

AquaStretch Overview

by George Eversaul, A.P.H.

SUMMARY: AquaStretch is a new form of individual and facilitated aquatic exercising, which may be used in Wellness programs and also as an aquatic therapy. It's like being stretched by an athletic trainer, only with movement in various depths of water (3'-5'), and with 5 to 15 lb weights attached to your body. It's also like a "cranial unwinding" in water, with verbal psychological encouragement to "Move, if you feel the need to move".

AquaStretch is considered a breakthrough in pain management and preventive medicine, provided primarily by massage therapists, athletic trainers, and physical therapists. It may quickly restore flexibility lost from accidents and surgeries more than three months old, significantly and immediately reduce chronic pain or movement pain, and/or create profound relaxation that may help improve sleep. AquaStretch theoretically breaks down fascial adhesions that inhibit flexibility or may cause nerve impingements, muscle tension or soreness, vascular insufficiencies, hormonal imbalances, and pain. It may also be potentially used in athletic conditioning and fitness programs to increase flexibility.

This article summarizes information from AquaStretch.com and the free training videos located on that website. It describes the Basic Procedure used to AquaStretch, and four ways of finding AquaStretch Pressure (Fulcrum) Points. It also briefly describes why we believe AquaStretch works – the Fascial Adhesion Theory, the nature of Intuitive Movement, the body's enhanced flexibility in water, and the control of Stress Resistance. Finally, it summarizes actual applications of how AquaStretch has benefited over 1,000 Fitness, Wellness, and Health Care clients, over 70% of which were medically referred.

BASIC PROCEDURE: The basic AquaStretch procedure consists of four steps:

1. Play
2. Freeze
3. Pressure
4. Move (if you feel the need to move)

First, the client is asked to "play" with their body's movement, to find any position in which they experience pain or restriction. For example, if they are having problems with movement pain or feel tension in the IT band of a leg, they are asked to move that leg in the water in all different directions until they feel that pain or tension.

Similarly, they may be asked to move their ankle, arm, shoulder, neck, back, or any other joint in their body to find pain or restriction. Sometimes they are asked to move in the specific way they know causes their pain or discomfort. After an AquaStretch soft tissue or joint fascial adhesion release, clients will often start "playing" spontaneously, to see if they can find any remaining restriction, and they are encouraged to do so.

Second, the client is asked to "freeze" their body in the exact position they feel their pain or restriction. The typical verbal instruction is, "Please play with your leg (ankle, arm, shoulder, etc) and freeze it when you feel any pain or restriction." This instruction is usually given with the client in one of the AquaStretch Starting Positions (see website).

Third, the facilitator puts “pressure” with their thumb, hand, or fingers where the client feels pain or restriction, while the client maintains the “frozen” position. You generally ask the client to direct you verbally to that spot (Up, down, left, right, forward, back, etc), although you may allow them to point to the approximate area. Such spots are also called a “Fulcrum” because it may be the middle point around which the body stretches.

It is important to understand that the client may change their body position when they point to their spot, and that you may need to re-position them to where they feel their pain or restriction and confirm you are putting pressure on the correct spot in that position. It is also important to appreciate that skin and muscle move when you put pressure on the skin, especially to penetrate to deeper fascial adhesions. As result, the spot on the skin where a client feels a restriction may not be the same place you need to position your pressure on the skin to get to the spot they feel, i.e., between a deep muscle and a bone.

Fourth, with facilitator pressure on the spot where the client feels pain or restriction, the facilitator asks the client to “Move, if they feel the need to move.” This request usually results in the client’s body experiencing “intuitive movement,” with the body moving in highly individual movements that result in the pain or muscle tension being relieved.

It is critically significant to understand the importance of repeatedly telling the client to “Move, if they feel the need to move.” Without the explicit verbal permission, many clients will have a psychological expectation that the facilitator will be deciding how to stretch their body and thereby suppress and inhibit their natural desire to move.

This four step process is then repeated several times, until the client cannot find any pain or restriction in their “playing”, or until time demands necessitate stopping or going to the next AquaStretch Starting Position.

