Aquatic Exercises
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Benefits of Aquatic Therapy

Aquatic therapy is an exercise program done in a heated swimming pool. Physical and occupational therapists use this type of rehabilitation (rehab) program to improve a person's strength and movement. Programs are tailored for each person.

Exercising in Water
Exercising in water allows you to have less stress on your joints. When the water comes up to your neck, your joints are only supporting about 10 percent of your body weight. The water:

• Lessens gravity forces on joints that may not be able to bear as much weight out of the water
• Heated water relaxes your muscles
• Provides support to let you move, stretch, walk, and strengthen your muscles and joints
• Helps you progress to exercising on land

Benefits of Aquatic Therapy
• Improves your muscle strength and tone
• Increases your heart and lung strength
• Increases your fitness level and endurance
• Reduces stress
• Decreases swelling and improves blood flow
• Increases your range of motion and flexibility

Safety First
If you feel any of these signs of fatigue, stop exercising and tell the therapist or lifeguard you need help:

• Trouble catching your breath or feel short of breath
• Faint, light-headed, or dizzy
• Nausea
• Red face or feel flushed
• Pain or pressure in chest or upper body
• Weakness or suddenly feel tired
• Pounding or irregular heart beat
• Confusion or loss of sense of direction

Benefits of pressure and resistance
Pressure from the water around your body helps your blood to circulate from your legs to your heart. This can reduce swelling in the joints and lessen joint tenderness.

The resistance you get in the water improves your strength and balance. It can also increase your awareness of your body, so you know where your joint is in space.

Who benefits
People with injuries, pain, limited range of motion, weakness, arthritis, or total joint replacement can often gain strength and greater range of motion with less pain than other therapy.

While most people can benefit, people with certain medical conditions should not do aquatic therapy.

Talk to your doctor and therapist about whether this type of treatment would be good for you.
Upper Body Stretches

Instructions
These exercises will stretch your joints and strengthen your muscles in your arms, shoulders, and neck.

- Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart. Stand with your knees slightly bent and your weight evenly distributed.
- Tighten your stomach muscles and you should feel balanced. Keep your stomach muscles tightened during all of the exercises.
- Be sure to breathe while you exercise. Never hold your breath when you exercise.
- Each of these exercises is done with you standing in shoulder high water.
- If you feel any signs of fatigue listed on page 3, stop exercising and tell the therapist or lifeguard you need help.

Stretching exercises
For each exercise, hold the stretch for 20 to 30 seconds, and then repeat _____ times.

1. Turn your head slowly, keeping your chin up, and look over your right shoulder.
2. Hold and feel the stretch in the back and side of your neck.
3. Then turn your head back and look over your left shoulder.
4. Hold again and feel the stretch.
1. Start with your head facing forward.
2. Bend your head down, so your chin goes down to your chest.
3. Hold and feel the stretch in the back of your neck.
4. Return to the starting position and repeat.

1. Start with your head facing forward.
2. Lift your chin up and look back.
3. Hold and feel the stretch in the front of your neck.
4. Return to the starting position and repeat.

1. Bend your head, so your right ear goes toward your right shoulder.
2. Hold and feel the stretch in the side of your neck.
3. Bring your head back to the center, and then bend your head, so your left ear goes toward your left shoulder.
4. Hold and feel the stretch. Repeat.
1. Place one hand behind your back and reach up and over the top of your head with your other hand.
2. Bend your head toward the raised arm.
3. Hold and feel the stretch down your neck and into your shoulder.
4. Repeat, and then change arm positions to stretch the other side.

1. Tuck your chin in and pull your head back. Keep your mouth closed and level as you pull back.
2. Hold and feel the stretch at the back of your neck.
3. Return to the starting position and repeat.

1. Reach across with your right hand and grasp your left arm at the wrist.
2. Pull the left arm down and across your body as you tilt your head to the right.
3. Hold and feel the stretch.
4. Switch arm positions and repeat, tilting your head to the left side.
1. Place your right hand on your right shoulder blade.
2. Reach your left hand up to the top of your head and gently pull your head down at a 45-degree angle from your body and away from your right shoulder.
3. Hold and feel the stretch.
4. Switch hand positions and repeat, gently pulling your head down and away from the left shoulder.

