

**CONSULTATION AND THERAPY
SERVICE**

HYDROTHERAPY PROGRAM

Arthritis Community Research and Evaluation Unit

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The impetus to develop the "ideal" hydrotherapy program for people with arthritis was generated by an ACREU initiative to evaluate the hydrotherapy programs of the Consultation and Therapy Service of The Arthritis Society.

Although the ACREU project was concerned with the evaluation of hydrotherapy in the management of osteoarthritis of the knee, it was determined that the content of the "ideal" program should include all body parts thereby offering benefit to people with any type of arthritis.

The final program was developed with input from therapists who conduct hydrotherapy programs and volunteers who lead The Arthritis Society Aquatics Program in several locations across the province. They must be acknowledged for their time and interest.

THE ARTHRITIS SOCIETY
CONSULTATION AND THERAPY SERVICES

HYDROTHERAPY PROGRAM

EXERCISE GUIDE

Guidelines and Precautions*

Include only the exercises listed in this "Exercise Guide" in your hydrotherapy class.

The length of the class is 40 minutes but may be increased to a maximum of 45 minutes.

The time guidelines for each component of the hydrotherapy program should be followed.

The instructor should not manually assist the participant to perform the exercises.

Participants should not do any exercise that causes or increases joint pain.

If participants experience increased pain that persists for more than 2 hours after the session, the subsequent number of repetitions for those exercises which caused the pain should be reduced. If pain continues the participant should consult the instructor, therapist or their physician about the advisability of continuing the exercises.

* modified from the Arthritis Foundation YMCA Aquatics Program guidelines,
based on the hydrotherapy workshop with therapists,
(11/94)

If participants have increased pain in a specific joint prior to the session they should perform only a few gentle repetitions of those exercises which involve that joint.

If participants have undergone surgery including total joint replacement, certain exercises may be contraindicated. Before entering the hydrotherapy program, participants are advised to contact their surgeon.

All exercises assume the participant is in the starting position.

Good posture should be encouraged for all exercises. The head and neck should be in a neutral position, with eyes forward, chin slightly tucked in, and slight tightening of the abdominal muscles.

Exercises should begin with 3 to 5 repetitions. In succeeding sessions the number of repetitions may increase gradually to 8 to 10 repetitions.

In the conditioning portion of the program the exercises may be timed in minutes instead of counting the number of repetitions.

Participants should work at their own pace. They should monitor their own exercises and perform only the number of repetitions that is comfortable for them.

The exercises should be performed slowly to achieve maximum range of motion. Motion should not be forced. After the participants reach their greatest range of motion the number of repetitions and speed of movement may be increased.

All exercises should be done with the moving part submerged to reduce water resistance.

Balance is improved when the participant holds on to the edge of the pool. This makes exercises for the lower extremity easier to perform.

If the pool is too small to permit walking across the pool, then walking on the spot may be included as an alternative.

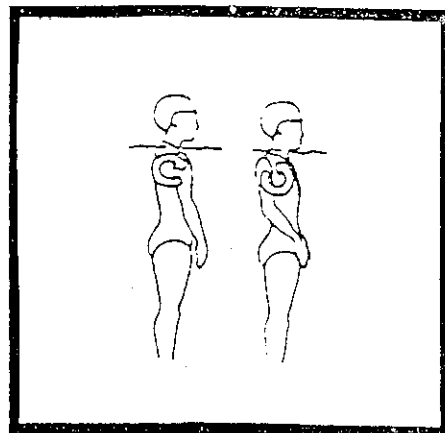
Neck exercises have been deliberately omitted from this program.

WARM UP

Recommended time: 5 minutes

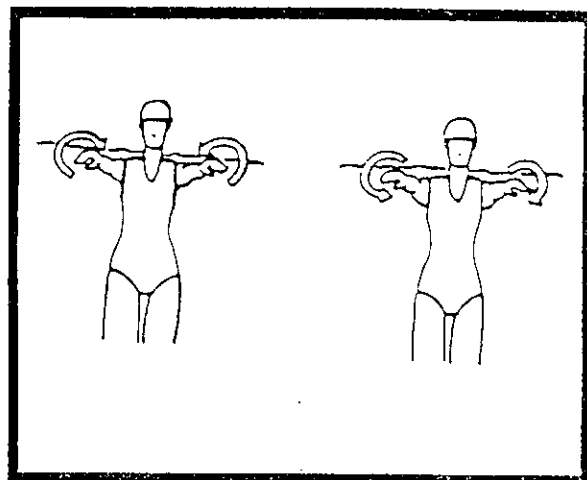
1. Shoulder Circles

- Hold arms at side
- Make circles with shoulders
- First forwards then backwards



