

## Ai Chi Progressions

Those of us who know and use Ai Chi have seen the myriad of benefits it offers our clients. Balance (along with core stability) improves, muscles tone and strengthen, systemic issues (blood pressure, diabetes, pulmonary) and cardio improve, and the calming of the reticular (part of the fight or flight sympathetic) system. This decreases stress, hyperactivity, sensory, anxiety, etc.

If you're already using Ai Chi with a single focus. Let me give you some ideas/options to progress your Ai Chi practice.

### I. For Balance and Core Stability

At 30-40 years of age we already have postural issues and muscle imbalance. Both of those lead to balance issues. Other factors affecting balance and core include respiration, vision, pain, disease, stress, medications, shoes and carrying techniques. Ai Chi helps with balance and core stability. Here are ways to encourage that benefit.

**Use the Breath.** Relearning diaphragmatic breathing assists in strengthening deep tissue core muscles. Proper breathing mechanics is also important. Dysfunctional breathing patterns can exacerbate upper crossed syndrome. Taking the time to educate clients on how to breathe well from different positions will not only enhance functional capacity but also help restore healthy length-tension relationships and quality of movement to the upper extremities.

Promoting diaphragmatic breathing during all of Ai Chi may be particularly rewarding and can help decrease sympathetic tone in tonic muscles.

**Deeper Water.** For almost everybody, because of the water's offloading, it's harder to stabilize and maintain balance in deeper water. Ai Chi is traditionally offered at neck level. Few people can perform the Ai Chi postures while maintaining neck depth with shoulders underwater. You'll see the strongest clients take shoulders up out of the water in order to maintain balance.

**Slower Movement.** Ai Chi moves slowly. Most people think that going faster is harder. Going faster may burn more calories but balance and core stability are better challenged when switching to slow motion. Try it yourself with this walking script. Give it about 5 minutes and go slower every 15-20 seconds.

- *Begin walking. Use a normal stride with the heel barely clearing the pool bottom during the swing phase. Use a heel strike and roll heel-to-toe. Eyes focused ahead. Neck is long, and shoulder blades pressed lightly down. (Reciprocal arms shouldn't have to be cued but do so if necessary).*
- *Continue walking and notice your step length, and again, that your heel is barely clearing the pool bottom. Slow down a bit and maintain the same step length while letting your shoulder blades relax down. Keep your eyes forward.*

- *Now slow down a bit more and check on your long neck, easy armswing and tall torso. If you can slow down even more you'll start to notice that you're challenging your balance. If you don't notice the challenge, move even slower.*
- *Try to keep your arms relaxed and eyes forward. These will be harder now but you can do it. You'll want to keep your step length the same as before and that's harder too.*
- *Continue walking and move as slowly as possible. When you're ready, go even slower.*

Why are slow motion movements (such as Slow Motion Walking and Ai Chi) so difficult? Because continuous forward movement masks a myriad of balance deficiencies. Cycling involves superfast corrections to a thousand invisible almost-falls. If you were to go slowly on your bike, it would be difficult for balance AND it would improve your balance. The same is true with Slow Motion Walking or moving slowly in Ai Chi. In life, we are constantly experiencing one controlled fall after another.

How do we find these controlled falls? Through Ai Chi you can help your clients identify any muscles that are "helping" when they shouldn't be and others that aren't doing their job. See what clients do to maintain their balance during Ai Chi – is it gripping the toes, tensing the neck and shoulders, a short range of motion with hands almost always in front of body, is it poor alignment with forward flexion? If you see those things, that's what your client will do on land when he/she starts to fall.

Chronic practice of these inappropriate motions eventually interferes with a healthy movement because the muscle patterns we develop to cope with balance (or do a balance exercise) reappear when we actually need to balance. If a client grips his/her toes during Ai Chi, there is great probability that he/she will grip during the beginning of a fall.

Balance exercises should work core ... then we have functional carryover to daily life. Making sure that clients move slowly and feel Ai Chi in the trunk will assist with balance and core stability.

**Stance.** Standing, on land or in the water, is easiest if our feet are about shoulder width apart and if they are staggered (one foot a little forward). It's harder to balance when putting feet side-to-side (rather than staggered), putting them next to each other (closed stance), or positioning them very far apart from each other. In Ai Chi we use a wide, non-staggered, stance. Spine must be straight. Making the stance just a bit wider, or much narrower, while staying low in the water will destabilize clients and require more core activation.

## **II. For Peace**

### ***Focus***

Changing the focus during Ai Chi takes our thoughts away from daily challenges. As you lead class you can change the focus so the brain has to stay focused instead of being distracted by 'life'. Here are some ideas to vary the focus.

- **Breath Awareness**  
Practice diaphragmatic and/or yogic breathing. Breathing deeply helps in a moment of crisis. Learn to associate relaxation with breathing. We all tend to breathe shallowly in a tense

situation. Deep breathing helps to ease the “hollow feeling” in the pit of the stomach, which usually means the muscles there have tightened up.

Diaphragmatic Breathing has many benefits (below). You can have people focus on it or not but be sure to teach it so clients get all the benefits they should get from Ai Chi. I teach it with clients standing in Ai Chi position with a spine straight and have them put their hands on the stomach. Exhale first – use a sponge analogy (squeeze the sponge in the stomach during exhalation). Inhale while placing the tongue behind upper front teeth. Use nasal inhalations if possible. That’s it – easy.