Before beginning the 4 step AquaStretch Basic Procedure, the client is usually told to tell their facilitator immediately to “Stop, or say less” if they feel any “bad” pain. The client is further told that they may experience “good” pain and that the facilitator may ignore pain and other guttural sounds, which may be part of their AquaStretch experience.

Finding Pressure Points: There are four ways to find pressure points or fulcrums to AquaStretch: 1. Playing 2. Palpation 3. Intentional Movement 4. Gravity Aggravated

As previously described, “playing” is the process of encouraging a client to move their body in water in whatever direction they want, to find any position in which they feel any pain or restriction. The client may then point to where they feel that pain or restriction, and direct the facilitator’s thumb, hand, or fingers to that spot, in their “frozen” position.

Massage therapists, athletic trainers, and others experienced in finding “hot” spots that are painful to palpation, feel tight or restricted, or are neurologically reactive may want to use those skills to identify pressure points or fulcrums to AquaStretch. This method is often more time efficient than “playing”, but should be used in combination with playing; i.e., palpation is first used to find spots, then playing is used to test for remaining spots.

Another way for a facilitator to find pressure points to AquaStretch is to intentionally move a joint while it is completely under water. For example, it is often easier to search for spots/fulcrums in shoulders and ankles, or in the IT Band, with intentional movement.

Generally the facilitator intentionally moves the least problematic, and preferably normal, joint first, often while also palpating. For example, if a client has a frozen right shoulder, you first intentionally move the left shoulder to see the normal range of motion for that client and to relieve any compensation problems. Then, after confirming the client understands to immediately say, “Stop, or say less” if they experience any “bad” pain, you would intentionally move the right shoulder slowly, with it completely under water, to find any restrictions or positions that cause pain. The client would then tell you where the “spot” is or the facilitator would find those spots by palpation, in motion.

Intentional movement and palpation are valuable ways to find AquaStretch pressure points and fulcrums because many clients have adapted to their anatomical restrictions and feel their limited flexibility is normal. In such individuals, a skilled AquaStretch facilitator may be able to identify fascial adhesions with palpation and/or intentional movement that the client may not be able to identify with their own “playing”.

For example, it may be common for long distance runners, people (dancers) who wear improper shoes, and others whose work requires extensive walking, to develop fascial adhesions between the flexor hallucis muscle and either the heel (calcaneus) and/or the Achilles tendon. These people would chronically have tension or less mobility in their ankle and foot movement that they believe is “normal”, which could be identified with intentional movement or palpation by a facilitator, and relieved with AquaStretch.

However, please understand that both intentional movement and palpation should be used in combination with playing. Intentional movement and palpation are diagnostically more time efficient, but playing is an invaluable method to find remaining fascial adhesions because the body’s natural playing is usually more creative in finding unusual positions that need AquaStretching. Playing is also valuable as a technique to test the immediate benefit of an AquaStretch joint or soft tissue release.

The fourth way to find potential pressure points and fulcrums to AquaStretch is to have the client move on land so their body is “gravity aggravated”. The client “plays” or moves into the position they know causes their pain or discomfort on land. “Frozen” in that position, the client then points to where they feel their pain or tension, and/or directs their facilitator to that spot. After the client returns to the water and tries their best to duplicate the same position that stimulated the problem on land, the facilitator then applies pressure to that spot and asks the client to “Move, if you feel the need to move.”

AquaStretch Theories: Many people ask, “Why does AquaStretch work? In summary, there are four basic explanations that may synergistically be interacting to account for the many physiological changes observed with AquaStretch exercising:

1. The body’s enhanced flexibility in water;
2. The use of variable “Stress Resistance”;
3. The Fascial Adhesion Theory; and,
4. Intuitive Movement.