1. Reach both arms behind your back and lace your fingers together.
2. Squeeze your shoulder blades together as you slowly raise and straighten your arms.
3. Hold and then relax. Repeat.

1. Stand in the corner with your hands at shoulder level and your feet out from the corner about 18 to 24 inches.
2. Lean forward into the corner and feel the stretch across your chest.
3. Hold and then return to the starting position. Repeat.
1. Place your arms in front of you and lace your fingers together.
2. Reach with your arms to pull your shoulder blades apart as you bend your head forward and down.
3. Hold and feel the stretch.
4. Relax and then repeat.

1. Bend your elbows and lift them behind your head.
2. Hold one elbow with the opposite hand, and pull the elbow back to feel the stretch in your arm.
3. Hold the stretch, and then switch hand positions to stretch the other shoulder.

1. Lift one arm up, bending the elbow to bring the hand over the opposite shoulder.
2. Use your other hand, and pull gently on the elbow to feel a stretch in the shoulder.
3. Hold and feel the stretch.
4. Repeat with the other arm.
1. Hold a towel behind your back with one hand over your head and the other holding the towel near the middle of your back.
2. Relax the shoulder of the lower hand.
3. Pull the towel above your head and feel the stretch in the shoulder of the lower hand holding the towel.
4. Hold and then switch hand positions on the towel. Repeat.
Lower Body Stretches

Instructions

These exercises will stretch your joints and strengthen your muscles in your lower back, buttocks, hips, and legs.

- Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart.
- Stand with your knees slightly bent and your weight evenly distributed.
- Tighten your stomach muscles, and you should feel balanced. Keep your stomach muscles tightened during all of the exercises.
- Be sure to breathe while you exercise. Never hold your breath when you exercise.
- Each of these exercises is done with you standing in shoulder high water unless otherwise directed by your therapist.
- If you feel any signs of fatigue listed on page 3, stop exercising, and tell the therapist or lifeguard you need help.

Stretching exercises

For each exercise, hold the stretch for 20 to 30 seconds and then repeat ______ times.

1. Stand about 18 to 24 inches from the wall of the pool.
2. Put your hands on the edge of the pool, keeping your arms straight, and lean forward with your back straight.
3. Step one foot back and bend the knee of the other leg.
4. Keep the heel on the back leg on the bottom of the pool, and lean into the wall, feeling the stretch in the back leg across the lower leg.
5. Hold and then repeat with the other leg.
1. Stand about 18 to 24 inches from the wall of the pool.
2. Have one foot forward and one back, both knees bent.
3. Place your hands on the edge of the pool and keeping the heel of the back leg on the bottom of the pool, lean into the wall as you feel a stretch in your lower leg.
4. Hold and then repeat with the other leg.

1. Use the stairs of the pool, and place one foot up on the second or third stair.
2. Keep the back leg straight, and lean forward, feeling the stretch across the top of your back leg and hip.
3. Hold and repeat with the other leg.

1. Use the stairs of the pool, and place one foot up on second or third stair.
2. Keeping both legs straight, lean your upper body forward and feel the stretch in the back of the leg that is on the stair.
3. Hold and then repeat with the other leg.
1. Stand along the side of the pool and hold onto the wall with one hand.
2. Bend one knee back and grasp the ankle with your other hand.
   **Option:** Support your foot on the pool stairs.
3. Pull the foot toward your buttocks and feel the stretch in the front of your upper leg.
4. Hold and repeat with the other leg.

1. Stand along the wall of the pool and hold the edge with one hand.
2. Cross one foot in front of the other and lean your hips into the pool wall.
3. Feel the stretch in your hip at the wall and hold.
4. Turn around and cross the other foot in front to stretch the other hip.

1. Stand near the wall of the pool and hold the edge with one hand.
2. Pull your one knee up and grasp the knee with the other hand.
3. Use the hand to push the knee across in your body.
4. Hold and feel the stretch in that upper leg and hip.
5. Repeat with the other leg.
Upper Body Strengthening

Instructions
These exercises will strengthen your muscles in your arms, shoulders, chest, and neck.
• Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart.
• Stand with your knees slightly bent and your weight evenly distributed.
• Tighten your stomach muscles, and you should feel balanced. Keep your stomach muscles tightened during all of the exercises.
• Be sure to breathe while you exercise. Never hold your breath when you exercise.
• Stand in water about shoulder height with your feet apart and knees slightly bent for these exercises unless otherwise noted.
• If you feel any signs of fatigue, stop exercising, and tell the therapist or lifeguard you need help.