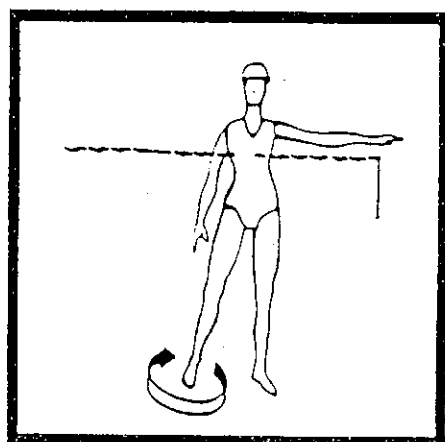
2. Arm Circles

- Raise arms in front of the body
- Keep elbows straight
- Keep arms under water
- Make small baseball size circles
- Increase until circles are the size of basketballs
- Gradually decrease circle size
- Make inward circles
- Make outward circles



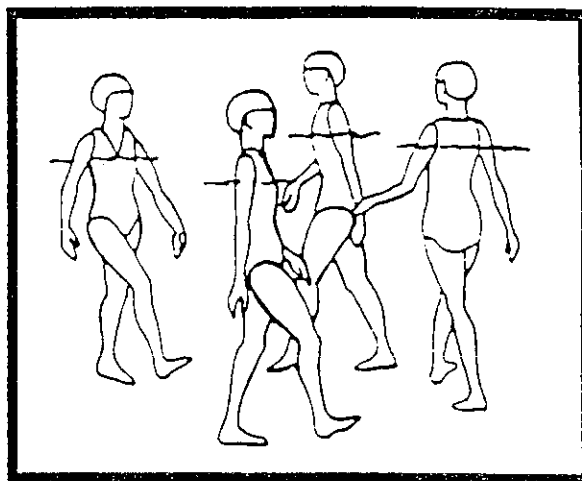
3. Leg Circles

- Stand with left side to pool wall
- Hold wall with left hand for balance
- Stand on left leg
- Make small inward circles with the right leg but avoid crossing over the left
- Make small outward circles with the right
- Turn right side to wall
- Repeat with left leg



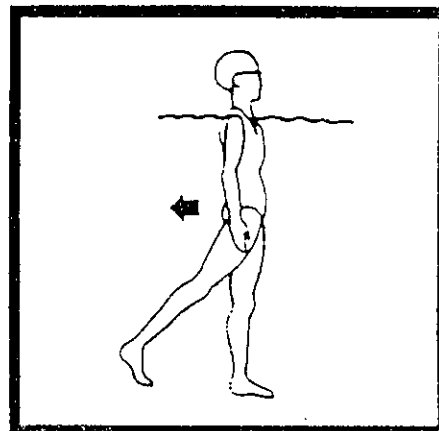
4. Walking Forward

- Walk normally across the pool or in a circle
- Swing arms while walking



5. Walking Backward

- Walk backwards
- Keep legs straight
- Keep body upright

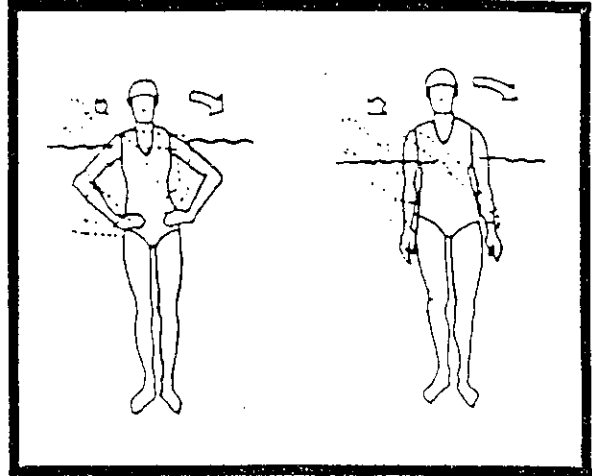


RANGE OF MOTION EXERCISES

Recommended time: 10 minutes

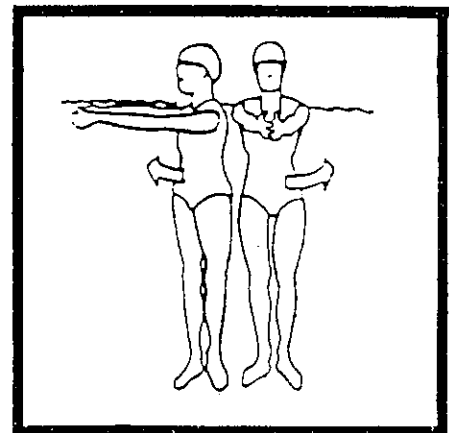
6. Trunk Sidebending

- Put hands on hips
- Keep feet in place
- Bend sideways to the right
- Return to upright position
- Bend sideways to the left
- Optional arm position:
Let right hand slide down right thigh when side bending to right
- Repeat on the left



