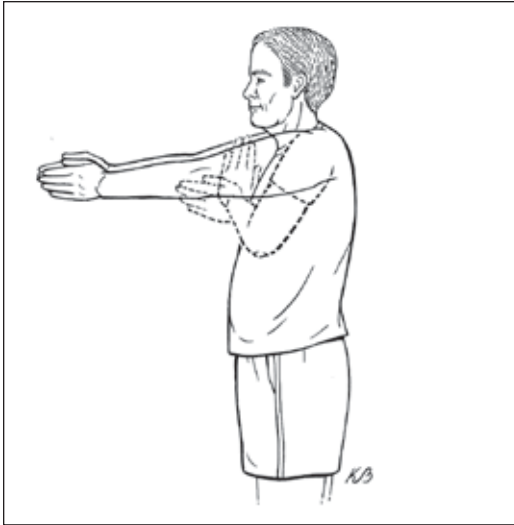
## SIDE ARM SWEEP

- Begin with long arms in front of body at shoulder level and palms together.
- Reach arms out to side, opening chest.

### VARIATION

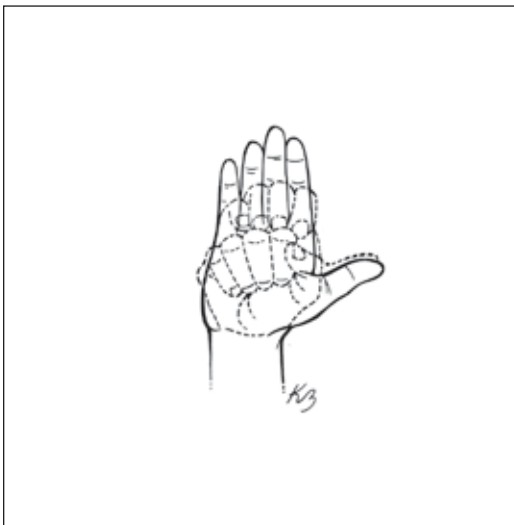
- Start with palms up with arms in front of body. Open arms and turn palms down. Return arms to front with palms down, and then turn palms up before repeating.





### **PRAYER ARMS**

- Bring arms in front of body with palms and fingers together.
- Keeping palms together, move hands toward chest by bending elbows (elbows will move out to side).
- Turn fingertips upward.
- Reverse movement by turning wrists to move fingertips away and straightening arms.



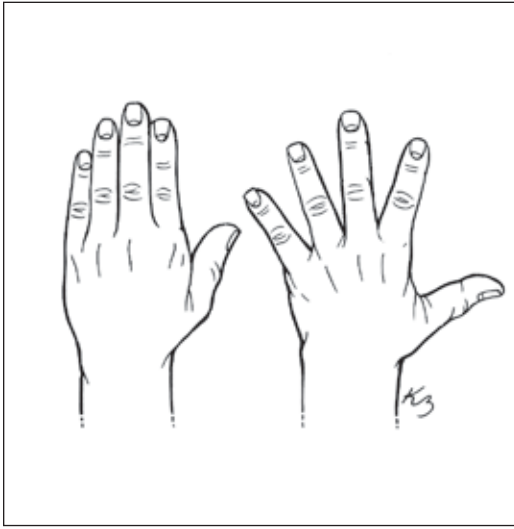
### **FINGER CURL**

#### **VARIATION A (ROM)**

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

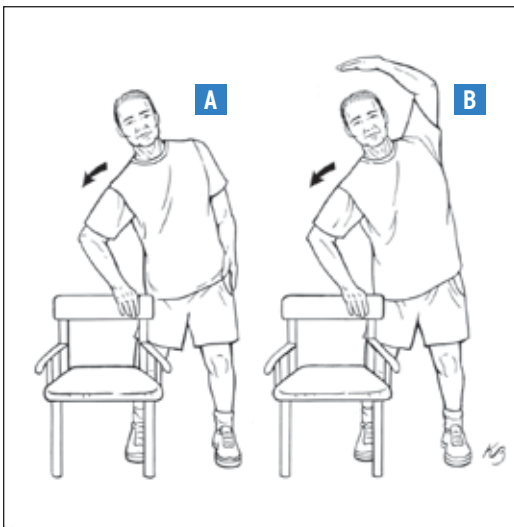
#### **VARIATION B (STRENGTH)**

- 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.



### FINGER SPREAD

- Spread fingers apart.
- Move fingers back together.
- Relax and repeat.



