

IMG PHYSICAL THERAPY

805 N. Richmond St., Suite 103 Fleetwood, PA 19522 610-944-8140

Chris Gordos, DPT Center Manager

Eric Parrish, MPT Staff Therapist

Aquatic Therapy Home Exercise Sheet

Aquatic therapy are therapeutic exercises that takes place in water. It may be beneficial in increasing strength, flexibility, and muscular / cardiovascular endurance in people that are unable to tolerate land based exercises. Exercising in the water makes the body feel lighter , thus decreasing the forces on the joints that are submerged in the water. The more of your body that is in the water, the lighter you will feel.

When you are exercising on your own at home there are some things to remember....

- **Never exercise in the pool if:** you are by yourself, have open wounds, have a history of uncontrolled seizures, had radiation treatments in the last 3 months, or have severe kidney disease.
- Patients who have multiple sclerosis (MS), Myasthenia Gravis (MG), or any other auto-immune disease should exercise in water temperature below 83 degrees. Patients who have osteoarthritis will often prefer a warmer temperature to exercise in.
- Any exercise that causes pain, especially sharp knife like pain, is hindering the healing process, and should be modified or discontinued until you notify your therapist.
- Increased swelling after exercise indicates that the exercise may be too difficult or it is not being done correctly. Be sure to ice that area of swelling and use a compression wrap as needed.
- Re-injuries during the rehabilitation process will slow your progress. If you get recurring pain either lower the resistance; lower the number of sets or repetitions; or reduce the range of motion to avoid the area of pain.
- You should experience muscle soreness, dull ache, fatigue ,and stretching sensations, but the exercises should not increase the pain or swelling.
- When in doubt about how much weight/resistance to use for exercises, guess low. It is safer and easier to add weight than to hurt yourself with too much weight.
- Consult your Physician or Physical Therapist at IMGPT if any problems arise or if you have any questions regarding an exercise. It is better to make sure that you are doing an exercise correctly than to cause further injury by doing an exercise incorrectly.

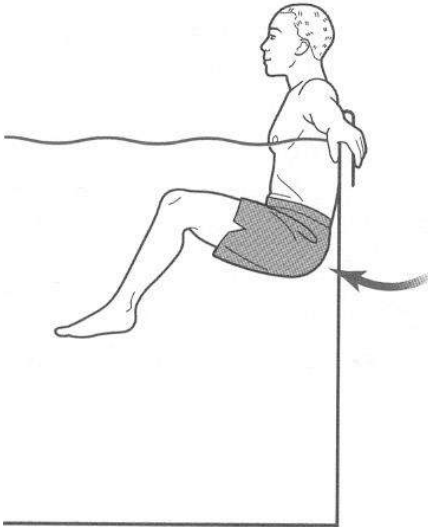
These exercises are to be done 3-5 times per week.

**Stretch for 3 repetitions holding 30 seconds each time.

**Strengthening exercise are 2 sets of 15. Buildup to this goal.

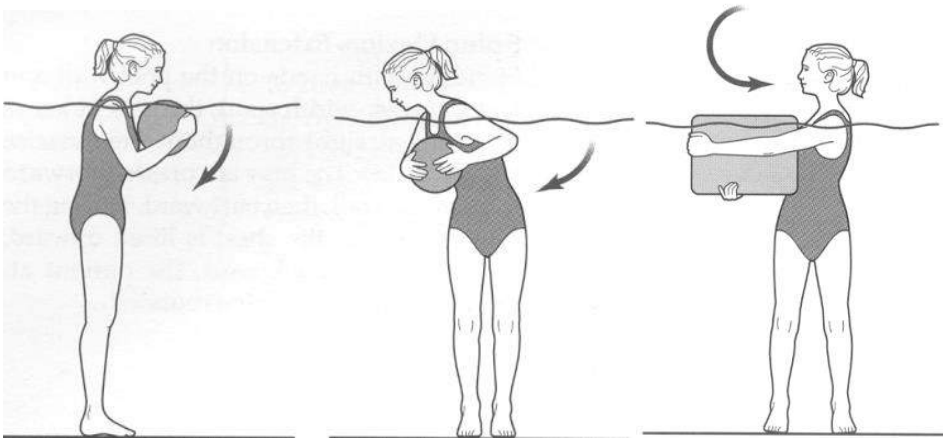
Exercises for the Spine

Pelvic Roll



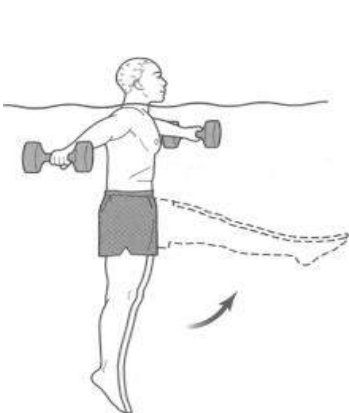
With your knees and hips bent, roll your pelvis to flatten out your low back. This is equal to the posterior pelvic tilts performed in therapy. This can be done by holding onto the side of the pool as shown or with a pool noodle to hold your head above water. Hold for 10 seconds. Repeat 10x