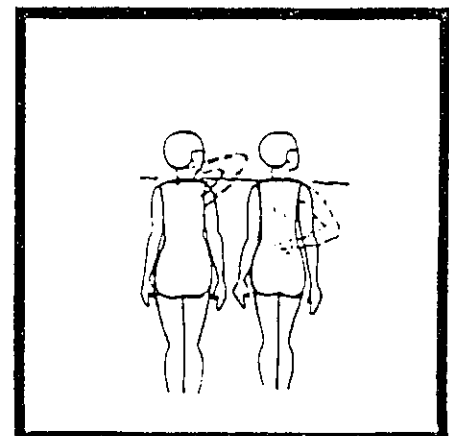
7. Trunk Twist

- Stand with feet apart and in place
- Hold hands clasped and extended in front
- Relax knees
- Slowly turn the body to the right
- Use hands to direct the turning motion
- Turn to left



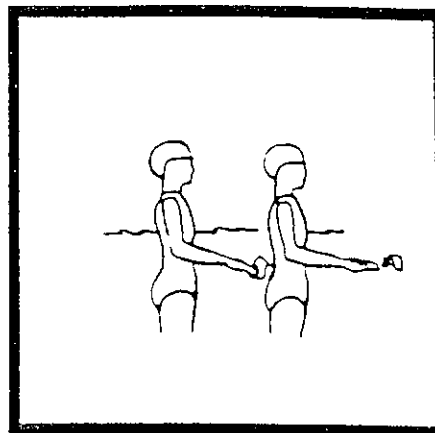
8. Back of Neck/Small of Back

- Place palm of the right hand on back of the neck
- Bring right hand down to the side
- Place back of the right hand against the small of the back
- Repeat with left hand



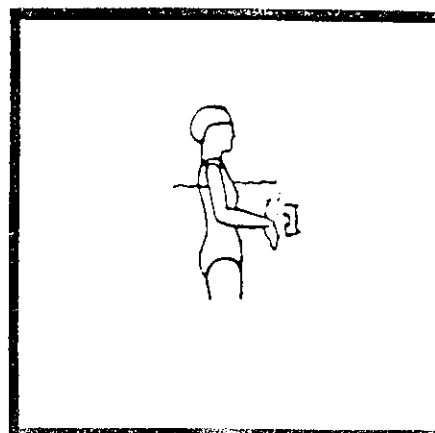
9. Palms Up and Down

- Hold elbows into the side of the body
- Arms are bent at 90 degree angle
- Turn palms toward the ceiling
- Turn palms over to face the bottom of the pool



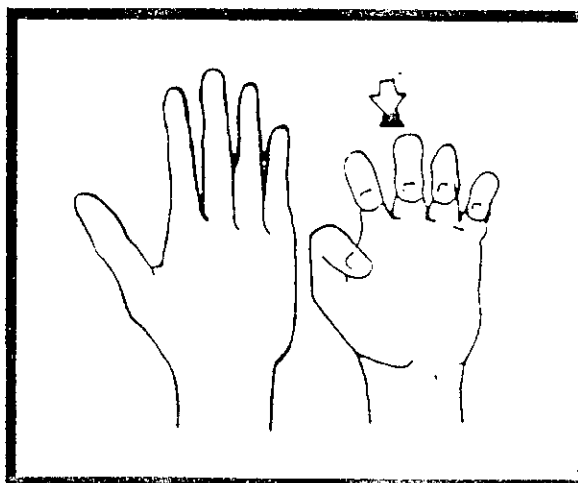
10. Wrist Backward and Forward

- Keep elbows tucked in at side
- Bend wrists backwards
- Bend wrists forward



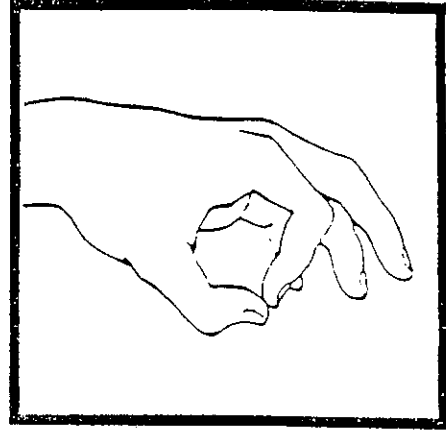
11. Finger Bends

- Keep knuckles straight
- Bend the fingers
- Stretch them straight to imitate a cat's clawing motion



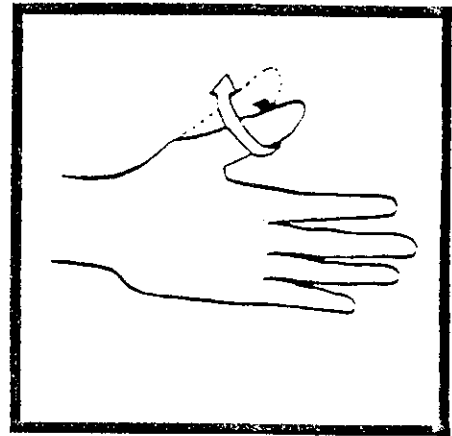
12. Finger "O"s

- Touch the tip of the left thumb to the tip of the index finger to form an "O"
- Repeat with each finger in turn
- Do with right thumb



