# CHINESE 2017 \*\*\* MEDICAL CULTURE

**Medical Scenes in Qing Ming Shang He Tu Chinese Characters** (清明上河图) and TCM -A Study of Qi **Medicinal Diet in Spring** Volume 2 (Spring Edition)

### **Instructions to Contributors**

### 1. Magazine Focus

Disseminating TCM humanistic philosophy, history, culture, health preservation, development trend, treatment, and comparative study on traditional medicine, passing on Oriental Wellness wisdom of Chinese medicine, and showcasing the knowledge about heritage of TCM to the world. This is an international journal for popular science focused on TCM culture.

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### 3. Readers

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### 4. Manuscripts

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Chinese Medicine & Culture

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Herbal Medicine

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Antiquity and Cultural Relics

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The English edition of the Journal of Chinese Medical Culture is edited and published by the Editorial Office of the Journal. The original papers (less than 5000 English words) of the experience or culture study in the field of TCM with related pictures are expected.

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Editorial Office of Chinese Medical Culture

## The Magazine of *Chinese Medical Culture* has Landed in 500 Confucius Institutes Around the Globe



In recent years, with Chinese Medicine spreading overseas, the magazine of Chinese Medical Culture has received great popularity among international readers. As the need for gaining Chinese Medicine knowledge is growing day by day, Shanghai University of TCM has designed and published a full English edition magazine of Chinese Medical Culture (ISSN 2206-009X). This magazine interprets the cultural aspects of Chinese Medicine through the perspectives of humanity, history, health preservation, treatment of diseases, as well as interactions between the world's traditional medicines and diverse cultures. At the moment, the digital version of Chinese Medical Culture is available online at iBooks and Amazon Global, and also for download worldwide.

A 2016 global survey on China's image indicates that Chinese Medicine is its most recognizable Chinese element. The Chinese government attaches great

importance to international development of Chinese Medicine, and encourages the new concept of including Chinese Medicine in all Confucius Institutes. At that time, there were only four Confucius Institutes featuring Chinese Medicine. Until December 11th, there are more than 240 Confucius Institutes in 78 countries that have provided Chinese Medicine courses.

The magazine of Chinese Medical Culture has been reaching out to various Confucius Institutes since its establishment and has been highly recognized. Currently, the magazine has been sent to 500 Confucius Institutes around the word, which facilitates Chinese Medicine going international and allows Chinese Medicine to speak to the world.

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### Chinese Characters and TCM— A Study of Qi

### By Elisabeth Rochat de la Vallée (FRA)

This article is an edited abstract from A Study of Qi, by Elisabeth Rochat de la Vallée, published by Monkey Press, London, UK. The first section of the book looks at the development of the concept of qi through the early classical texts; the second part discusses the nature of qi within the medical texts of Huang Di Nei Jing (《黄帝内经》Yellow Emperor's Internal Classics). The following is part of the introduction, which defines the origins of the concept of qi, its place in yin yang cosmology, its many and various dictionary definitions and the etymology of the character. The concept of qi is not easy to grasp. It has never been successfully translated into European languages, though it may be likened to the Indian prana. This study aims to deepen our understanding of the phenomena, which as practitioners of Chinese medicine, use every day.

The character for qi (氣) does not appear in early oracular or bronze inscriptions, or in the most ancient Chinese texts, such as Shu Jing (《书经》 The Book of Documents) or Shi Jing (《诗经》 The Book of Odes). What we do find in the oracular inscriptions of the twelfth, thirteenth and even fourteenth centuries BCE is the character for wind (风), and these early descriptions of wind have some of the qualities which will be later attributed to qi. So in order to understand the origin of qi, we must first look at the concept of wind.

Even at this very remote period in time there was the idea of different winds. These early documents refer to several different kinds of wind. A wind from the south was not the same as a wind from the north or the east. They speak of the 'four winds' and the 'eight winds', and each of these contributes to the growing concept of qi. Wind was also considered to be a messenger of the Supreme Being, bringing life, transformation and fertility, all that is necessary for the development of life. Wind came from heaven and had an action on earth, and this is clearly a basis for the beginning of the notion of qi. So although a character for qi itself does not appear with a fixed meaning in these early texts, wind and its effects were certainly a way of perceiving the vital forces.

The character for phoenix (  $\mbox{\ensuremath{\mbox{$M$}}}$  ) is similar to that for the wind, and has the same pronunciation, feng. This is not by chance. The ancient character for wind represented a phoenix with a proud and fierce bearing, and the phoenix was one of the assistants of the Supreme Being, the Great Ancestor, who was in charge of the four winds. The four territories were organized around the centre where the reigning power was established. This cosmology was the foundation of the Shang-Yin dynasty.

When qi begins to appear in texts, it refers to something coming from heaven and penetrating earth. It has an influence on earth and provokes a reaction, as for instance with the qi that makes cold and heat, day and night, wind and rain.