Strengthening exercises
Do each exercise slowly with smooth movement and repeat ______ times.

1. Bent at the waist and hang your arm down toward the pool floor.
2. Move your arm in a circle, first going clockwise, and then counter clockwise.
3. Turn around to switch arms and repeat the exercise with the other arm.
1. Start with your arms at your sides, thumbs facing forward.
2. Lift both arms forward to chest level.
3. Return to the starting position and repeat. Use the stairs of the pool and place one foot up on the second or third stair.

1. Hold your arms out to your sides at chest level with your elbows straight and thumbs up.
2. Push your arms in, keeping your arms straight until your hands meet in front of you.
3. Then pull your arms back to your sides at chest level.

1. Start with your arms crossed in front of you at waist level, thumbs up, and arms close to your body.
2. Push your arms out to your sides with elbows bent at 90 degrees, and then pull them back in, so they cross in front of your stomach.
1. Stand with your arms down at your sides.
2. Bend your elbows up to 90 degrees and keep your arms close to your body with your thumbs up.
3. Push your hands out to your sides and feel your shoulders move.
4. Bring your hands back to the starting position, keeping your elbows close to your body.

1. Stand with your arms down at your sides, and your palms facing forward.
2. Bend your elbows, and bring your hands up through the water to your chest.
3. Turn your palms to face down, and push your arms back down until they are straight by your sides.
1. Lift both arms up and out to your sides to shoulder level.
2. Keep your arms straight pull your arms down through the water to your legs.
3. Then pull your arms back up to your sides to shoulder level, keeping your arms straight.

1. Bring your arms up at your sides to shoulder level, bending your elbows up.
2. Pull your arms in front of your face, keeping your hands up.
3. Push your arms back to the starting position.
1. Reach your hands up and cross your palms behind your head.
2. Push your elbows forward, and then back, like flapping your wings.

1. With your arms at your sides, bend your elbows up to 90 degrees.
2. Swing your arms up through the water.
3. Swing your arms back down to your sides, keeping your elbows bent.
1. Stand with your arms straight down at your sides.
2. Roll your shoulders forward.
3. Repeat rolling your shoulders back.

1. Stand with your arms at your sides, hands turned out to your sides with palms down.
2. Pull your shoulders up, and then punch your arms down in the water, so your shoulders move down under the water.
Lower Body Strengthening

Instructions
These exercises will strengthen the muscles in your legs, hips, abdomen, and buttocks.

1. Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart. Stand with your knees slightly bent and your weight evenly distributed.
2. Tighten your stomach muscles, and you should feel balanced. Keep your stomach muscles tightened during all of the exercises.
3. Be sure to breathe while you exercise. Never hold your breath when you exercise.
4. Stand in water about shoulder height unless otherwise noted or as directed by your therapist.
5. Start each exercise with feet together and knees straight unless otherwise noted.
6. If you feel any signs of fatigue listed on page 3, stop exercising and tell the therapist or lifeguard you need help.

Strengthening exercises
Do each exercise slowly with smooth movements and repeat _____ times.

1. Move your right foot out in front of you, keeping your knee straight and toes up.
2. Hold and then return to starting position.
3. Repeat and then do the same exercise with the left foot.
1. Move your right foot back, keeping your knee straight.
2. Hold and then return to the starting position.
3. Repeat and then do the same exercise with your left foot.

1. Move your right foot out to your side and hold.
2. Then pull your right foot across in front of the other leg and hold.
3. Repeat and then do the same exercise with the left leg.

March in place, lifting one foot and then the other.
1. Bend your knee, bringing your foot up behind you.
2. Repeat with the other foot.

Option for exercise above:
For more support, place a noodle under your leg. Be sure to hold it with both hands.
1. Pull one knee up bent at 90 degrees in front of your body.
2. Swing the foot across in front of your body.
3. Swing the foot out to the side of your body.
4. Repeat with the other foot.

1. Hold onto the side of the pool.
2. Raise your toes up and hold.
3. Put your toes down and raise up your heels and hold.
You will need a floatation noodle for this exercise, and you will need to hold on to the side of the pool.