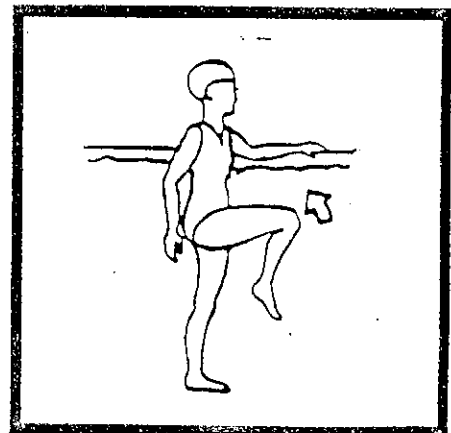
13. Thumb Circles

- Make a large circle with the thumb
- Move in one direction then the other



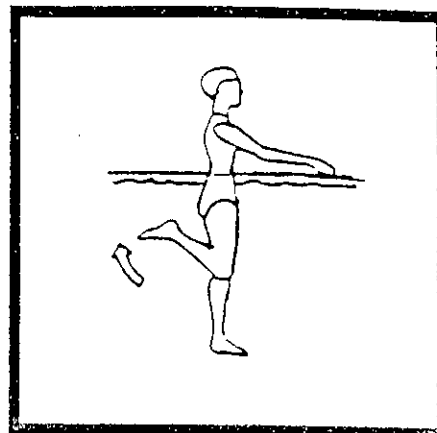
14. Bend Knee/Swing Thigh

- Stand with left side to wall
 - Hold on with left hand
 - Bend right knee towards chest
 - Turn to right side
 - Repeat with left knee
- CAUTION: hip joint replacement,
avoid bending hip more than 90 degrees



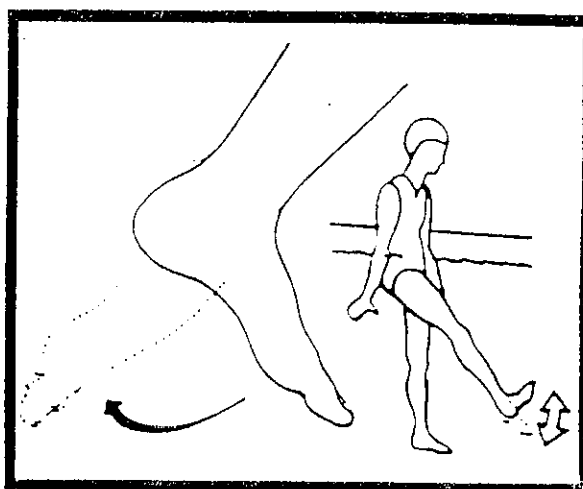
15. Heel to Buttock

- Stand facing wall
- Hold on for balance
- Keep knees together
- Bring right heel to buttock
- Repeat by bending left knee



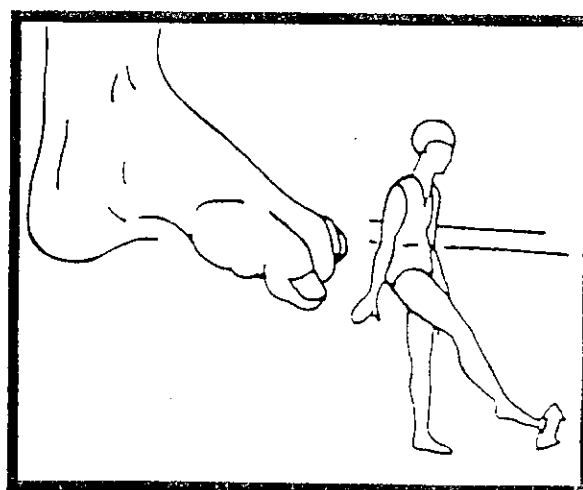
16. Ankle Up/Down

- Stand with back against pool wall
- Put weight on left foot
- Point right foot up then down
- Repeat with left foot



17. Toe Curls

- Stand with back against wall
- Put weight on left foot
- Curl right toes down
- Stretch right toes out
- Repeat with left foot

