

# Protecting the celestial stem: A personal reflection on a Chinese Qigong approach to staying fit and not injuring yourself in the process

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## Abstract

Protecting the celestial stem explores the health benefits of Chinese Qigong practice, which places great emphasis on protecting the body by paying attention to body architecture – the positioning and placement of bones and joints in relationship, one to the other.

It is based on 30 years of data collected from grant aided research projects and from teaching of Eastern movement practices (Qigong, Tai Chi and Yoga), to people with life-changing and life-threatening conditions and to students of all ages wishing simply to remain healthy. It presents a brief introduction to the basic principles that underpin Qigong practice, and its particular and peculiar approach to exercise. In addition, it describes as simply as possible some of essential exercises, breathing practices and their reputed benefits.

## Introduction

### Protecting the celestial stem

Reflections on a Chinese Qigong approach to staying fit and not injuring yourself in the process.

*“There are more things in heaven and earth ...*

*than are dreamt of in your philosophy” [1]*

Protecting the celestial stem is not a research paper per se but rather focusses on a personal reflection of my own practice and teaching. As such it can be considered a case study, supported by academic research, and more than 30 years of data collected from grant aided research projects and teaching of Eastern movement practices (Qigong, Tai Chi and Yoga), to people with life-changing and life-threatening conditions and to students of all ages wishing simply to remain healthy.

To give some context, this paper evolved from a book on the idea of people trying to stay healthy but injuring themselves as they do it. Protecting the celestial stem presents a look at Chinese Qigong practice, which places great emphasis on protecting the body by paying attention to body architecture – the positioning and placement of bones and joints in relationship, one to the other.

In preparing this paper, I reflected on the similarities and differences with western approaches in dance and physiotherapy. So as part of the process of writing this article I started talking with my long time Research Associate Candace Hind, my daughter Alora (a kinesiologist currently studying physiotherapy), and my long-time assistant Joanna Coughlin (a dancer, dance teacher and choreographer who I have slowly co-opted to be a Qigong teacher with seniors) about contributing editorial suggestions and commentary on what I was writing from the perspectives of western exercise and dance. Their comments have been integrated within this article.

Below is presented a brief introduction to the basic principles that underpin Chinese Qigong practice and its particular and peculiar approach to exercise. In addition, I have described as simply as possible some of essential exercises, breathing practices and their reputed benefits. It must be clearly stated that none of the authors are licensed Physiotherapists and we appreciate that to some people trained in western approaches to health and exercise much of what is written here may at best be seen as alien and at worst anathema. This is probably doubly so for those who follow evidence based best practices as defined by modern western science. I appreciate that for many readers the concepts presented here may be very hard to accept.

### Off by an inch, miss by a mile

#### Basic principles of Chinese qigong exercise

Qigong is considered one of the ‘Three Pillars of Traditional Chinese Medicine’ (TCM), the other two are Acupuncture and healing with food & herbs. Occasionally ‘Bone Setting’ (similar to Western Chiropractic or Osteopathic medicine) is also referenced. The practice of TCM is based on the concepts of Chi, the five elements (earth, fire, metal, water, air) and Yin and Yang (opposite and complementary forces such as day and night, female and male, in our ever-changing universe).

While I began my initial studies of Chinese Martial Arts over 50 years ago, I consider that my study of authentic martial arts began with Master George Ling Hu, a true Master with a wealth of experience and

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knowledge who fast became my personal teacher. I first met him in 1993 and I often say I learned more in my first three hours of working with him than I had in my previous twenty years of study.

Master Hu was born in China and grew up in Taiwan. His parents were both Western Physicians. Professionally, he trained as a geologist and worked as an engineer. In addition to his expertise in Chinese Martial and Healing Arts, he is also a Yoga Master and occasionally teaches acupuncture and meditation at Baylor medical school. He is a funny, engaging, and pragmatic teacher. He is often dismissive of Western characterizations of the metaphysical and esoteric benefits of Qigong and Yoga practice. One of my favorites sayings of his, is that practice in the martial arts, with its emphasis on its cultivation of Chi, (loosely translated as the life's force, life's energy or the Universal force is best described as 'Bio-Electrical energy'), is "simple but not easy".

