



## Aqua Therapy



Aqua Therapy is a program that has been used extensively by physical therapists in recent years and we felt that it has achieved enough popularity that some aspects of it should be reviewed.

Water exercise improves flexibility and range of motion and strengthens and tones muscles without hurting vulnerable joints. It is particularly helpful in those who have arthritis because exercise in water cannot damage the joint further and the warm water itself is therapeutic. The Arthritis Foundation recommends that the temperature be between 83 and 86 F. Moist heat relieves joint pain. Heat raises the pain threshold and relaxes muscles.

When you exercise in water, you're working with buoyancy, not gravity. There isn't much compression (stress) with buoyancy, so you can do more for a longer time. Ten minutes of exercise on land equals about 30 to 45 minutes in water.

Water also offers 12 times more resistance than air, so you work harder and use up more calories than you would on land. For example, 1/4 mile of water walking equals one mile on land. Exercise also increases blood flow to muscles, ligaments, and tendons getting rid of substances that build up with inflammation.

A study reported 2.5 years ago actually found that quadricep thigh weakness actually may precede arthritis of the knee. An increase in quadricep strength results in a 20 to 30% lower risk of arthritis in the knee.

Anything that can be done from an exercise standpoint to avoid further damaging an arthritic joint is particularly helpful. Arthritis releases enzymes that digest the cartilage of the joint. The cartilage tries to repair itself, but breakdown outpaces repair. Cartilage loses water, becomes brittle and cracks.

Aqua therapy can help virtually any kind of arthritis in the body, including hands, feet, knees, shoulders, neck, spine, and hips.

In addition to arthritis of particular joints, aqua therapy can be especially helpful to patients suffering from lower back pain. Exercise of the spinal muscles in a pool can be very helpful in increasing flexibility and strength and reducing muscle spasm and discomfort. Most patients with lower back problems have wear and tear changes in the discs and small joints of the spine and possibly some bulging of the discs, as well. Even



# Online Orthopaedics

Medical Article



if one were to have a slipped or protruding disc, aqua therapy could be helpful in the treatment of this condition.

In fact, it would be almost impossible to make any condition worse with aqua therapy. Joints seem to be protected by the buoyancy of the water while allowing the muscles to stretch and become more flexible and also to gain strength.

When one has begun to improve with aqua therapy, you have to sustain the improvement by continuing to participate in it at least twice weekly.

In addition to hospital physical therapists using aqua therapy, over the years a multitude of programs have been started often co-developed by the Arthritis Foundation and the YMCA. In addition, there are many pool programs at schools, clubs, and exercise centers - some of which are served by a certified Arthritis Aquatics Instructor.

Exercise in a pool is one of the healthiest things that one can do for themselves if they have almost any type of arthritis, spine problem, fibromyalgia or any other painful musculoskeletal condition that affects the joints, muscles, ligaments or tendons.

The Arthritis Foundation can be contacted for further information at 1-800-283-7800.



## Online Orthopaedics

Thank you for using the Online Orthopaedics Library.

**We hope it was useful to you. Please check back frequently because new topics and information are being added continuously by Dr. Haverbush.**

**Please feel free to print, download, and use/distribute this information (as long as you are not reselling it in any form). Remember, it is the property of Online Orthopaedics and we retain all rights regarding its content. Alteration of this document in any way is a violation of the copyright.**

**This material does not constitute medical advice. It is intended for informational purposes only. No one associated with Online Orthopaedics will answer medical questions via email.**

**Please consult Dr. Haverbush or a physician for specific treatment recommendations.**

**Thomas J. Haverbush, MD. P.C.**

**Office Address:**

**315 E. Warwick Dr., Suite A**

**Alma, Michigan 48801**

**989-463-6092**

**Fax 989-463-8914**

**Website Address:**

**[www.orthopodsurgeon.com](http://www.orthopodsurgeon.com)**