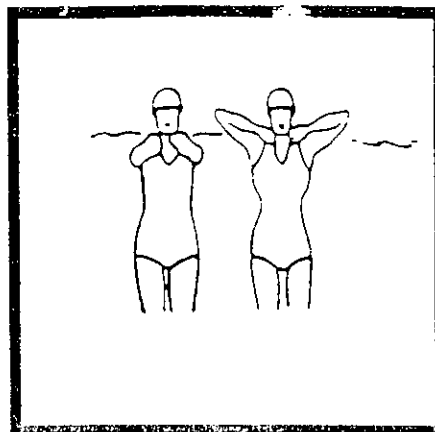


STRENGTHENING EXERCISES

Recommended time: 10 minutes

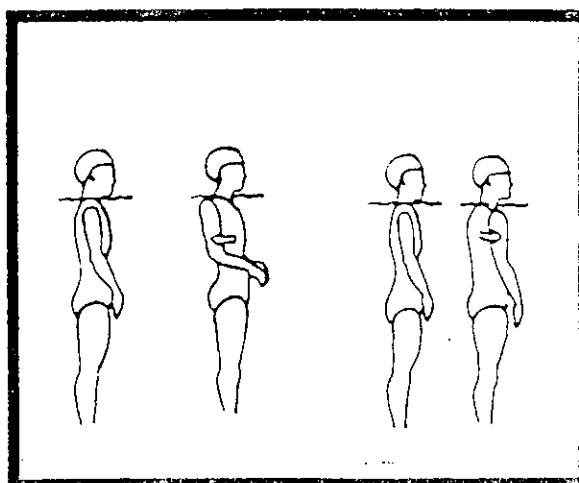
18. Hands Behind Head

- Place hands gently behind neck
- Bring both elbows back while taking a deep breath
- Exhale slowly bringing the elbows together



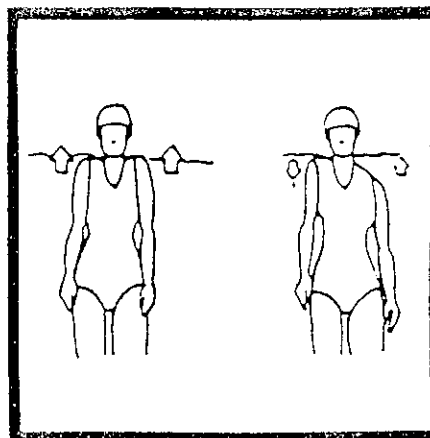
19. Pinch/Curl Shoulder Blades

- Pinch shoulder blades together
- Relax
- Roll shoulders forward to round out the back



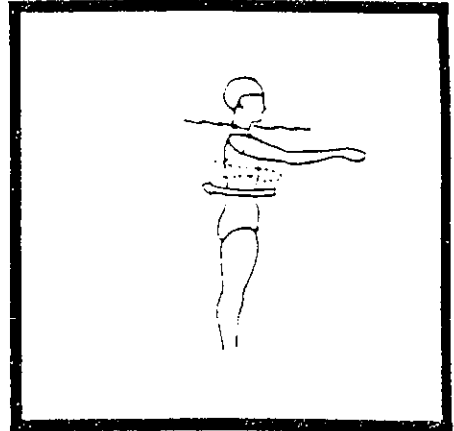
20. Shoulder Shrugs

- Shrug both shoulders by lifting them toward earlobes
- Relax
- Lift one shoulder at a time



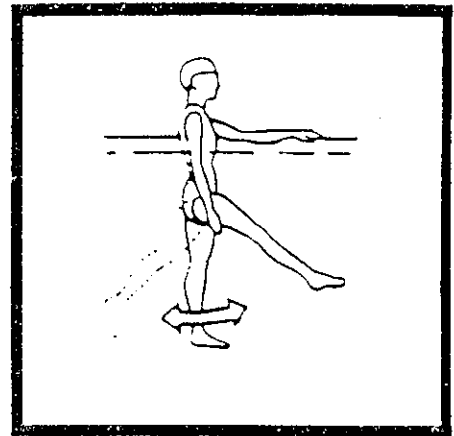
21. Reach and Bend

- Raise both arms out in front of the body at shoulder level just under the water
- Bend elbows back behind the body
- Keep arms parallel with the water surface
- Pinch shoulder blades together
- Relax



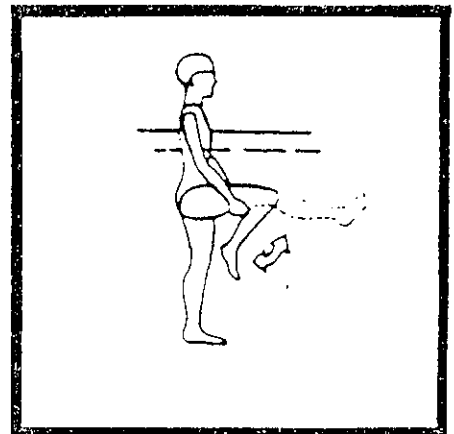
22. Leg Swings

- Stand with left side to pool wall
- Hold wall with left hand for balance
- Keep knees straight
- Lift right leg forward slowly to a comfortable height
- Hold right knee straight for a count of 5
- Slowly swing right leg backward while keeping the knee straight
- Stand with right side to pool wall
- Repeat with left leg



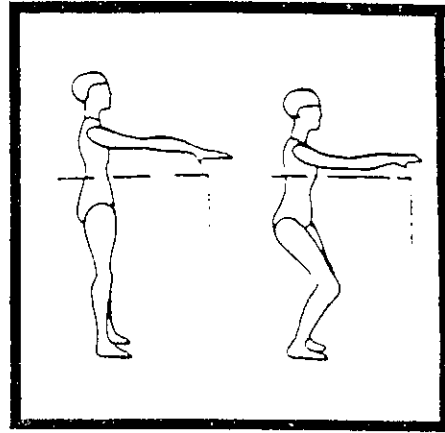
23. Bend & Straighten Knee

- Stand with left side to pool wall
- Hold with left hand for balance
- Bend right knee until the thigh is parallel to the water surface
- Straighten the right knee
- Bend right knee again
- Lower the right knee while keeping the knee bent
- Repeat with left leg