Standing crunch/trunk rotation (SHALLOW)



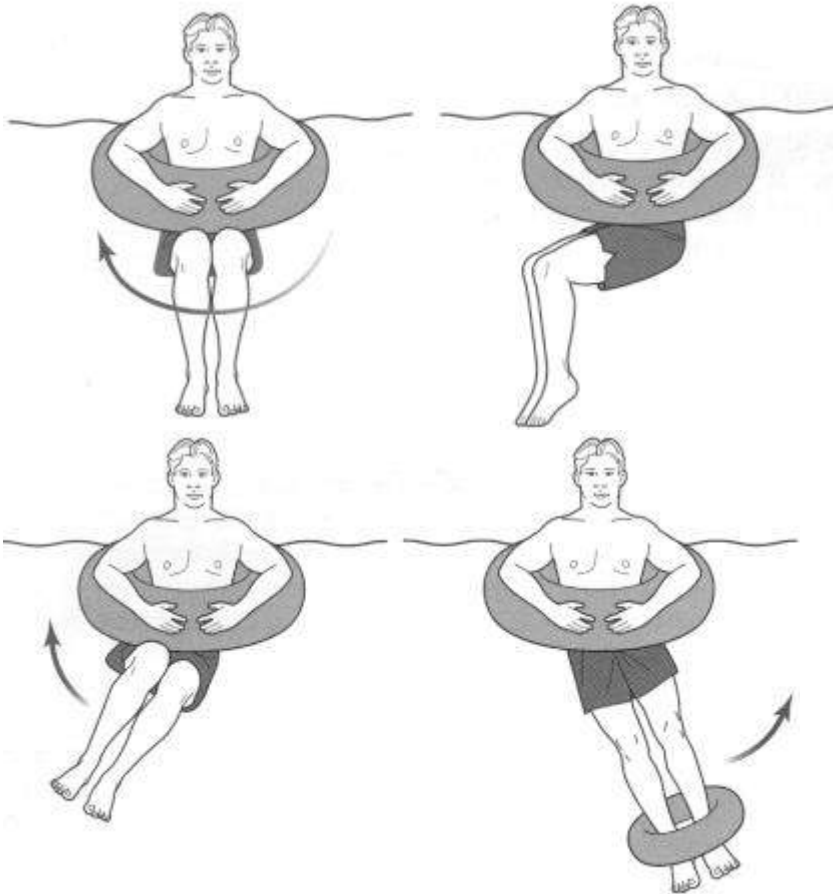
For this exercise you can hold a ball or other object in your hands. A ball that floats works best to add resistance. This is done in standing. Perform 2 sets of 15 repetitions for each exercise.

Straight leg raises (DEEP)



Use pool dumbbells or a pool noodle for flotation, kick one leg out, return to the start position, kick the other leg out, and repeat. Perform 2 sets of 15 repetitions of each leg. To progress the exercise you can raise both legs at the same time.

Trunk Rotations (DEEP)



Use a pool noodle or other floatation device to perform the exercises seen in the picture. These include rotating the hips from left to right, and lifting the legs right and left without rotating the hips. Perform 2 sets of 15 repetitions. The last image shows a way to progress the exercise.

Aerobic recommendations

SHALLOW

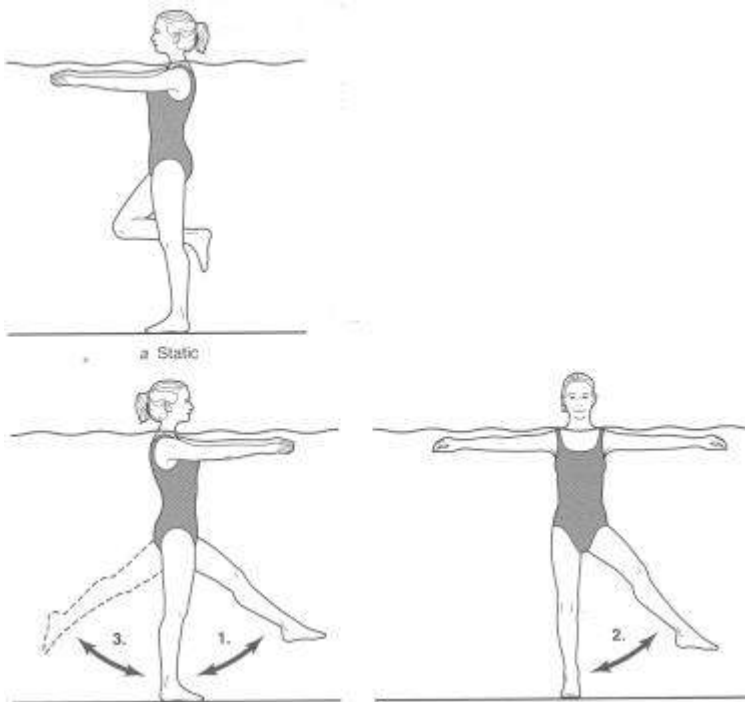
- Heel/toe raises
- Walking in the pool: Forward, backward, sidestepping, toe walking, heel walking, marches

