It is never too late to start aquatic exercise. For persons with fibromyalgia (FM), it not only offers a pleasant and relaxing environment, it can also be very helpful in decreasing pain, fatigue, stress, and depression. Among the benefits of aquatic exercise for persons with fibromyalgia:

- It increases muscular strength and endurance as well as joint flexibility and mobility with very low impact on muscles and joints.
- It is a great way to control weight.
- Because it is low impact and non-fatiguing, it is an ideal way to work on cardio-respiratory fitness.
- It helps to increase circulation.

Practice proper body alignment—neutral spine, rib cage lifted, shoulders back, and low, abdominal and back muscles.

Use firm, slight forward pelvic tilt (hips slightly forward), breathe normally (abdominal breathing).

Achieve trunk stabilization (all muscles from shoulders to hips firm).

Avoid hyperextension (or locking) of spine or joints.

Learn safe transfer of body weight (transferring body weight from side to side, or back to front, with proper balance).

Avoid shoulder impingement—avoid leaning against wall with arms outstretched behind you for support.

- It promotes a sense of well-being and self-efficacy while allowing for socialization.
- Studies by Melton-Rogers, Whitley & Schoene, and Homer & Morton support the positive health benefits of aquatic exercise.

On the following pages are several water exercises to try. Photos are included for additional illustration when needed. For your own protection, consult your physician before getting started to ensure that these exercises are safe for you.

**Important Points To Keep In Mind!**

**REMEMBER SAFETY FIRST! Never go into a pool or hot tub alone. Always have another person along, even if that person stays on the deck. Learn to scull (make figure 8’s with your wrist), and also learn to recover from a float to a standing position.**

Know yourself, your abilities, needs, limitations, water experience, comfort and conditioning level. Listen to your body; you know it best. New pain is a sign to reduce activity or stop.

- Practice proper body alignment—neutral spine, rib cage lifted, shoulders back, and low, abdominal and back muscles.
- Use firm, slight forward pelvic tilt (hips slightly forward), breathe normally (abdominal breathing).
- Achieve trunk stabilization (all muscles from shoulders to hips firm).
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- Note high risk areas: knees, shoulders, neck, low back, ankle, foot.
- Avoid fatigue.
- Stretch warm muscles (walk before stretching).
- Try a carefully graduated program of non-fatiguing exercises.
- Monitor yourself carefully.
- If overweight, lose weight.
- Listen to your body, but don’t give up. Try 10-15 minutes 3x per week for a start.
- Pay attention, and practice mindful movement.
- Remember, only you can control breathing and posture; be conscious of them at all times.
Warm-Up With Water Walking

Choose a comfortable depth of water in which to walk—usually between the nipple and belly button.

1. Walk forward placing your foot to strike heel first, roll through heel, ball, toe. Allow your arms to swing freely, alternately if possible.
2. Walk backwards: strike with toe, follow with ball and heel.
3. Walk sideways moving arms the same direction (arms lifted to shoulder height and lowered back to side).

(Alternate these three techniques for 5-10 minutes.)

<table>
<thead>
<tr>
<th>Standing In Center Of Pool With Shoulders Underwater</th>
<th>Standing At Wall For Balance</th>
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<tbody>
<tr>
<td>Choose a comfortable depth of water in which to walk--usually between the nipple and belly button.</td>
<td>Quad Stretch: With back or side towards the wall, stand on one foot, and place one foot behind you as if on the wall. Lower the knee on bent leg. Pelvic tilt forward, and feel the stretch in front of your thigh. An alternate technique which can be used if it is comfortable, and if it doesn’t compromise posture: grasp foot and bring heel toward buttocks. Hold stretches for 10 to 30 seconds.</td>
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<td>(Adaptations and accommodations: You may sit on steps or pool chair, or wear ankle weights for stabilization)</td>
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<tr>
<td>Breathing: slow abdominal breathing. Allow arms to lift naturally.</td>
<td>Head Turn: slowly look over each shoulder alternately, stopping momentarily in center.</td>
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<tr>
<td>Posture: neutral spine, no locking of joints</td>
<td>Shoulder Circles: circle arms from shoulders; go from small to larger circles/reverse.</td>
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<td>Head Turn: slowly look over each shoulder alternately, stopping momentarily in center.</td>
<td>Cross Over Shoulder Stretch: Reach one arm across your body; support this arm with your other hand below the shoulder. Stretch your whole body in the direction of the stretching (upper) hand. Change sides.</td>
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<td>Runner’s Stretch: Face the wall. Maintain firm trunk muscles (tight behind your belly button). Place one foot behind with heel flat on floor; other leg is bent in front with foot near wall. Lean toward the wall with your spine straight. The stretch is in the calf of the back leg.</td>
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<td>Leg Forward: Balance with one hand on wall; bend outside leg at knee; raise to 90 degrees if comfortable; extend the leg and lower foot to floor.</td>
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Alternate Quad Stretch
**Side Lift:** Balance with one hand on the wall. Lift your outside leg from your hip 12-18 inches out from body (or as comfortable); then return to standing neutral position. Always relax the knee of your standing leg.