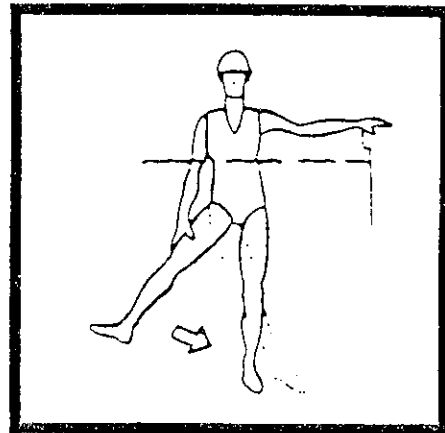
24. Knee Bends

- Stand facing the pool wall
- Hold the wall for balance
- Feet are a few inches apart
- Squat down as far as possible
- Push up straight using the legs not the hands



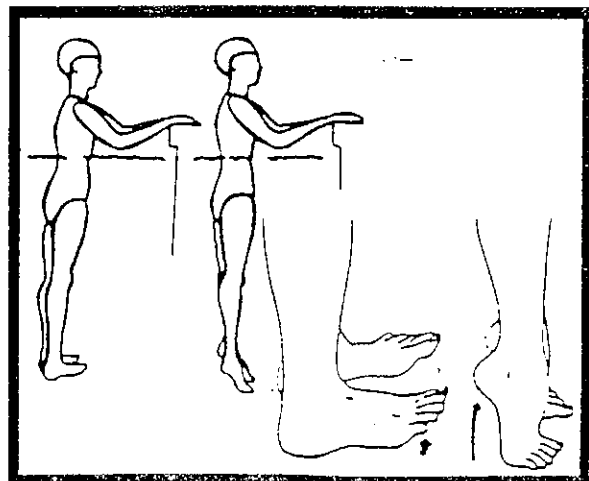
25. Leg Sweeps

- Stand with left side to wall
 - Hold wall with left hand for balance
 - Relax knees
 - Swing right leg out toward centre of pool
 - Swing back toward wall crossing in front of left leg
 - Turn right side to wall
 - Repeat with left leg
- CAUTION: hip joint replacement, avoid crossing supporting leg



26. Heels and Toes

- Stand facing wall
 - Hold on to the wall for balance
 - Lift toes off bottom
 - Stand on heels to a count of 5
 - Relax
 - Raise up on balls of feet
 - Hold position for a count of 5
 - Relax
 - Optional method: Omit the count
- CAUTION: foot deformities, omit raising on balls of feet if uncomfortable

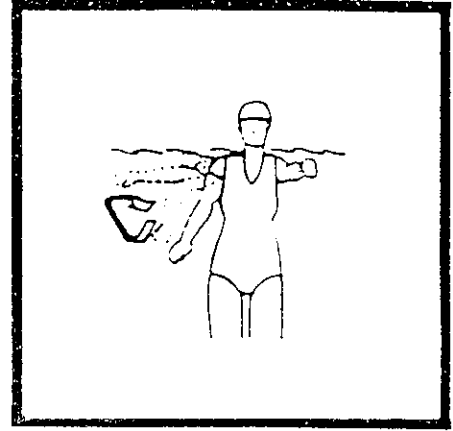


CONDITIONING EXERCISES

Recommended time: 10 minutes
This may be increased to 15 minutes.

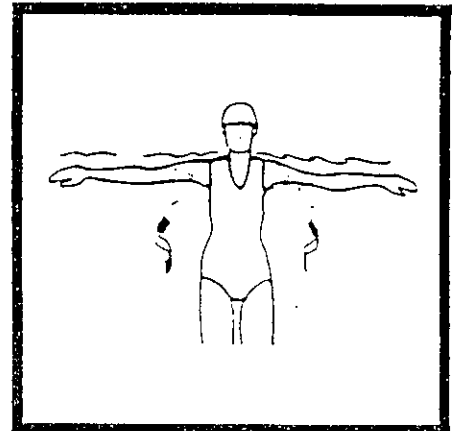
27. Crawl Stroke

- Do the front crawl standing in place
- Keep arms and shoulders underwater
- Increase speed as able