DEEP

- Treading water, flutter kicking with a pool noodle, any of the walking exercises using a pool noodle for floatation

The pool is a great place to develop your cardiovascular endurance. The above exercises are recommendations. There is room to be creative as long as activities are safe. We recommend working up to 30 minutes with aerobic exercises. This can be one exercise or a combination of the above. (Example: forward walking in shallow water for 20 minutes; or forward walking 5 minutes, backward walking 5 minutes, treading water with a pool noodle for floatation for 5 minutes, and sidestepping for 5 minutes)

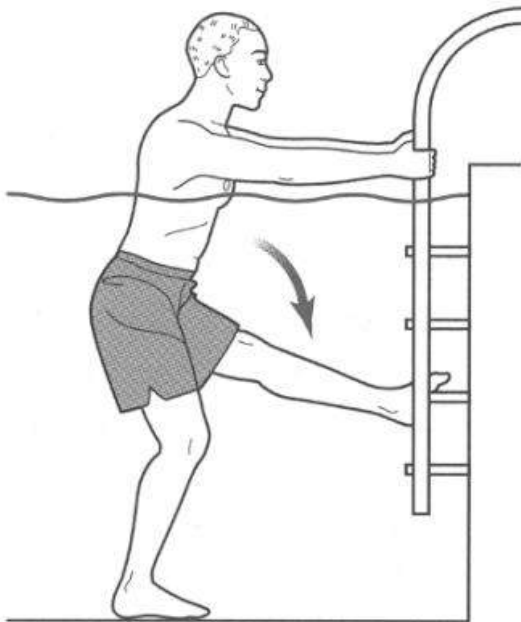
Single leg balance (SHALLOW)



Single leg balance training is not only helpful for preventing falls, it is also a good exercise for hip and core strengthening. Stand on one leg. Kick the other leg forward/backwards and side to side. Hold your balance for up to 1 minute at a time for 3 sets on each leg. If you cannot hold for one minute, do what you can and try to improve

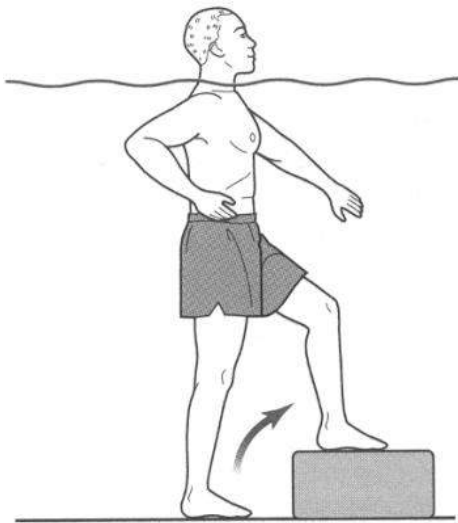
Exercises for the knees and hips

Hamstring Stretch (Shallow)



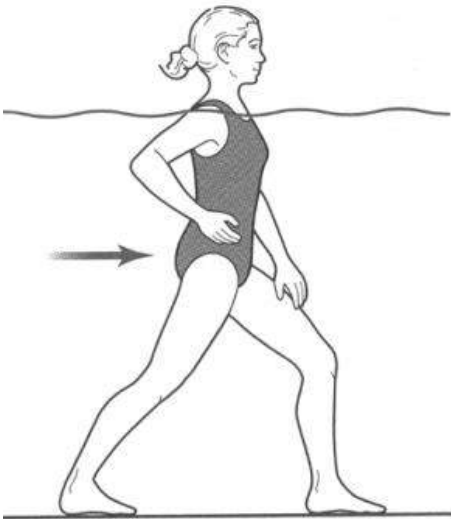
Prop your foot on a step of a ladder and lean towards your leg. Bend your opposite knee to reduce strain on your back. Perform on both legs. You should feel a gentle pull/stretch in the back of the leg. Perform the stretch 3 times and hold for 30 seconds each time.

Step ups (SHALLOW)



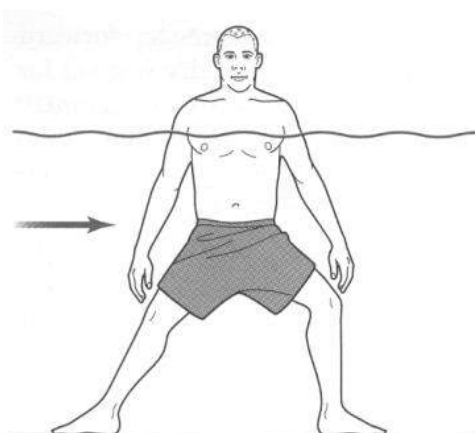
The step up exercise shows the person stepping up onto a small step that can be placed in the pool. If you do this be careful the step will not damage the bottom of the pool and that you will be able to get the step back out of the pool. This exercise is good to develop strength if you have difficulty with stairs. Perform 2 sets of 15 repetitions. To make this more challenging, perform the exercise in more shallow water.

