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**Water Therapy**

**What is water therapy?**

Water therapy, also known as pool therapy or aquatic physical therapy, is a form of rehabilitation that is done in the water. It is used to improve function, endurance, balance, coordination, strength and flexibility.

Water therapy is done by a licensed physical therapist or physical therapy assistant.

**Who can benefit from water therapy?**

Anybody who has pain in their back, hips or legs can benefit from water therapy. It can help people who have:

* limited range of motion
* weakness
* pain
* spasticity
* balance deficits
* joint replacement
* obesity
* pregnancy
* osteoporosis
* arthritis
* fibromyalgia

Water therapy is often used for athletes who cannot run due to stress fractures or other injuries.

**How does water therapy work?**

There are 3 main principles behind water therapy: buoyancy, resistance and water pressure.

**Buoyancy:**

When you are in the water your body weighs less than if you were on dry land. For example, if you are standing in water that is up to your chest, your body weight is decreased by about 75%. If you are standing at waist level, your body weight is decreased by 50%. Having less body weight means the stresses on your joints is less. This lets people with conditions such as arthritis to exercise with less pain.

**Resistance:**

Another unique feature of water is that it provides resistance when you move. Have you ever tried to run in the water? It's much harder than if you tried to run on dry land. Resistance helps to strengthen weakened muscles. In many cases, the faster you try to move under water, the greater the resistance.

**Water Pressure:**

Water can put pressure on chronically inflamed joints and can help to reduce swelling. Exercising in warm water can also help to reduce swelling because it can increase the circulation in your joints.

**Who should avoid water therapy?**

Check with your healthcare provider to make sure that water therapy is safe for you. People with these conditions should not exercise in the water:

* incontinence
* contagious diseases such as colds, flu, or hepatitis
* sensitivity to heat or humidity, such as people with multiple sclerosis
* wounds, rashes, or skin problems such as psoriasis
* uncontrolled seizures, unstable angina or uncontrolled diabetes

**Water Therapy Exercise Sample Program**

Do these exercises in waist deep water:

* **Double Leg Squats:** Stand with your feet shoulder width apart. Bend your knees until your thighs are parallel to the bottom of the pool. Keep your back as upright as possible while you do this. Do 3 sets of 10.
* **Heel Raises:** Lift up onto your toes, raising your heels off the floor of the pool. Do 3 sets of 10.
* **Hip Flexor Stretch:** Standing upright, raise your knee to your chest as high as possible. Do 3 sets of 10 then repeat on your opposite side.
* **Hip Abduction:** Standing with your feet together and your knees straight, lift leg out to your side. Do 3 sets of 10 then repeat on your opposite side.
* **Lunges:** Stand with your feet shoulder width apart. Step forward as far as you can with one leg, leaving the other leg behind. Lower your front thigh until it is parallel with the floor of the pool. Then step backwards to the starting position. Do 3 sets of 10 then repeat on your opposite side.
* **Calf stretch:** Perform the lunge exercise above, but leave your front leg forward and keep your back heel on the floor of the pool, keeping your back knee straight. Hold for 20 seconds and repeat 2 times on each leg.
* **Thigh stretch:** Stand near the side of the pool and grab the edge with one hand. Bend one knee, and with your other hand, grab your foot, bend your knee and pull your thigh backwards. Hold for 20 seconds and repeat 2 times on each leg.
* **Walking:** Walk around the pool in for 8 to 10 minutes. As you feel stronger, try to walk faster and faster.

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Published by [RelayHealth.](http://www.merckmedicus.com/pp/us/hcp/hcp_patient_resource_allhandouts_content_search.jsp?pg=/ppdocs/us/common/crs/aha/about_advisors.htm)  
Last modified: 2010-02-18  
Last reviewed: 2010-01-28

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[References](http://www.merckmedicus.com/pp/us/hcp/hcp_patient_resource_allhandouts_content_search.jsp?pg=/ppdocs/us/common/crs/aha/aha_aquather_sma_refs.htm)   
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