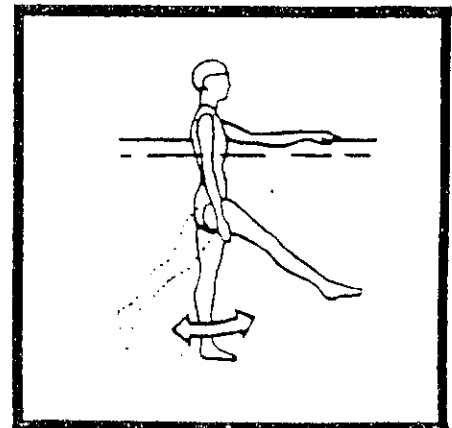
28. Breast Stroke

- Do the breast stroke standing in place
- Keep arms and shoulders underwater
- Bring arms back as far as possible
- Increase speed as able



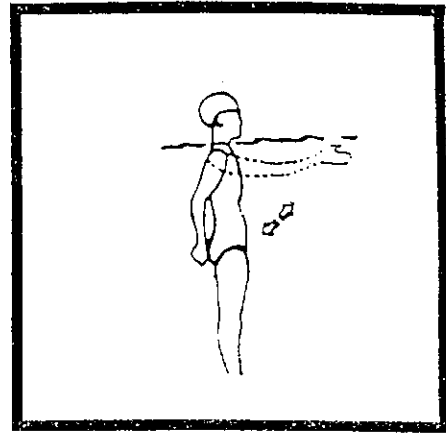
29. Leg Swing

- Stand on your left leg
- Pull your right toes up so they clear the bottom of the pool
- Keep your right knee straight
- Swing your right leg forward and backward
- Repeat by swinging left leg



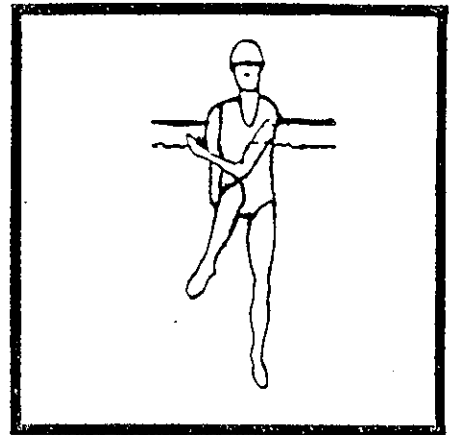
30. Hand Clap

- Raise arms out to the side of the body at shoulder level
- Keep arms and shoulders underwater
- Bring the arms forward to clap the hands
- Bring the arms behind the body to try to clap the hands together
- Increase speed as able



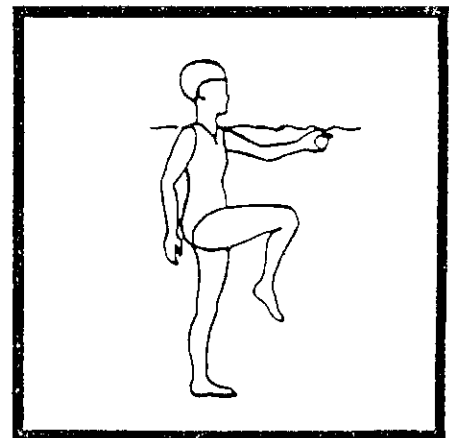
31. Tummy Tucks

- Stand with back against wall
- Bend left elbow
- Bend right knee
- Touch the bent elbow and knee together
- Return to starting position
- Repeat by bending right elbow and left knee and touching them together
- Increase speed as able



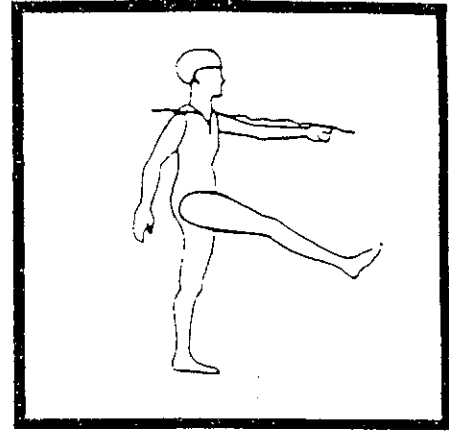
32. Marching High Knee

- March across or around the pool
- Take a higher step
- Raise the knees
- Exaggerate the arm swing
- Keep the arms under the water