1. Pull one knee up in front of you at 90 degrees and place the noodle under your foot.
2. Push the noodle down with your foot and hold, and then bring it back up to 90 degrees.
3. Repeat with the other leg.

This exercise is done in waist to chest high water.

Lift your arms straight out in front of your body while you bend your knees down.

You might also do this exercise against the wall of the pool for more balance.

1. Stand with your feet about 6 to 8 inches from the wall of the pool, and your back to the wall.
2. Slide your back down along the wall of the pool as you bend your knees.
1. Pull your foot straight back, keeping your knee straight and toes up.
2. Move the foot forward in front of your body.
3. Repeat and then do the exercise with the other leg.

You will need a step placed on the bottom on the pool.
1. Stand on the step with both feet.
2. Step down to the side with your right foot, and then bring your foot back up.
3. Step down to the side with your left foot, and then bring your foot back up.
You will need a step placed on the bottom of the pool.
1. Stand in back of the step.
2. Step forward with your left foot onto the bench.
3. Lean into your forward foot. Bring your left foot back onto the foot.
4. Repeat with your right foot.

You will need a step placed on the bottom of the pool.
1. Stand in back of the step.
2. Step up with one foot into the bench.
3. Bring the other foot up, so you are standing on it.
4. Step back and repeat, alternating feet.

You will need a step placed on the bottom of the pool.
1. Beginning by standing on the bench.
2. Step back with one foot, and then bring your foot back onto the bench.
3. Repeat, alternating feet stepping back.
Aerobic Body Strengthening

Instructions

These exercises will strengthen the muscles in your legs, hips, abdomen, and buttocks as well as your heart and lungs.

- Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart.
- Stand with your knees slightly bent, and your weight evenly distributed.
- Tighten your stomach muscles and you should feel balanced. Keep your stomach muscles tightened during all of the exercises.
- Be sure to breathe while you exercise. Never hold your breath when you exercise.
- Stand in water about shoulder height unless otherwise noted or as directed by your therapist.
- Start each exercise with feet together and knees straight unless otherwise noted.
- If you feel any signs of fatigue listed on page 3, stop exercising and tell the therapist or lifeguard you need help.

Exercises

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Start with 1 lap and work toward a goal of doing 2 laps.

1. Walk forward in the water.
2. Walk backward in the water.
Start with 1 lap and work toward a goal of doing 2 laps.

1. Walk sideways in the water
2. Then walk back the other direction to where you started.

Goal: of 3 to 5 minutes

1. Step out to the side with your left foot, and then step your right foot across in front of your left foot.
2. Step out to the side again with your left foot, and then step your right foot across behind your left foot.
3. Go back in the other direction, alternating crossing in front, and then behind the other foot.
You may need to move to deeper water for this exercise, so you do not scrape your feet.

1. Hold on to the side of the pool.
2. Pedal your legs like you are riding a bicycle. Point your toes when your foot goes down.

Option: Less intense option for exercise above.
March in place. Lift your knee up high, and push your opposite arm out in front of you.

This exercise is done in deeper water with the floatation belt. This can also be done as a variation to marching in deep water.
Move your arms and legs like you are jogging.
Do this exercise in deeper water with the floatation belt on.

1. Hold your arms out at shoulder level to help you stay upright.
2. Keep your knees straight, and push your legs out to the sides, and then pull them back in to the center.

1. Start by standing in the water with your arms at your sides.
2. Kick your legs out, and lift your arms out to your sides, keeping your knees and elbows straight.
3. Pull your legs back to the center and bring your arms back down to your sides.

1. Hold onto the side of the pool for this exercise.
2. Float on your stomach, and kick your legs. Point your toes, and keep your legs fairly straight. Be sure you are moving your leg from the hip.
Exercises with Kick Board and Paddles

Instructions
These exercises are done using kick boards to give you resistance in the water.

• Stand in water that is shoulder height.
• Do these exercises with your spine in a neutral position. Find this by standing with your feet about shoulder width apart. Stand with your knees slightly bent, and your weight evenly distributed.
• Tighten your stomach muscles, and you should feel balanced.
• Keep your stomach muscles tightened during all of the exercises.
• Be sure to breathe while you exercise. Never hold your breath when you exercise.
• If you feel any signs of fatigue, stop exercising, and tell the therapist or lifeguard you need help.

Exercises with kick boards
Do each exercise slowly with smooth movements and repeat ______ times.