He always talks about how the architecture of the body is crucial to the practice of Qigong and Tai Chi. He emphasizes that the way you position and align your body, affects not only the energy generated, but also the benefits, of each exercise. Hu jokes about poorly trained and ill-informed teachers in the West who emphasize how practice should make you "feel good" - what he calls "Spaghetti Tai Chi style" - but who neither understand nor teach the martial applications inherent in the practice of the forms, from which almost all physical benefits arise.

### Poetry and metaphor as guides to practice

*"Your mind should be nowhere in particular"* [2]

Students learning Qigong and Traditional Chinese exercises often need to make a fundamental paradigm shift in their approach. The directions they are asked to follow often run counter to modern Western scientific theories and approaches to exercise, and so do not easily relate to their previous experience. Taoist and Buddhist images and poetic sayings are often very helpful in this process.

Unlike Western teachers who more often than not emphasise mechanics and scientific descriptions, Chinese Masters are renowned for their use of poetic short sayings and natural images as guides to practice. They advise students to

- Do without doing - (Wei Wu Wei)
- Literally translated as, "action without action" or "effortless doing", is often associated with water and its yielding nature.
- "Root Like a Tree, Flow Like Water" [3]
- The Waist is the great commander
- The body leads - The arms follow

Students learn sets of exercise named

- The five animal frolics - (Wu Qin Xi)
- Wu Qin Xi

Wu Qin Xi can be regarded as one of the earliest form of Medical Qigong in Chinese history. These are playful and dynamic exercises which imitate movements of five animals. Each animal, Tiger, Deer, Bear, Ape and Bird, is connected with one of five elements and with our internal organs. According to Master Hua Tuo, "It eliminates sickness, benefits the legs, and is also a form of Tao Yin (body exercise of bending and stretching)" [4].

- *The Eight Pieces of Silk Brocade - (Ba Duan Jin)* [5]
- Ba Duan Jin

Ba Duan Jin is one of the oldest known forms of Qigong. It consists of eight sections and was primarily designed to be a form of medical Qigong to repair injury and improve overall health, but it is also used as part of the training regime in Shaolin Kung Fu, where it is the first form taught in Shaolin Medical Qigong.

- o Medical studies suggest that Ba Duan Jin significantly improves the flexibility of the spine, calves and Achilles tendon, and also the shoulder joint and sacroiliac joint. In addition, it alleviates pain in the knees and strengthens the entire physical structure, in particular the quadriceps muscles and the calves. Used as a warm-up exercise it helps to prevent athletic injuries.

Individual exercises called:

- "Place the moon back in the Sky",
- "Carry Tiger Back to Mountain",
- "Lift the Pails, Push the Donkey"

### Breathe and smile: Focus on your breathing as if your life depends on it.

In Tai Chi and Qigong, the positioning and alignment, of an individual's knees, navel, nose and big toes, is crucial not only for the benefits of each exercise but also to prevent doing harm to the body. In addition, the positioning the hips in alignment with the shoulders is also crucial. However, the most important aspect in all of this is how and when to breath while doing the exercises.

In Qigong it is important that you focus on your breathing and smile, for simply smiling helps with relaxation and stress reduction. Western research bears this out. You do not need to summon an image to smile about, the act of engaging the facial muscles in the formation of a smile induces stress and blood pressure reduction. [6]

The way you breathe influences the functions of the body. Qigong and Yogi and Sufi, breathing patterns, help to improve the immune and lymphatic systems and aid digestion. Done correctly they also improve oxygen uptake and the fluidity of all movements.

I begin my daily Qigong practice with a set of three linked exercises which together are known as the Opening and Closing Breaths. [7]. This set of exercises is also referred to as 3 healing breaths because in Traditional Chinese Medical practice, they are used to help prevent and treat cancers and stress related diseases. These exercises help to 'guide' Chi through the main meridians [8], strengthen the immune system, energise the body, physically clearing and expelling 'stale' air and cleansing the body of impurities, and toxins.