Hip Extension (SHALLOW)



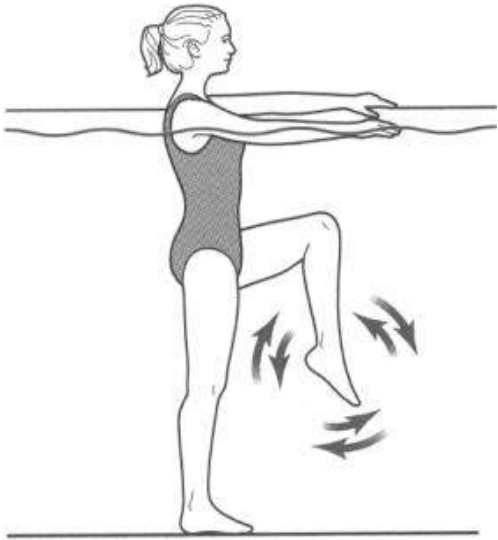
To stretch your right leg, place left leg forward and lean into left leg. Hold for 30 seconds and repeat 3 times. Switch legs and repeat. Try to avoid bending your spine backwards to avoid increased strain on your low back.

Hip Adductor Stretch (SHALLOW)



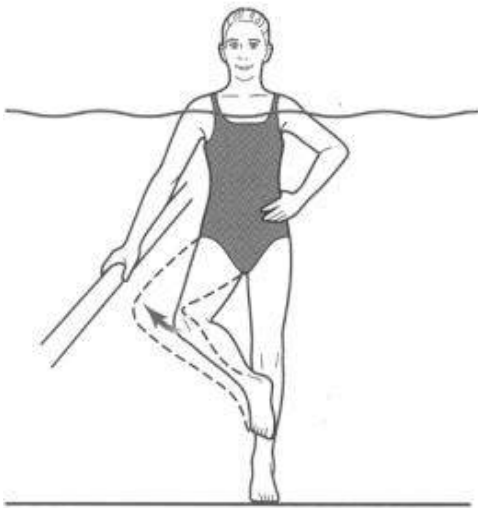
Standing in the shallow end of the pool, stand with your legs separated wider than your shoulders. With your right leg bent and your left leg straight, lean towards your right leg. Hold 30 seconds and repeat 3 times. Switch legs and repeat.

Single Leg Bicycling (SHALLOW)



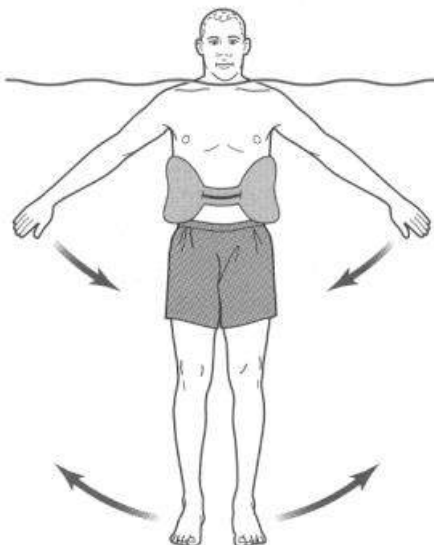
Use the side of the pool or a pool noodle for support and stand on one leg. Maintain your balance and move your left knee in a clockwise direction (like pedaling a bike) for up to 60 seconds. Repeat 5 times. Switch legs and repeat. You may perform this activity in a counter clockwise direction.

Hip Internal/External Rotation (SHALLOW)



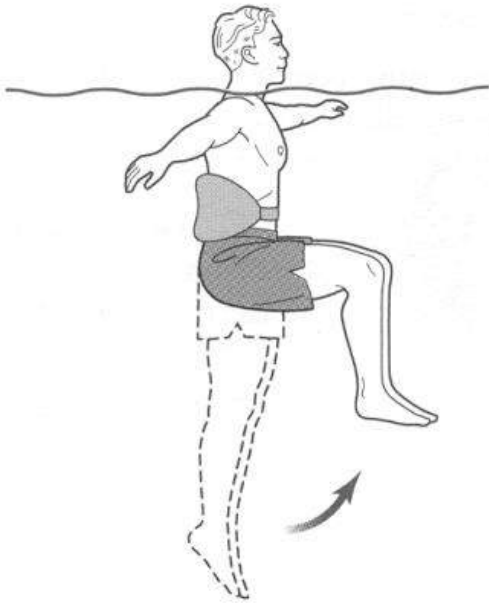
Hold on to the side of the pool or use a pool noodle for support and pull your foot up and down your shin to your knee. Perform 2 sets of 15 repetitions. Repeat on both legs.