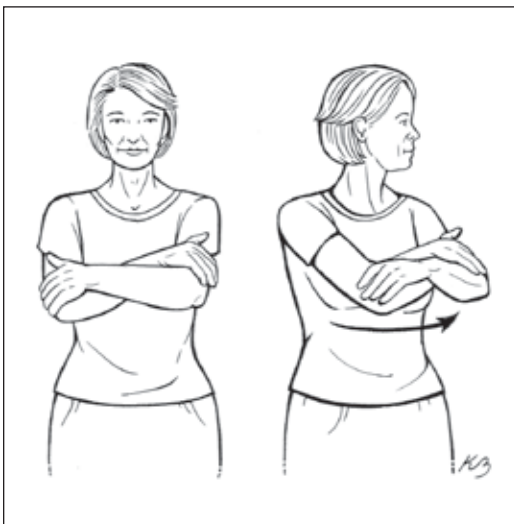
### SIDE TRUNK BEND

#### VARIATION 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.

#### VARIATION B

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



### TRUNK ROTATION

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



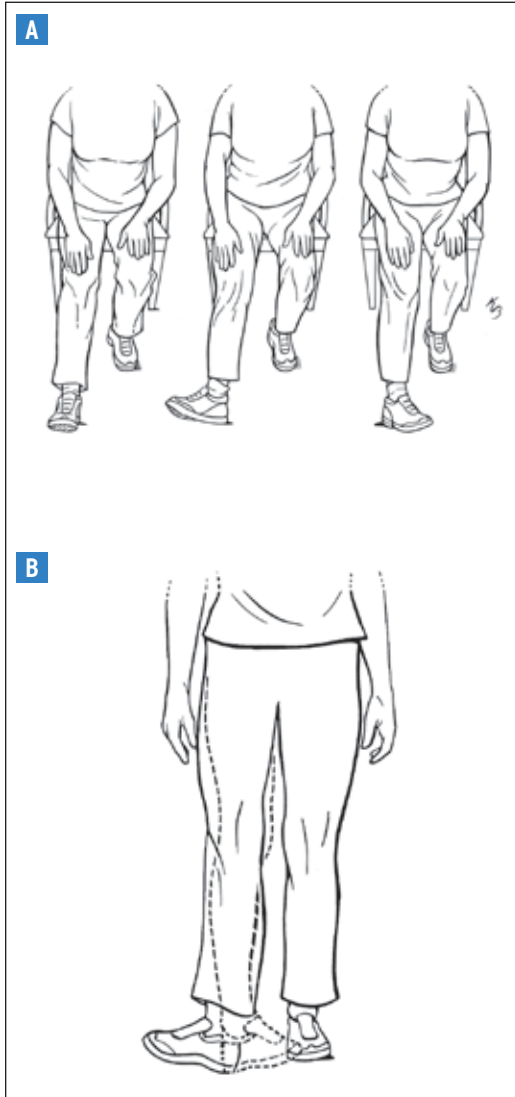
## MARCH

### VARIATION A

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

### VARIATION B

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



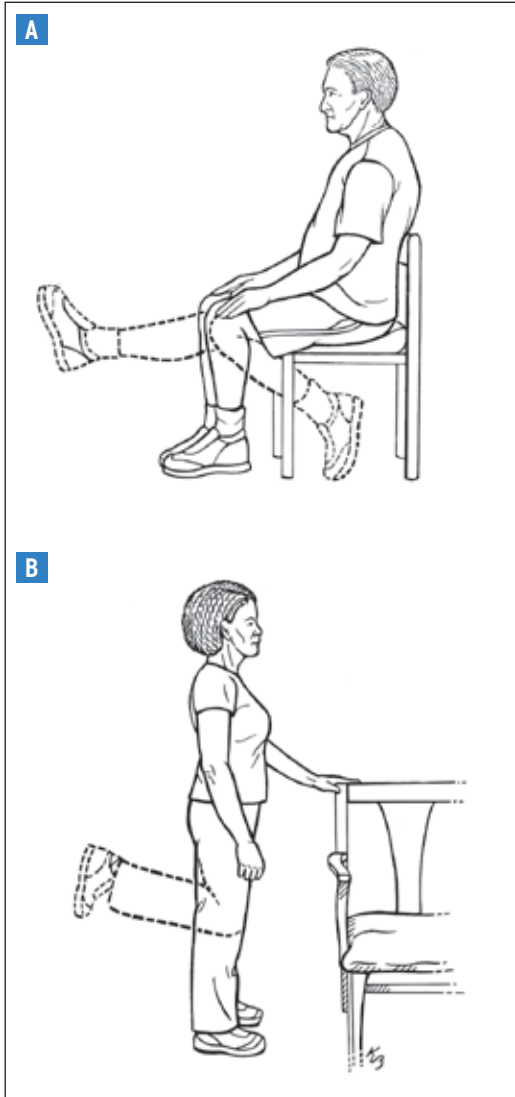
## HIP ROTATOR

### VARIATION A

- Sit with good posture.
- Extend one leg straight out, heel resting on floor.
- Roll leg outward and inward, rotating at hip.