**Foot Pedal:** Balance with hand on wall; pedal with each foot alternately--up and down rolling on your whole foot. One foot is in touch with the floor, always.

**Wall Curl:** My favorite full body stretch—stand facing wall. Place your hands at the top of the wall or bar for support. Bend your knees up to the wall, keeping your chin low to protect your neck. You are in a curled up fetal position. Hold that. Then, keeping your hands and feet attached to the wall, swing your buttocks out in the pool, and feel the wonderful back stretch. Move your feet so you are comfortable and get a great stretch.

**Swing And Sway:** Bend your left knee; keep right foot with right leg extended against the wall. Swing and sway alternately, and hold each stretch 10 seconds. The desired stretch is in the inner thigh of your outstretched leg.

**Reach Up:** In a neutral position, reach one hand to the sky, hold for 10 seconds, then change to second hand. Do one hand at a time.

**Hug:** In a neutral position, with shoulders underwater, if possible, cross arms and hug yourself gently. Cross over and change for a second hug.

**Aerobic Conditioning**

You may return to water walking or non-weight-bearing exercise in the water. Consider deeper water work using flotation belts or noodles. Examples of exercises for deeper water include:

- Jog With Sculling
- Jog With Arm Circles
- Cross Country Ski
- Bicycle
- Forward, Backward, Sideways
- Walking Marching

**Breathing and Relaxation**

Keep your shoulders underwater, and use soft movements with slow breaths and active stretching. Move the part of your body which feels it needs to move. Try shoulder circles. Try doing the Wall Curl, Swing & Sway, Reach Up, and Hug exercises described above which are great breathing and relaxation exercises.
Intermediate/Advanced Exercise

As you become more conditioned (8-10 weeks, or more) you may consider adding resistance equipment. One’s own body should be used first and foremost to its best advantage. FM participants may get muscle microtears; equipment used for resistance increases this risk.

When you do progress to equipment, use surface equipment first. Begin with gloves, and progress to paddles. Buoyant hand bars are less stable and more difficult to control.

Increase time and number of repetitions, as you are ready. Choose activities for cardio work. Persons may do intervals with moves such as cross country ski or half jacks, etc., or walk or bicycle on a noodle. Interval work means 10 or 20 repetitions at your best intensity, then the same number of reps slowly. Keep that going for effective cardiorespiratory exercise.

Weights are never used for resistance. They may be used on the ankles for stability in walking if necessary (3-5 lb.).

Intensity

In aquatic exercise, the Borg Rate of Perceived Exertion (RPE) scale is used to judge the intensity of conditioning work. You can measure intensity either with a 10-point scale (1-10), or if you are concentrating on the middle scores and want more ratings to choose from, use a 20-point scale (1-20). No matter what scale you choose, middle scores are most desirable when measuring aerobic exercise intensity. On a 10-point scale: 4-6 are good scores. On a 20-point scale, 10-12 are good scores. A rating between 4-6 or 12-15 approximates 60% - 80% of maximal oxygen consumption appropriate for cardiovascular training. Ratings of 7 (on the 1-10 scale) or 16 (on the 1-20 scale) or above indicate overexertion. Individuals with fibromyalgia may vary intensity from day to day but should strive ultimately for 20 minutes at moderately hard work.

Heart rate palpation is unnecessary. During exercise, read the chart to find the number and description that best matches how intense your effort feels at the moment. You are probably used to having your pain measured on a 1-10 scale. Do the same thing to gauge how hard you are working.

Using the RPE Method helps you listen to your body and get in touch with how you feel as you exercise. Remember, pain or a high level of fatigue is unacceptable.

Most of all, do exercises that you enjoy and will continue to do regularly. Find a warm pool which suits your needs (a lake and ocean will also work, but you may want to wear a wet suit), and utilize the wonder of water as often as you can!

A Hint To The Wise: If you want to find a safe group exercise class, call your local Arthritis Foundation, or see: www.arthritis.org.

Mary B. Essert, B.A., ATRIC, has been involved in the aquatic industry since 1949. Her leadership and experience in teaching swimming, water fitness, and therapeutic intervention techniques are internationally recognized. Adapted Aquatics has brought her more active involvement and employment in rehabilitation and therapy. She serves as a trainer for the Arthritis Foundation, Red Cross WSI, AAHPERD Adapted Aquatics, and she holds many instructor certifications from organizations including AEA, USWFA, Medical Health & Fitness Cancer Wel-Fit, and the MS Society.

For more information on aquatic exercise, visit her website at: www.maryessert.com.