Jumping Jacks (SHALLOW or DEEP)



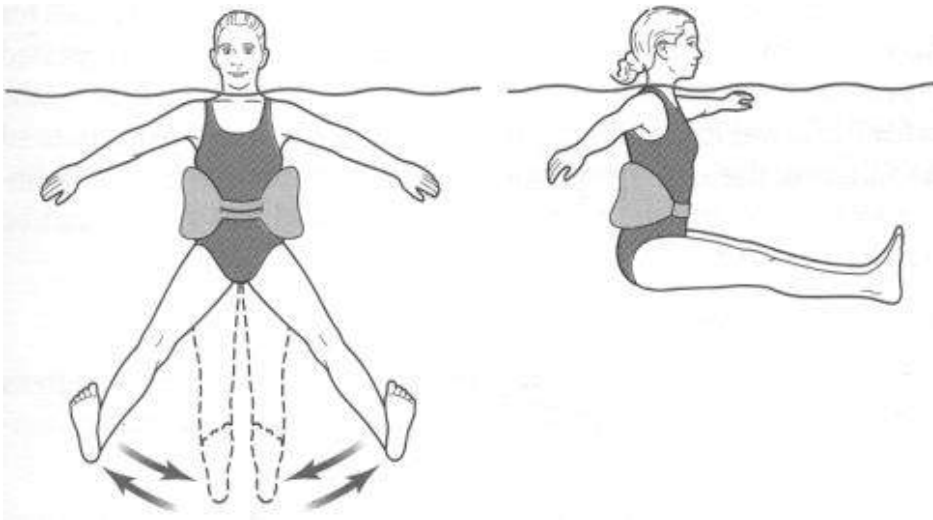
In either shallow water with no support or in deep water with a flotation device, perform jumping jacks. Try 2 sets of 15 repetitions. The higher the water is above the waist the harder the exercise as the arms will have more resistance.

Double Knee Lift (SHALLOW or DEEP)



In shallow water use the wall for support or deep water use a flotation device. Bend both knees up to hip level and then straighten legs. Perform 2 sets of 15.

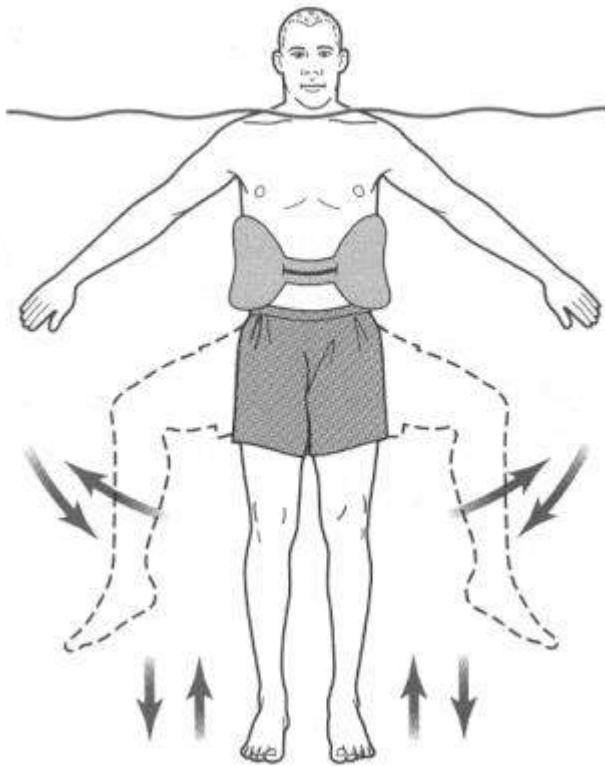
Hip Abduction (SHALLOW or DEEP)



In shallow water use the side of the pool for support and in deep water use a flotation device such as a pool noodle. Keep your knees straight, bend your hips up so they are at a 90 degree angle with the body. Hold this position and open and close your legs. If this is too challenging or causes you pain, the exercise

can also be performed without bending the hips. Keep the legs straight and raise them out to the side as if doing a jumping jack without the arms. Perform 2 sets of 15 repetitions

Flexion with External Rotation (SHALLOW or DEEP)



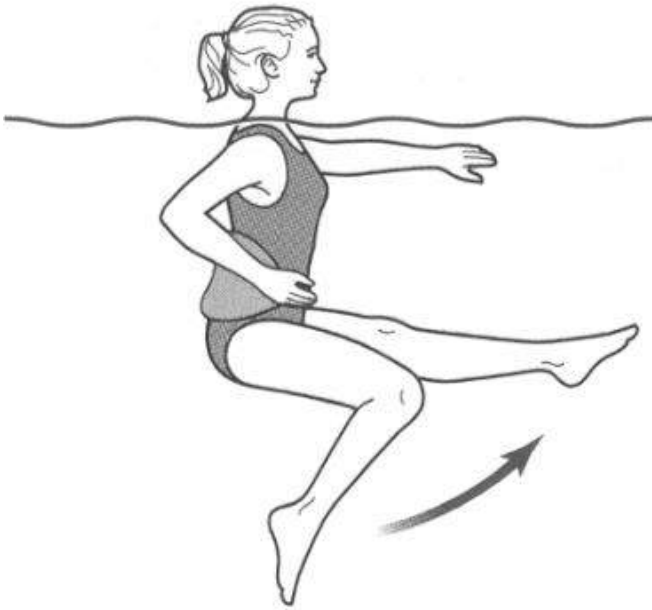
In shallow water use the wall for support or in deep water use a flotation device such as a pool noodle. Bend both hips and knees up to a 90 degree angle from the body. Open and close your legs. Slowly straighten hips and knees to pool floor and repeat. Perform 2 sets of 15.