### Yin and yang ( 阴阳 )

In later centuries, qi is understood as what lies behind yin and yang, and this is a very important shift in thinking. It is not possible to speak about qi without speaking of yin and yang, and we cannot speak of yin yang without speaking of qi. Yin and yang appear in early texts as two of the six qi of heaven, and are likened to cold and heat, which is to say they are not only the bright, sunny and dark, shady sides of a hill, but as an extension of that, they are the cold and heat which are the results of being in the sun or in the shade. Yin and yang later



become a way to differentiate qi. With the progression of time, qi became the influence behind every kind of manifestation: yin qi, the principle behind cold and cooling, and yang qi, the principle behind heat and warming.

We can see how these differences evolved, and how this development was linked with changes in the weather and the passing of time, which was seen as a movement of qi and yin yang, with cooling from summer to winter and warming from winter to summer. So here qi was used to codify the movement of time, and that movement was seen not only in the four seasons but also seen in the progress of each day. Many of the early texts describe this.

### Wu Xing ( 五行 five elements)

As the understanding of qi evolves into that which lies behind the outer appearance of things, there is the development of what we may call "analogy". For instance, the same kind of qi that makes wind and storms in nature is also seen to create anger within a human being. In the early texts, the relationship is often made between the six qi of heaven and the six qualities of qi within a human being. An example of this is seen







in the Zhuang Zi (《庄子》 Zhuang Tzu), where qi is understood not only as that which lies behind any given phenomenon, but also as the link between different phenomena presenting similar characteristics. For instance, the qi that is behind anger and wind may also be behind all kinds of violent impulses that appear at the beginning of something; a movement of arising, as we see in the spring for example.

"Heaven has four seasons and five elements (  $\Xi$  行 ) for giving life, the former including growth, limit, storage, and the latter to produce cold, heat, dryness, damp ness and wind. Human beings have five zang-organs, and through transformation, five qi to produce elation, anger, sadness, oppression and fear." (Huang Di Nei Jing Su Wen 《黄帝内经·素问》 Plain Question of Yellow Emperor's Internal Classic)

Through this linking process it was possible to develop a cosmology based on qi, yin and yang and the five elements. The concept of the five elements, phases or agents (  $\pm \pi$ ), developed around the third century BCE, as it was not possible to develop a cosmology of correspondences before having a substantial notion of qi in order to make these links. This occurred around the fourth and third centuries BCE.

"Heaven has wind and rain, cold and heat; human beings have taking and giving, joy and anger." (Huai Nan Zi《淮南子》Huai Nan Tze)

### Qi and the origin of life

At the end of the third century and the beginning of the second century, qi was linked with the origin and production of life. This shift came with the understanding that qi is not only the power of transformation that makes life appear, but may also be considered as the origin of life itself. This allows us to ask what kind of relationship exists between qi and living beings, between qi and form. "Form" suggests everything that has a specific quality; form requires substance and essences. The beginning of form is the yin concentration and condensation of qi, which allows substance to appear. When qi becomes yin and yang it is subject to the movements and transformations which create opposition. Within this duality of essences and qi, form and qi, the qi is specific with specific qualities and no longer a totality. Therefore, it may be changed, altered and even perverted, especially by the power of human nature.

So what is the relationship between qi and the Shen (神)? Qi itself is neither substance nor spirit. What we may say is that qi manifests through phenomena, and is inseparable from that manifestation to which it gives specificity and movement. On the other hand we cannot say that qi is the same thing as these phenomena or beings.

When things cease to be, the qi does not disappear, but no longer having a form, it can no longer be perceived. So we could say that it is a kind of infinite and indefinite potentiality. But potentiality sounds like an abstraction, which is not the case with qi. It is a reality. So finally we come to the understanding that everything is qi, and qi is everything that exists. Therefore heaven and earth and all that is between them, everything that may envelope them and all the beings and phenomena existing between them, are just specific manifestations of qi which exist for a while. If it is an emotion it may last just for a day. If it is a mountain it lasts longer. Eventually we come to the understanding that everything is qi, and the essences themselves are just a concentration of qi.

The ancient Chinese texts also had a passion for unity, and found the unity of all things through this vision of qi. Within this vision, my qi is not exactly my own. It is mine at the moment, because at the moment it is making up my life. And it is the same thing with my spirits. My spirits are not specifically my own, they are mine because they are effective in my life at this moment. If my life comes to an end, the spirits and the qi will not disappear but they will be something or somewhere else. They will continue to participate in the infinite and unlimited movement of life. This is not an adequate description because we are deficient in language to speak of what lies behind the appearance of living beings. But qi is at that level; it is at the level of the origin of all manifestations of life. So the colour, sound and smell of a specific being are all a matter of qi.

At the same time, there is also the idea of qi as the yang aspect of all yin yang relationships, such as blood and qi, essence and qi, body form and qi. So the question here is whether qi is able to be the natural order of life on its own or do we need to add something? This 'added something' has been called by different names according to the era and the school of thought: the Dao ( $\dot{u}$ ), the Li (u), the principles of the Confucian school, or the Shen (u). There are several approaches in later texts, but essentially the idea is that the qi follows 'guidance' from heaven in some way. But we have to be careful here, because even if the qi is in relationship with something giving guidance, this

does not suggest duality. Ultimate reality is always the merging of opposites in unity. We have to be very clear about this because it is an error that is often made in the west.