### VARIATION 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).
- Roll leg outward and inward, rotating at hip.



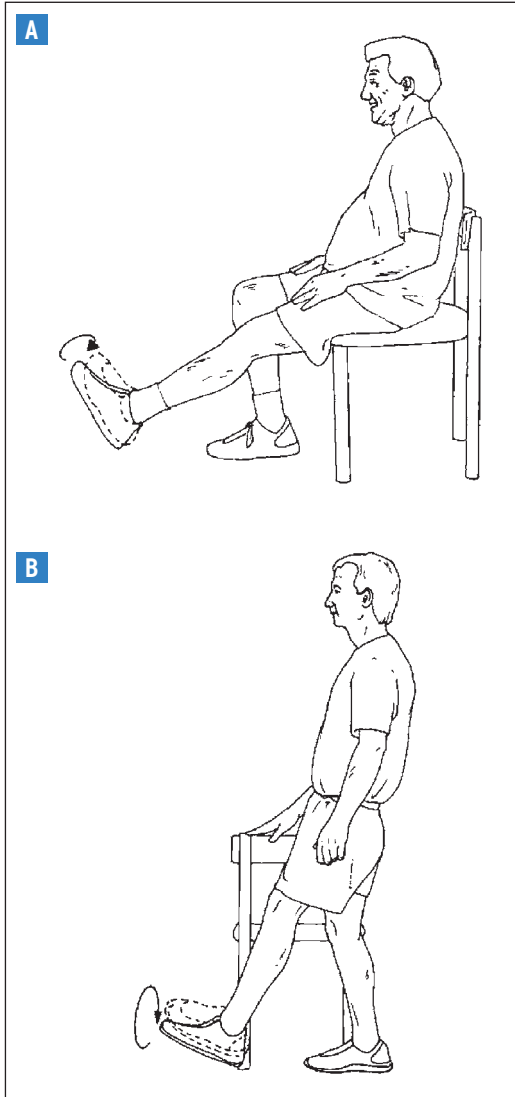
## KNEE BEND

### VARIATION A

- Sit up straight.
- Bend knee, moving heel under chair.
- Straighten knee out in front.

### VARIATION B

- Stand, holding on to chair.
- Bring heel of one leg up toward buttocks (keep knee pointing to floor).
- Lower foot to floor.



## ANKLE CIRCLE

### VARIATION A

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

### VARIATION B

- Stand with one leg in front of the other, foot off the floor.
- Move foot around in a slow, large circle (or draw letters of alphabet).
- Change directions.



## TOE CURL

- Sit or stand.
- Lift toes slightly off floor.
- Curl toes as if picking up a pencil or a marble.

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

## SAMPLE ROUTINES

Below are two sample routines that you can follow to make exercise part of your healthy, daily routine. Remember to perform only pain-free range of motion during all exercises and adjust the routine (leave out any exercises) as needed based upon your personal needs. FUN FACT: Listening to music while you exercise can make the activity more enjoyable and motivating.

Begin with 4 repetitions of each exercise. Gradually add 1-2 repetitions, as you feel comfortable, working up to 10 repetitions. Remember the Two-Hour Pain Rule - if you develop joint pain that lasts for two hours or more after exercising, reduce the number of repetitions the next day.

### **ROUTINE 1 HEAD TO TOE (SEATED OR STANDING)**

This sample routine starts at the head and moves down to the toes, which is the sequence in which the diagrams are shown. FUN FACT: To keep from getting bored, simply reverse the order and work from the toes to the head.

Head Turn  
Head Tilt  
Shoulder Blade Squeeze  
Forward Arm Reach  
Side Arm Sweep  
Prayer Arms  
Finger Curl  
Finger Spread  
Trunk Bend  
Trunk Rotation  
March  
Hip Rotator  
Knee Bend  
Ankle Circle  
Toe Curl

### **ROUTINE 2 MIX IT UP (SEATED OR STANDING)**

This sample routine includes all 15 exercises but mixes up the order performed. FUN FACT: Variety assists with motivation, exercise adherence and progression.

Shoulder Blade Squeeze  
Head Turn  
Trunk Rotation  
Hip Rotator  
Side Arm Sweep  
Finger Spread  
March  
Ankle Circle  
Forward Arm Reach  
Trunk Bend  
Prayer Arms  
Knee Bend  
Toe Curl  
Finger Curl  
Head Tilt



## CONTINUING YOUR EXERCISE PROGRAM

We hope you enjoyed this exercise guide. If you would like to learn more about maintaining a healthy, happy lifestyle through exercise, visit AEA's website at [www.aeawave.com](http://www.aeawave.com). This extended resource offers more information on the benefits of exercise and includes all of the Arthritis Foundation Exercise Program flexibility, range of motion and muscular strength & endurance exercises, plus 4 sample routines.

The Aquatic Exercise Association is a nonprofit educational organization committed to the advancement of aquatic fitness, health and wellness worldwide. AEA is proud to manage the Arthritis Foundation Exercise Program and the Arthritis Foundation Aquatic Program.

*Keep moving for health and wellness!*