Double Knee Bends (SHALLOW or DEEP)



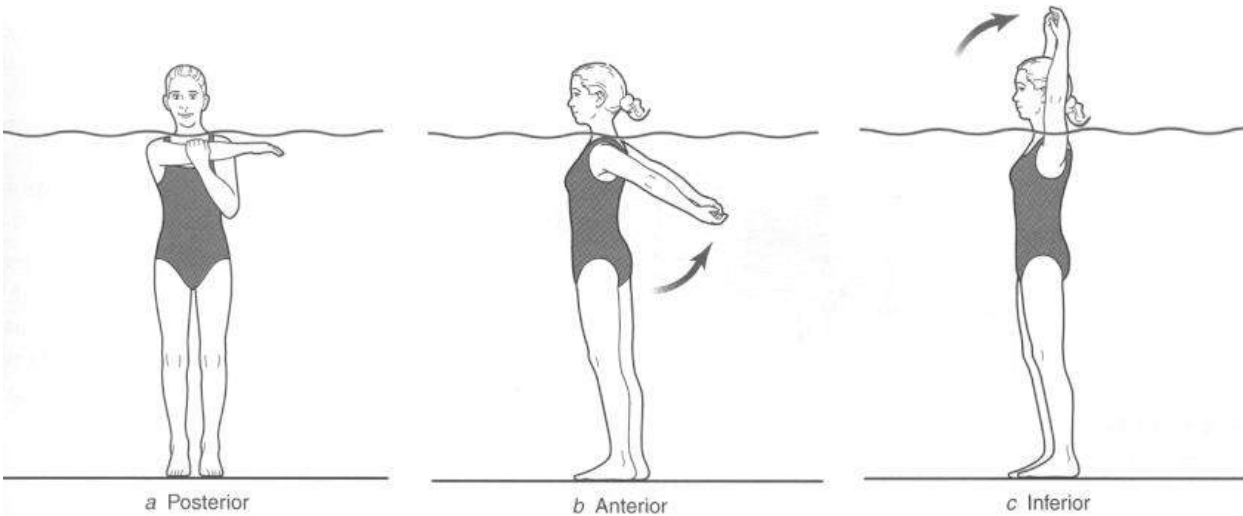
In the shallow water use the wall for support or deep water use a flotation device such as a pool noodle. Bend both knees together to a 90 degree angle with your body. Slowly straighten your legs and repeat. Perform 2 sets of 15.

Single Knee Extension (SHALLOW or DEEP)



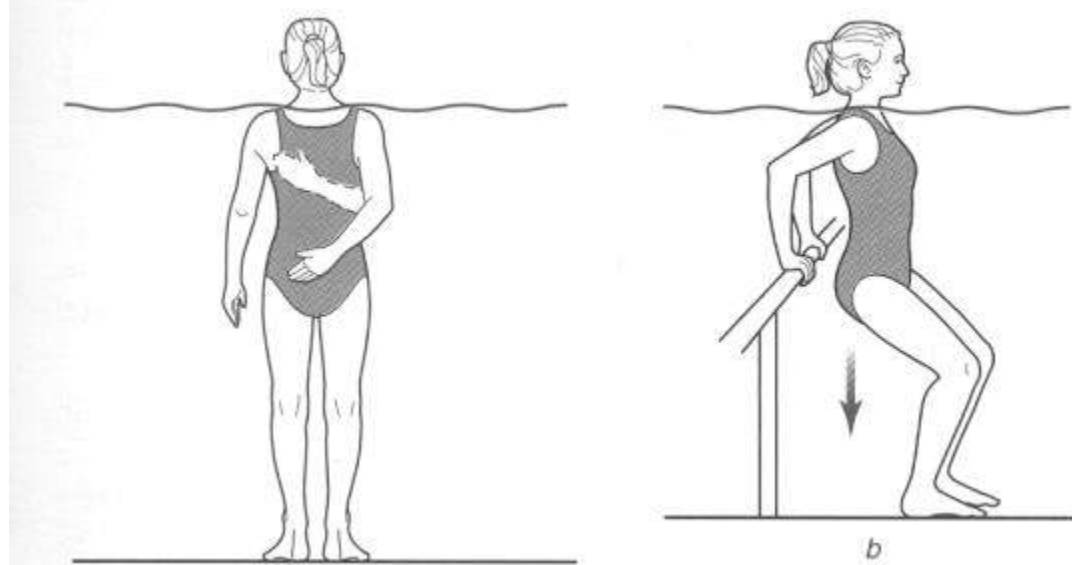
In the shallow water use the wall for support or in deep water use a flotation device such as a pool noodle. Bend both hips and knees up to a 90 degree angle with the body. Slowly straighten one leg at a time. Repeat with opposite leg. Perform 2 sets of 15.