To briefly summarize the primary physiological changes and benefits that have been observed, AquaStretch has consistently restored flexibility lost following prior injuries and accidents. It also consistently reduces chronic pain and movement pain, probably from stretching fascia between vertebra and other joint spaces, which then reduce nerve impingements. AquaStretch also consistently produces muscle relaxation, and sometimes profound relaxation, that may decrease muscle soreness following intense workouts, decrease anxiety, and improve sleep. AquaStretch has been observed intermittently to improve vascular function, hormonal imbalances, emotional dysfunctions, and cognitive behavior. As part of an athletic conditioning program, it may increase flexibility.

The first theoretical explanation for why AquaStretch works is simply that your body has enhanced flexibility in the water, in two ways. Because your body does not have to protect against gravity due to its buoyancy in water, your body can stretch in positions that it cannot stretch on land. In addition, your body can sustain stretches for much longer periods of endurance in the water because your muscles do not have to make as much effort as they do on land. For example, you can hold your arm parallel to the pool floor for hours with minimal effort because your arm can essentially float.

The second theoretical explanation for why AquaStretch works is that AquaStretch controls “stretch resistance” with three variables, by: 1. Attaching 5 lb to 15 lb weights; 2. Changing buoyancy; 3. Varying facilitator pressure either directly or isometrically.

Without weights attached, the body can only generate low resistance against the water itself when stretching, and that minimal resistance can only be sustained for a short time. Although you can generate more resistance by putting pressure against objects or surfaces in the water, such as the bottom and sides of the pool or with hand paddles, it is difficult to control the exact amount of stress resistance and you may be limited in the directions you can sustain that stretch.

By attaching 5 lb to 15 lb weights to various parts of the body, you more effectively control the amount of stress resistance experienced and retain freedom in the range of motion to stretch. For example, with 10 lb weights attached above the ankle on one leg (the AquaStretch starting position called One Leg Standing), you can dynamically stretch the other foot, ankle, leg, as well as the lower back and pelvis in a remarkable number of directions. Similarly, with 10 lb weights above both ankles (the AquaStretch starting position called Two Heavy Feet), you can dynamically stretch the entire spine and neck in ways that are virtually impossible on land, often producing significant clinical benefit.

You can also control stress resistance by changing the body’s depth in the water. It is amazing how different the stress resistance and the quality of the stretch are by only changing the body’s relative buoyancy in the water by just a few inches. For example, it may be helpful to do Two Heavy Feet first with the client in water 4 inches below their armpit and then to repeat this stretch in water at armpit depth. Similarly, if you do AquaStretch self-exercises such as “Wall Sitting” (with 5 lb or 10 lb weights on both ankles while sitting with your back to the pool wall), again you stretch different areas of your body if you do that same stretch at four different water depths, each 3” to 4” apart.

Essentially, the greater your body's buoyancy, the more your muscles float and the more you stretch deeper fascia and the gentler the stretch is. Thus, for people in significant pain or with limited movement, like frozen shoulder, scoliosis or recent injuries, it is often valuable to first AquaStretch in relatively deep water, so the areas that need to be stretched are completely under water.

The third theoretical explanation for why AquaStretch works is the Fascial Adhesion theory. In summary, when a person is injured they may form micro-calcifications in the fascia between their skin and a muscle, between two muscles, and/or between a muscle and a bone. These micro-calcifications are a temporary hardening around the injured area, primarily to facilitate the healing process and to protect against additional injury of those tissues. In normal situations, these fascial adhesions dissolve with normal exercise after the injured area has healed.

However, it seems that fascial adhesions may excessively harden and/or not dissolve for primarily two reasons. First, if someone is injured, they may start using that area before its' healing is complete. For example, it is common for dancers and athletes that have an injured ankle which requires 4 weeks to heal, to be practicing, running, competing, or performing after 2 weeks. This may result in that ankle healing improperly and cause them to experience decreased flexibility, movement pain, and/or compensation problems on either side of their body in their knee, leg, hip, or lower back, often manifested by not being able to move symmetrically.

Second, many people do not exercise sufficiently and as a result, they do not dissolve their fascial adhesions, especially if those adhesions were excessively hardened due to premature use. In addition, fascial adhesions may form in anatomical areas that may only be stretched in positions possible while in the water.