This practice focusses on a style of breathing know as Natural Breathing. The key thing is to focus on your breath. Slow, natural regular breath. In Eastern texts the practitioner is instructed to guide their breath to the Dan Tien, often referred to as the seat of the breath and/or the wellspring of Chi. It is described as a point located at a point approximately three fingers below the navel, about two inches below the body's surface.

### Basic directions

- Breathe in and out through the nose.
- Keep your mouth closed;
- Your teeth gently touching
- Tip of your tongue gently touching the roof of the mouth.

- Do not hold your breath
- Breathe in – Clear the mind
- Breathe out – Cleanse the body
- You must always synchronise your movements to your breathing - follow this pattern:

### When moving your arm(s)

- As arm(s) rises breathe IN
- As arm(s) lowers breathe OUT

### When moving your leg(s)

- As you raise leg(s) up - breathe IN
- As you lower your leg(s) down- breathe OUT

Above all breathe naturally and do not force anything!

In addition to this style of breathing, there are many other styles of breathing employed in the Qigong and the Martial Arts, e.g. Reverse or Taoist breathing where the abdomen moves outwards on the OUT breath and inwards on the IN breath.

The breath itself can be considered as:

- Cleansing (IN breath is through the nose and the OUT breath is through the mouth),
- Relaxing (OUT breath is longer than the in breath),
- Energizing (IN breath is longer than the OUT breath),
- Healing (IN breath is directed to a point of tension or pain and the pain is expelled on the OUT breath).

### Standing postures – the essential architecture of Qigong

How you stand is an essential element in the practice of Qigong. There are several standing positions used in Qigong. Most important are: Standing Like a Tree, Standing Post and Inverted Y Position (Warren & Coughlin 2014 pp15-17) [9]. Each has a different effect on the body.

In the Standing Like a Tree, often referred to as Wu Chi - the point of neutral balance, you should imagine that you are like a tree rooted to the ground through your legs and feet and reaching upward to the sky through the top of your head.

Standing Post is in some ways the simplest of postures. As it merely requires that you stand up straight with your feet together.

The Inverted Y position links directly to traditional Chinese calligraphy. The symbol for a human being was often an inverted Y shape with a straight line, drawn across at the junction of where the “V” and the “I” meet, to represent the arms. As a result, this position is sometimes referred to as “Mankind” or “Human Being” posture.

### Sinews changing exercises - Protecting your knees, Strengthening your bones

Western and Chinese approaches to exercising the body are different in several ways. Firstly, much of what is done in western exercise is to strengthen the ‘outer’ muscle layers. However, this is often done without strengthening the ‘inner’ layers or with any attention to the connective tissue that attaches muscle to bone.

One of the most profound differences in Chinese approaches to exercising the body is the emphasis on strengthening what we in the West would call Tendons, Ligaments, Cartilage and Bone - which in Qigong practice are referred to simply as *The Sinews*. The Chinese’ belief is that strengthening and developing muscle without attending to making the *Sinews* strong and supple is counterproductive and may even be harmful. TCM says, that as there are many nerves, blood vessels and meridians that run through your knees, keeping your knees supple allows the heart to pump blood more efficiently and so helps prevent heart attacks.

The Sinews Changing Exercises are a series of exercises designed to gently work and strengthen your “sinews”. I appreciate that this belief is very hard to reconcile with Western analysis of how our bodies function. However, while some of Qigong’s benefits occasionally defy rational scientific explanation – when experienced or seen first-hand somehow the benefits are undeniable!

While there are many exercises considered to be *Sinews Changing Exercises* (Warren & Coughlin 2014 pp 49-51 [9]) the essential ones include *Circling Your Knees*, *Picking up Your Toes and Raising Your Heels*. In these exercises, positioning, placement and architecture are of great importance. Deviation from the directions can in fact transform these exercises from having a positive effect to a negative one. Consequently, it is very important to pay attention to the directions for placement, especially of your knees throughout.