Exercises for the shoulder/elbow
Shoulder Stretches (SHALLOW)



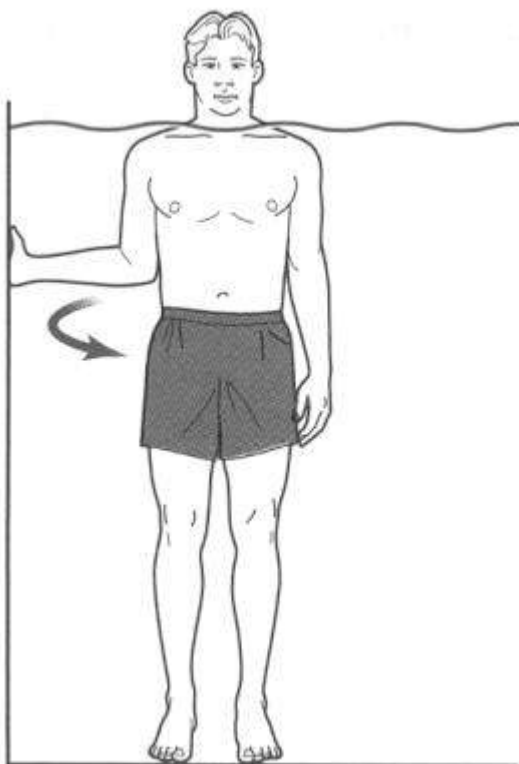
Standing in shallow water, perform the above stretches for 3 sets holding 30 seconds each time. This stretch should feel like a gentle pull, not a pain.

Shoulder Stretches Internal Rotation (SHALLOW)



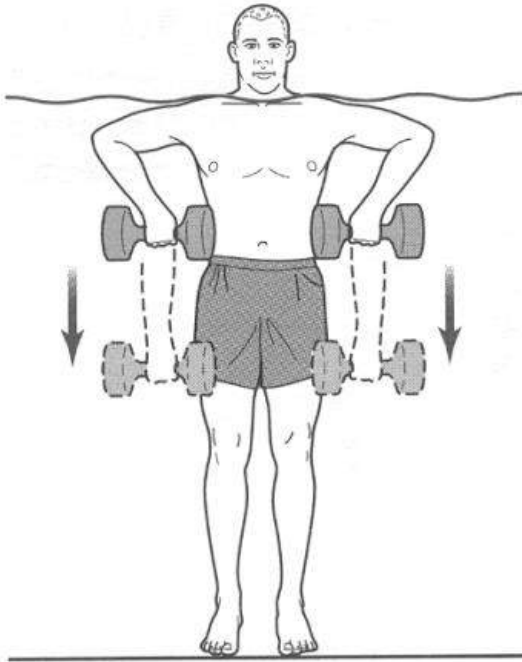
Stand in shallow water. Perform the above stretches for 3 sets holding 30 seconds each time. The stretch should feel like a gentle pull, not a pain. A ladder going into the pool can be used as a way to increase the stretch. For example in picture one, you would reach behind you, put your hand on the ladder, and lower your body to increase the stretch. In picture b, a ladder can be used instead of the bar.

External Rotation Stretch (SHALLOW)



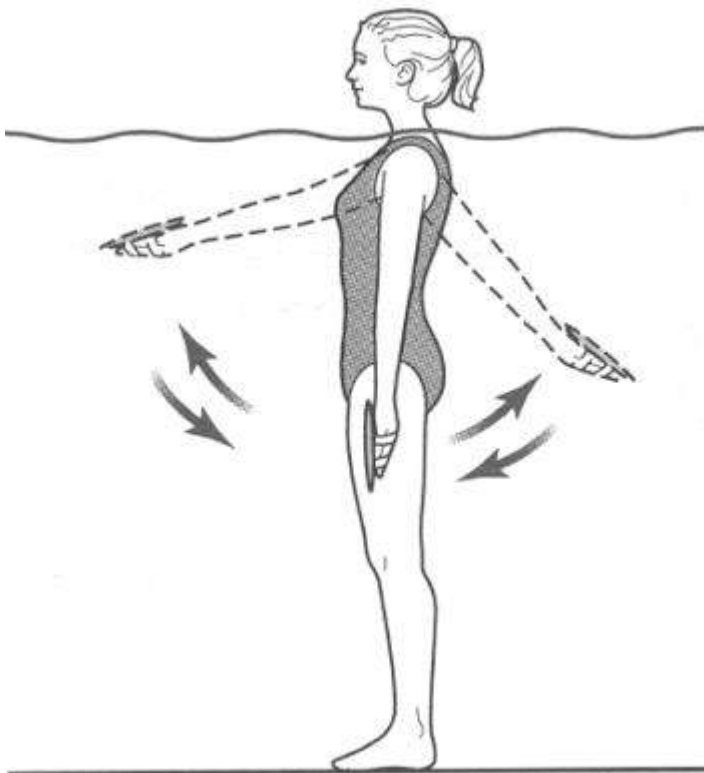
In shallow water perform the stretch using the ladder or side of the pool. Keep the elbow at the side of the body and the elbow bent to 90 degrees. Use the ladder or side of the pool to push the arm out. You should feel a gentle pull and no pain. Perform 3 sets of 30 seconds each time.