The fourth theoretical explanation for why AquaStretch works is the concept of Intuitive Movement. It seems that if almost any part of your fascia is put into a stretch and you are given permission to "Move, if you feel the need to move" (to avoid your expectation of being "done" by the therapist), your body may intuitively move and stretch in directions that you need for better health. Your body is often smarter than you or your facilitator.

This intuitive movement may then be accented for greater effectiveness by facilitator pressure or isometric resistance. It is believed that your body cannot itself generate sufficient force in either strength or endurance, and/or that it needs increased resistance at specific body spots to be able to stretch out its fascial adhesions.

To summarize, AquaStretch theoretically works because it takes advantage of the body's enhanced flexibility in water and controls stress resistance with 5 to 15 lb weights attached to the body in different water depths to vary relative buoyancy, with a facilitator encouraging their client to "Move, if they feel the need to move" and then accenting their client's intuitive movement to dissolve fascial adhesions. It is the combination of these four theories that seems to account for AquaStretch's effectiveness to restore freedom of movement and symmetry of function, and its many physiological benefits.

AquaStretch Applications:

The purpose of the following is to summarize AquaStretch exercising applications in three areas: Fitness, Wellness, and Health Care. This summary is prepared based on **actual experience**, not on projected or anticipated beliefs, of over 1,000 clients seen at the University of Nevada, Las Vegas (UNLV) Wellness Center since January of 2008, over 70% of who were medically referred.

Fitness: AquaStretch exercising has been observed to restore and/or increase flexibility in amateur athletes, ballroom dancers, and ordinary people, as well as those with above average or exceptional flexibility such as professional dancers and yoga instructors. AquaStretch has often been reported as a superior stretching technique useful in:

1. Athletic Conditioning: As part of programs to restore or increase flexibility.
2. Athletic Training: To relieve soreness from intense training and pain post injury.
3. Athletic Psychology: To physically “get loose” and to psychologically relax.

Two general patterns have been noticed about AquaStretch for athletes and dancers. First, AquaStretch makes training easier and more comfortable, especially if done as a flexibility preparation and as a post training recovery tool to reduce muscle soreness. Second, many athletes and dancers do not allow sufficient time for proper healing when injured. If an injury takes 4 weeks to heal, they are practicing or training after 2 weeks. This may result in improper healing that leads to movement pain and/or small decreases in flexibility caused by fascial adhesions that AquaStretch relieves or restores.

Wellness: AquaStretch results are immediate versus other forms of exercise, and are relatively permanent. It is also useful as a motivational tool for other wellness program tools, i.e., diet. The following groups have especially benefited from AquaStretch:

1. Movement pain or flexibility loss more than 3 months after injury or surgery.
2. Women with foot and leg pains from high heels or dance shoes, or from playing tennis
3. Recurring need for massage, chiropractic, or osteopathic manipulative therapy (OMT).
4. Occupation Aggravated Joint or Muscle Pains, i.e. Back, neck, shoulder, wrist, foot.
Food servers, computer workers, cocktail waitresses, casino dealers, bartenders.
5. Personal Growth Clients: May enhance meditation or stimulate altered/spiritual states.

Health Care: We don't Dx or Tx. AquaStretch exercising has helped people with:

1. Lower Back, Neck, Joint or Muscle Pain (including arthritis, headaches, fibromyalgia)
2. Idiopathic Pain or Nerve Dysfunction: (i.e. Ovarian pain, Dysmenorrhea, P. Fasciatis)
3. Soft Tissue Prep, for synergy with massage, chiropractic, OMT, and cranial work.
4. Post Surgical Rehabilitation: ACL, Meniscus, Hip & Knee Replacement, post natal.
5. Pain Management Programs, including accidents, combat, and sports injuries.
6. Scoliosis & other spinal deformities, including degenerative or herniated disks.
7. Psychological: May reduce anxiety & PMS emotions. May increase mental clarity.
8. Sleep problems

Finding Fulcrums = 636 Words, for editing, Total 3110 – 636 = 2,474