1. Hold the kick board in front of your chest with both hands, elbows bent.
2. Walk forward, holding the kick board in front of you.
1. Hold the kick board in both hands in front of your body at chest height, elbows bent.
2. Push the board straight down in front of your body, straightening your elbows. Think of it like pushing a knife straight down in the water.
3. Pull the board back up to the starting position.

1. Hold a kick board in front of your chest with both hands, elbows bent.
2. Push the board out in front of you until your elbows are straight.
3. Pull the board back to the starting position.

1. Hold the kick board in front of your chest with both hands, elbows bent.
2. Push the board out in front of you to your right at a 45 degree angle from your body.
3. Pull the board back in to your chest.
4. Push the board back out in front of you to your left at a 45 degree angle from your body.
5. Pull the board back in to your chest.
Exercises with paddles

1. Hold the paddles in your hands and bend your elbows out to your sides. Keep your elbows tucked at your sides.
2. Move the paddles in front of you like you are clapping them together.
3. Move the paddles back out to the starting position.

1. Hold the paddles out to your sides at shoulder height with elbows straight.
2. Bring your arms down to your sides, keeping your arms straight.
3. Move the paddles back up to the starting position.

1. Hold the paddles out to your sides with elbows straight, about shoulder height.
2. Bring the paddles in front of you, keeping your elbows straight.
3. Move the paddles back out to the starting position.
Aquatic Exercises

1. Hold paddles at waist with elbows bent.
2. Push paddles out in front of you until elbows are straight.
3. Pull the paddles back to the starting position.

1. Hold the paddles about shoulder height with elbows straight. Be sure the paddles are in the water.
2. Move your arms to make circles with the paddles. Go in one direction, and then the other.

1. Hold the paddles in front of your body at shoulder height, elbows straight. The paddles should be nearly flat in the water.
2. Push the paddles down to your waist, keeping your elbows straight.
3. Bring the paddles back up to the starting position, keeping your elbows straight.
1. Hold the paddles in front of your chest, elbows bent. Keep the paddles in the water.
2. Push the paddles out at a 45-degree angle to the right until elbows are straight.
3. Pull the paddles back to the starting position.
4. Push the paddles out at a 45-degree angle to the left until elbows are straight.
5. Pull the paddles back to the starting position.

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1. Hold the paddles in front of your body with elbows bent, keeping the paddles in the water.
2. Walk forward, holding the paddles in front of you.

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1. Hold the paddles in front of your body with your arms bent at a 90-degree angle, keeping the paddles in the water.
2. Push the right paddle forward until your elbow is straight.
3. Pull the right paddle back to the starting position.
4. Repeat using the left arm.
Warm Water Pool Classes
Ohio State Center for Wellness and Prevention

Classes are held in a pool with warm water temperature and a 3-1/2-to-5-foot depth. Wide stairs with handrails are available for pool entrance/exit. You must be able to enter and exit the pool on your own and a physician’s referral is needed to join program.

**Level 1 Water Movement**
This class is designed for individuals with musculoskeletal problems, who want to keep the body moving at a slow pace. This class concentrates on total body, joint movement and range of motion, and includes stretching and relaxation components.

**Level 2 Water Movement**
Moving at a slighter faster pace, the Level 2 water movement class includes short intervals of water dumbbells, noodles and other equipment to help individuals improve muscle strength. Exercises are performed to uplifting, upbeat music to incorporating a fun atmosphere. This class is intended to improve function and strength, but is not intended to be an aerobic workout.

**Level 3 Water Movement**
The Level 3 water movement class includes longer intervals of water dumbbells, noodles and other equipment to help individuals improve muscle strength.

**Creative Water Movement**
The focus of this class is variety and fun while working to improve overall function from head to toe. A game format is utilized so participants can choose the order of exercises.

**Open Water**
Open water class time is available for patients who would like to enjoy the benefits of warm water exercises, but do not want formal instruction. During this time, participants have access to aquatic equipment and there is always a staff member on hand to supervise and answer questions. This session is ideal for people who have completed aquatic physical therapy and would like to continue exercises on their own. Lap swimming is not allowed in the warm water pool.

Ohio State Center for Wellness and Prevention
2050 Kenny Road, Columbus, OH 43221

To schedule or for class information:
Call 614-293-2800