Shoulder Press Down (SHALLOW)



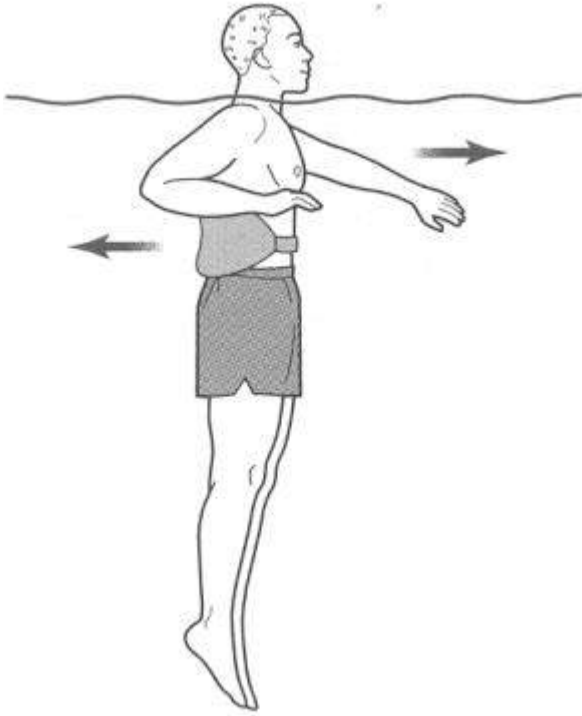
This exercise is best performed standing in water that is up to the neck in height. Use floatation barbells or a noodle. Push down each hand as shown in the picture. If this is too challenging, perform with nothing in the hand. The activity is made more challenging by using objects that float more easily. Perform 2 sets of 15 repetitions.

Shoulder Flexion/Extension and Abduction/Adduction (SHALLOW or DEEP)



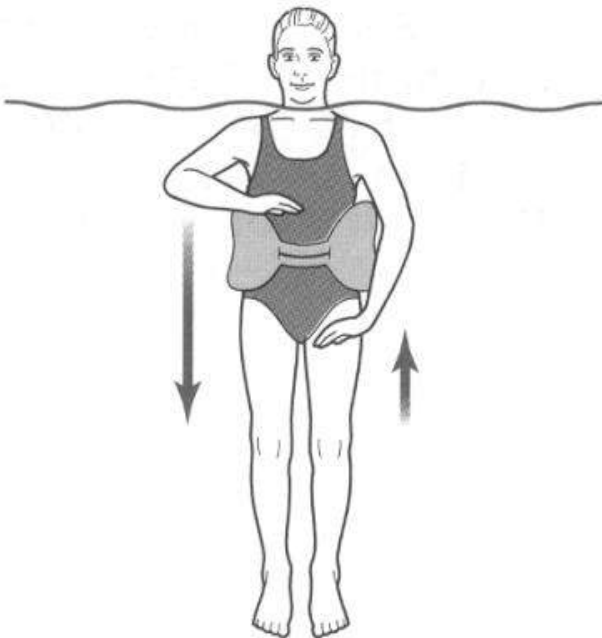
The shoulder flexion/extension exercise should be performed in water that comes up to neck height. The water will act as resistance to your movement, so the more water you have to move your arm through the harder the exercise. To make this exercise easier, turn the thumb up so the hand slices nicely through the water. To make this more challenging, use a palm up position to add resistance. To make even more challenging, hold a paddle in the hand to increase resistance. Perform 2 sets of 15 repetitions. To do abduction/adduction, move the arms up and down to the side as if doing a jumping jack. The same principles apply for making it easier or harder. This can be done in deep water using a flotation device.

Bent arm pull (DEEP or SHALLOW)



Perform in shallow water standing with the arms below the water or use a pool noodle or other floatation device in deep water. Keep the elbows bent as shown in the picture and move the arms forward/backward as if striking the water in front of you with the forearm. This is a great exercise to do with walking in the water or treading water with the legs and a floatation device around the waist. An additional exercise is the straight arm pull which is conducted keeping the arms straight and alternately moving them forward and backward brushing by your hip each time. These exercises would be best performed for time rather than repetitions. Try to work up to 3 sets of 1 minute each.

Wave (DEEP or SHALLOW)



Perform in shallow water standing with the arms below the water or use a pool noodle or other floatation device in deep water. Keep your elbows bent as seen in the picture. Push the water downward with one hand and pull upward with the other hand. For example, as the right arm pushes water down the left arm will pull water up. This exercise would be best performed for time rather than repetitions. Try to work up to 3 sets of 1 minute each.