Diaphragmatic Ai Chi breathing decreases:

- Blood Pressure
- Tone and contractures
- Spasticity (spasticity increases with stress, breath-holding and thoracic breathing)
- Stress
- Heart Rate
- Pain and pain awareness
- Sympathetic response
- Breathing cadence
- Use of accessory muscles

Diaphragmatic Ai Chi breathing increases:

- Circulation
- Blood flow to the muscles
- Parasympathetic response (calms the reticular system, which decreases stress, insomnia, depression, anger, fatigue, anxiety and confusion)
  
- Relaxation and comfort in the water
- Digestion
- Focus / mental alertness
- Restorative rest / sleep
- Deep tissue abdominal muscle activation / massage / improves motility and liver function
- Rib cage mobility and lung expansion for gas exchange - creates deeper ventilations

- **Watching**  
Be aware of what the water’s doing, how your hands are moving, and the difference of water and body movement at the surface versus deeper in the water.
- **Physical Feeling**  
Notice where the movement initiates, and notice points of stress, tightness or hyper-mobility.
- **Emotional Feeling**  
Be aware of emotions. If they are positive, remember them and come back to this feeling when negative emotions are present. If they’re negative practice separating the negative thought from the emotion. Ask “*How do you feel right now? Focused or scattered? Positive or negative? Creative or dull? Happy or sad? Compassionate or angry?*”
- **Alignment**

Observe yourself in your progression using an imaginary watcher. Make subtle changes in your technique based on what you and the watcher “see”. Watch low back, neck, shoulders, knees and hips for proper positioning.

- Physical

A new pattern of thought or a new activity initially attracts much conscious attention, but with frequent repetition it becomes unconscious and habitual. Be sure the habit is good by noticing extension, flexion, flow, speed, consistency, balance, etc. Ask, “*How do you feel physically right now? Strong or weak? Energetic or lethargic? Comfortable or uncomfortable? Flexible or tight? What part of the body moves when you breathe? How deep, full and even are the breaths?*”

### III. To Strengthen / Tone

**Hold Stance** – simply holding stance during Ai Chi takes a lot of muscle recruitment. The movement of the water (which you don’t notice) rocks the body and tries to destabilize clients. Maintaining a straight spine is beneficial to strength and not that easy to do.

Slow the movements down a little more than usual and watch the head and feet move as clients try to settle in one place. Or let clients move their arms a bit faster and see if they can hold their position. Unilateral arm movement makes this VERY challenging.

Anchoring in neck depth water isn’t easy but it is beneficial.

External rotators are usually weak (especially in women). The Ai Chi stance brings tone and strength to the hips and low back. Because of what the low back pain researchers call ‘gluteal amnesia’ it is very difficult to hold the position for all of Ai Chi. The more practice and awareness clients have, the stronger they become.

**Coordinated Breath and Movement.** The Ai Chi coordination of breathing and movement allows muscles to integrate their dual functions and produce graceful, flowing movements of the trunk and extremities. This leads to development of core control and alignment for all movement, not only Ai Chi movements. Balance learned in the water (an unstable medium) translates well to land.

**Joint Range of Motion.** Increase ROM by small increments and practice with that small additional ROM. Maintaining or promoting the integrity of articular surfaces, connective tissues and joint capsules is a goal of Ai Chi so the Ai Chi protocol can enhance the treatment of patients with rheumatoid arthritis.

**Movement Tempo** – Simply slowing the movement down elicits a more accurate and stronger muscle recruitment pattern. Mix ‘up tempo’ (as in Katrien Lemaheiu’s *Ai Chi in 3*) with the slow movement. We don’t live in one tempo – we move both quickly and slowly and at moderate tempo daily. Mixing Ai Chi tempo is functional.

**Hand Position** - As you already know, hand position changes drag. Change the ‘slicing’ hand position and increase cardiac output.

#### IV. For Cardio

Breath Function. A stress response includes increased respiratory rate, decreased tidal volume and a shift to thoracic breathing. Ai Chi breathing can inhibit neural responses. Eliciting a parasympathetic or inhibitory response will enhance vagal modulation, decrease heart rate (Lu), improve respiratory synkinesis improving breath function or asthma and immune system function for asthmatics. Clients with respiratory impairments that affect their ventilation can benefit significantly from the synchronized Ai Chi breathing cycle. *What does this mean?*

Healthier heart and lungs can be a benefit of Ai Chi's diaphragmatic breathing. While a decrease in VO<sub>2</sub> and heart rate are the end product of the program, an increase of heart rate and oxygen consumption are seen during participation in the program.

According to research done by physiologists in Japan, simply breathing while submersed to the shoulders in water (not doing anything else) is comparable to forms of moderate aerobic exercise and increase oxygen consumption seven percent. This in turn increases caloric consumption, a side benefit many are looking for. Cardiac patients can benefit from Ai Chi's diaphragmatic breathing with the inhibited neural response by decreasing arrhythmia, coagulation, blood pressure and heart rate.

**Brain** – Work the flow and the breath. It is a fact that the brain requires three times the amount of oxygen of any other organ in the human body. Anything less than that supply may lead to confused thinking. Diaphragmatic breathing leads to an overall increased feeling of clarity and focus. The natural flow of Ai Chi movements calm the mind and decrease stress, fatigue anxiety and confusion. Water, movement and music are used to encourage a state of relaxed awareness.

The research backs this information and the anecdotal findings support it. Try one suggestion this month and let me know how it works!

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