

Arthritis and Aquatics

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Long ago, clients with arthritis had been cautioned to stay away from any movement or any type of exercise that might irritate an arthritic condition. Current best practice, bolstered by extensive research, has shown that the pain and stiffness in arthritic joints can be decreased through low- to moderate-intensity exercise. Movement releases synovial fluid, lubricating the joints and helping them to move more easily.

Arthritis is more a description of symptoms, than a disease. Simply put it means joint pain and stiffness. There are more than 100 types of arthritis that fall into four main categories: degenerative, inflammatory, infectious and metabolic.

Osteoarthritis is degenerative arthritis and the most common type of arthritis. It is caused by a wearing away or degeneration of the cartilage of the bones and the joints. Symptoms include pain, decreased range of motion, and muscular atrophy.

Inflammatory arthritis includes the autoimmune forms of arthritis such as lupus, myositis, and spondyloarthropathies. Rheumatoid arthritis is the most common inflammatory arthritis and can affect any age and is an autoimmune disease. In rheumatoid arthritis, and the other auto immune forms of arthritis, the body is attacking its own joint tissue causing inflammation and tissue damage. The symptoms are often episodic and include pain and limited mobility during flare-ups.

Infectious arthritis can become chronic but is usually transitory and caused by a reaction to an infectious condition such as hepatitis C.

Metabolic arthritis is gout. Uric acid from purines in food can build up in a person's bloodstream and cause joint pain and swelling especially in the feet.

Although each of these conditions are separate, exercise perspectives are similar and modifications can be made to accommodate all individuals.

People who live with arthritis get the same benefits of exercise as anyone else such as weight control, better sleep and improved moods. However, people with arthritis have some specific exercise needs due to their joint damage. The primary goals of an arthritis exercise program should be to build strength, as well as maintain bone mass, flexibility and range of motion in a safe and effective manner. Clients with particular forms of arthritis need other benefits such as people with the auto immune forms of arthritis need cardiorespiratory endurance due to their increased risk of adverse cardiac events.

Aquatic exercise is excellent for participants with arthritis because the buoyancy and increased viscosity of the water minimizes stress on the joints.

Exercisers in an arthritis class will realize improvements in cardiorespiratory fitness, flexibility, muscular strength and endurance, and body composition. Participants will be more functional in daily activities and will have more freedom of movement. Range of motion will be increased or at least maintained. Joint mobility will be increased. Participants will also experience a greater sense of self-worth, increases in self-efficacy skills, and decreases in depression.

As in any aquatics class, safety is of paramount importance and classes for the arthritis community have a few extra considerations. Medical approval should be required of all participants. Any exercise that causes undue joint pain in the client with arthritis should be stopped immediately. Alternative exercises to accomplish the same goal should be used instead. The affected areas should be submerged beneath the water, since water naturally reduces edema (swelling). The exercise program should begin slowly and gradually progress. Intensity and duration of exercise should be decreased. The rule of twos should be in effect for arthritis classes: That is, if it hurts more after two hours or after two days than it did before exercise, too much was attempted. The participant should do less next time.

Format changes for arthritis classes should consider:

- Elongated warm-up period to allow the synovial fluid to enter the joints and prepare for more vigorous exercise.

- Pain free range-of-motion exercises are extremely important.
- Transitions should be fluid, with successive movements being made easily.
- Bouncing and impact moves should be used sparingly or eliminated from the program.
- Progressions should start with the easiest expression of a move and then Increase challenge with repetition: closed chain to open chain or short-lever to long-lever moves.
- Water-walking and deep-water exercise are ideal for arthritis classes.
- Dynamic stretching can be safer for arthritic joints is it discourages 'hanging' in joints and hyperextension.
- Do not load joints with full extension or flexion.
- While most exercise programs concentrate on using the large muscles and major joints in the body (elbows, knees, hips, etc.), this program should also Include the fine-motor skills and smaller joints (wrists, fingers, ankles, etc.).

Consider the practicalities of your pool. Water for a shallow-water arthritis class should be chest to shoulder depth. Instructors should ensure that participants submerge affected areas. The ideal water temperature for arthritic classes is 88 to 92 degrees Fahrenheit. Many arthritis participants are able to exercise in 82-degree water but find that they are more comfortable in a full unitard, wetsuit, or windsurf suit.

Weighted, resistance, and buoyant equipment should be used with caution in arthritis classes, since any type of equipment can increase stress on the joints. Start with props in areas of the body not, or less affected by arthritis. For example, someone with knee osteoarthritis can use buoyant barbells in their hands the same as anyone else but ankle weights would be a challenging choice. Equipment requiring gripping is often eliminated for arthritic hands but substitutes can be found with rubberized equipment around the wrists.

People with arthritis need exercise the same as everyone else and even more in many cases. It is absolutely achievable with some awareness, support and a good attitude. It's not "No pain, no gain." It's "No pain, no pain."

- Christa Fairbrother, ERYT 200/RYT 500, ATRIC
As a Yoga for Arthritis teacher, an Arthritis Foundation Aquatics Program leader, and someone who live with multiple forms of arthritis, Christa is passionate about helping people with arthritis reach their full potential through aquatic exercise, especially aqua yoga.