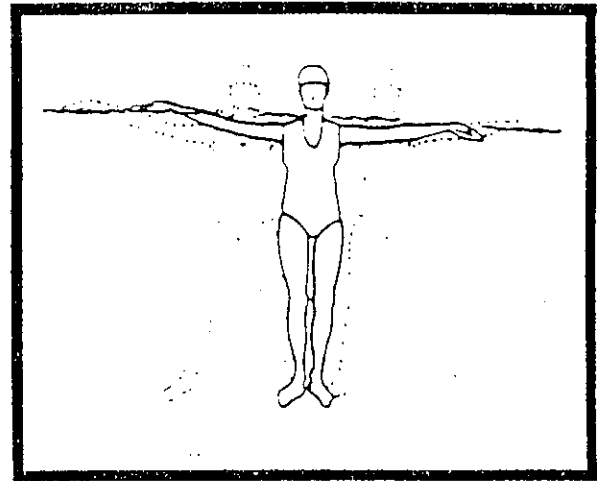
33. Stilt Knee Walk

- March across the pool
- Keep the knees straight
- Use reciprocal arm swing



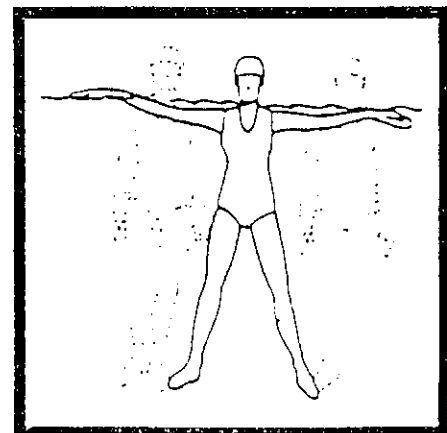
34. Sideways Walk

- Sidestep across pool
- Keep arms stretched out to side
- Optional position:
 Hold on to edge of pool



35. Sidestep with Arms

- Sidestep across the pool
- Stretch arms out to the side
 just below water level when stepping
- Drop arms to side of body
 when feet come together
- Repeat in both directions
- Optional position:
 Hang on to side of pool while
 walking

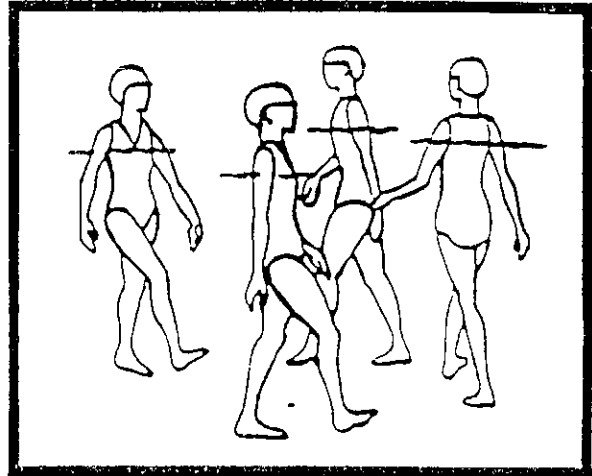


COOL DOWN

Recommended time: 5 minutes (not less!)

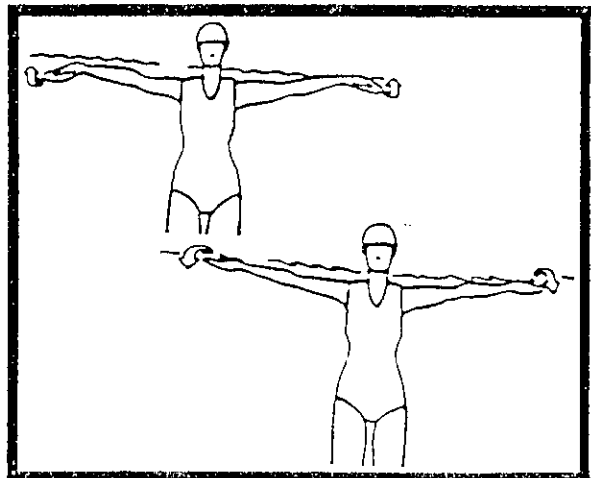
36. Walking

- Walk normally across the pool or in a circle
- Swing arms while walking
- Gradually slow the pace down



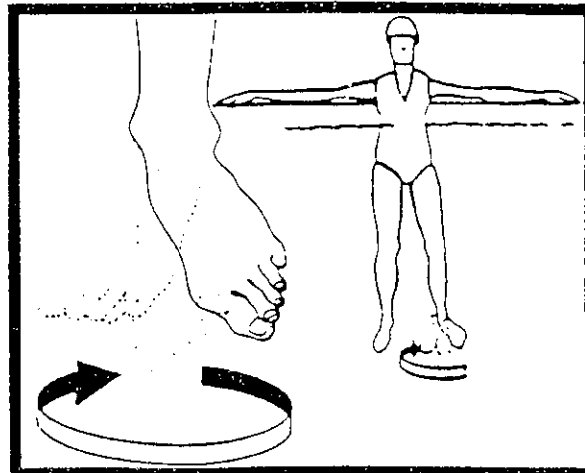
37. Arm Circles to Side

- Bring arms to the side of the body just under water level
- Make small then large circles
- Decrease circle size
- Do in one direction then the other
- Optional position: palms up



38. Ankle Circles

- Stand with back against wall
- Put weight on left foot
- Make large inward circles with right foot
- Make large outward circles
- Repeat with left foot



39. Single Leg Stretch

- Stand with left side to wall
- Hold wall with left hand for balance
- Stand straight with legs slightly apart
- Left leg forward of right
- Keep body straight and lean forward
- Let the left knee bend
- Keep the right knee straight
- Keep heels on bottom
- Hold the position for a count of 5
- Return to standing position
- Place right side to pool wall
- Place right leg forward
- Repeat the stretch