### The celestial stem

Celestial Stem is a term used in Qigong that describes the point from the top of the spine (inside back of the head that points to the sky) to the tip of the tailbone. It is a term used to describe how the spine should be ‘held’ where each vertebra is:

- aligned one and top of the other and
- the space between each vertebra should be equidistant
- However as intervertebral disc space varies throughout the spinal column this directive should be not be seen as a scientific truism but rather as an ‘illustrative’ image used to help guide the student.

Qigong masters emphasise that the Celestial Stem needs to work as a single unit with your nose, navel, shoulders & hips staying in alignment so that the spine moves as a single unit. You should not allow it to curve or twist to the side, as this blocks blood flow and impedes free movement. This is a bit different from physiotherapy practice, which generally promotes spinal mobility especially through the thoracic region, only promoting moving as a unit when some condition contra-indicates twisting.

### Basic Directions

- Imagine a string attached to the top of your head that lightly and softly pulls you up to the sky
- At the same time a string is attached to your tailbone that lightly and softly pulls your tailbone down to the floor
- Notion of relaxed tension
- keep your shoulders, chest and stomach muscles relaxed
- Each vertebra stacked one on one another,
- the spine moves as a complete unit.

## Tips

- Try not to wear glasses if possible as glasses affect posture and the position of your head
- Think of your head floating up and your tail floating down

According to TCM the Celestial Stem helps to protect the body in general day to day movements:

This also helps to protect the lower spine, Alleviate abdominal and menstrual cramps, aid digestion, weight and body changes.

It is clear that there are some similarities here with Dance training and Physiotherapy. Placement and alignment are crucial in attaining the benefits of both.

Research on posture and its benefits to overall health goes back almost 100 years [10,11]. Recently there has been an increase in awareness as to how alignment and correct placement helps to prevent injuries for Ballet & Contemporary Dancers as well as more modern styles of dance and now Pole Dancers and Aerial Artists [12-15].

Alignment in dance, particularly ballet, has both practical and aesthetic purpose. When the spine is erect with shoulders open, neck elongated, and chin lifted the classic, graceful “ballerina” posture is seen. Without this alignment, ballet dancers are unable to achieve the balance required to execute turns such as pirouettes, long extensions, as seen in an arabesque, or height required in jumps. The fluidity of a ballerina’s arms can be linked to the idea that the body leads, and the arms follow. Movement is initiated using back muscles and flows out and down through the end of the fingertips.

In Dance breathing patterns are also crucial. Holding one’s breath will lead to fatigue and breathlessness, shortening a dancer’s ability to move. Additionally, when dancers breathe with their movement, it complements the action and gives the appearance of effortlessness.

However, in Qigong it is the connection of the generation of Chi and other TCM concepts, to the coordination of breathing patterns, posture and movements that sets this apart. The stress on protecting the Celestial stem and its importance in developing Chi cannot be overstated.

## Final thoughts

Some of what I have described above has crept into modern usage in the Western teaching of Yoga and Soft Martial Arts. It has also permeated into Dance Teaching and Aerobics. The problem as Master Hu points out is that people integrate ideas into their practice without understanding, or knowing in their bones, the effects of each exercise or even the significance of the metaphors and poetry used as guides to practice.

In my work with people living with life-changing and life-threatening conditions I always stress that Qigong and Yoga are not panaceas in themselves. Ideally, these practices, when taught by well trained and understanding teachers, are best used as a complementary approach, ones that may provide “added value” to Western Medical approaches and exercise forms – thus the sum of the whole becoming greater than the sum of the parts.

I have been practising these forms all my life. Every day I practice Yoga, Tai Chi, Qigong and martial arts forms in rotations that allow me to cross train my body, and different sets of muscles to help strengthen different physiological and immunological facets of my body. Master Hu once said to me that it is not that Qigong Masters and Yogis do not get sick, it is simply that they tend to get sick less often and have shorter and less severe bouts of illness when they do succumb to illness. My personal experience bears this out.

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