The cosmology which is seen in Chinese medicine and in Daoism is based on qi, yin and yang and Wu Xing ( £  $\pi$  the five elements/agents). A rich and comprehensive understanding of the notion of qi is necessary to allow this cosmology to exist and to function with all its correspondences. If qi was just cold or heat for example, it would not be possible to have a foundation for this complex cosmology. Obviously the diversity and richness of the concept of qi was not present in Chinese thinking before the third century BC, there was no trace of it before that time, and therefore, there was no possibility of such connections being made in order to establish such a complex cosmology.

If you look up in a comprehensive Chinese dictionary you will find several meanings under the heading of qi which express the various historical uses of the term. For instance, there can be a state of undifferentiated totality in which everything is qi. It can be the life-giving principle, the original qi, or the components of the constituent agent of all that exists. There is also the idea of the life force and activity in any organism or phenomenon, the vigour of motion, energy, the animating forces of the universe. Qi is also used for more observable things, for instance the breath, steam, gas or vapour. All of these meanings can be defined by this character.

Qi gives movement, change and transformation to the various expressions of life, and allows the manifestation of specific qualities and aspects. For instance, in nature it is air, but it is also the state of nature itself, the weather and the atmosphere. It is each of the four seasons, and each of the 24 periods of 15 days which form the solar year. The 24 periods of the year are called Jie Qi (节气). Jie (节) suggests a kind of rhythm, and etymologically the character means the knots in bamboo. In its structure bamboo expresses the alternation of yin and yang, emptiness and fullness, activity and rest, display and concentration. The meaning of the character is to regulate, to measure – a regular interval, similar to that of the articulations of the bamboo. Jie is often linked with gi because it is important for gi to have an even measure, and not to be in excess or deficiency. But at the same time jie (节) contains ideas of alternation and rhythm. Qi is always yin and yang - the passage from cold to heat, concentration to dispersion. The Wu Jie (五 节 five rhythms) give the solar year an organization by five. The eight Jie ( $\dagger$ ), or eight rhythms of the year are the two solstices, the two equinoxes and the

four 'gates' which mark the change of season. They are the days of the year when there is a kind of 'knot' regulating all the movement of qi. And we have seen that the 24 periods of the year are called Jie Qi – so qi can also be used to express a measure of time.

Within a living organism, qi can be used to mean breathing, exhalation, or any kind of utterance. It can also describe colour and appearance, and is the manner, attitude, bearing and expression of its container. For example, the expression which I have on my face is the result of qi. My demeanour and body language are all a manifestation of qi, so are my temper, temperament and emotions. Pi Qi ( 摩氣 Spleen Qi ) is a popular expression in Chinese for the mood of the day, and to be in a bad mood is to have a bad spleen qi. Of course qi is also used for the yang expression of anger, to 'make qi' is to be angry, but it is also used for a state of mind, and the natural movement or disposition of the heart. So it is used for the vital forces, not only of the body and the strength of the constitution, but also for the power of the mind. Thus the intelligence, or will power of any being is also qi. To be animated or spirited is due to qi. When looking at calligraphy, we can say that there is qi within the characters. This is something that is felt. So the idea of qi underlies all kinds of manifestation, and at the same time it is the life-giving force.

This understanding of qi, and our ability to perceive it, enables all the various methods of diagnosis used in Chinese medicine, the movement and quality of qi to be an expression of what lies beneath.

### The character for qi

We have seen that the character Qi (氣) does not appear in the most ancient inscriptions or even in the earliest Chinese written texts. The outer part of the character 氣 is found in old texts and in oracular inscriptions where it means to ask or to pray for. It suggests something that comes from below and rises up. So the general meaning in ancient times was to make a ritual prayer.



By the time of the appearance of Shuo Wen Jie Zi (《说文解字》Analytical Dictionary of Characters), the etymological dictionary published at the beginning of the second century CE, many of the original forms of writing had

been lost, along with their primitive meanings. For instance, in trying to explain this character 气, the writers of the Shuo Wen Jie Zi (《说文解字》 Analytical Dictionary of Characters) did not know that the primitive meaning was to pray, to offer a prayer, or to demand something. So the analysis of this character 气 is of ascending vapour forming clouds. The movement is nearly the same. Something ascends from below and accumulates above with some kind of purpose. This idea is developed in the complete form of the character (4). The ascending vapours now come from the cooking of grain, because the pictogram within the character for qi represents bursting grain (\*).

In this character for qi we can see a relationship between the grain boiling and bursting, and the appearance of something in the form of a vapour with the strength to lift up the lid of the cooking pot. So we can also include in the meaning the idea of a kind of heat and force which enable things to function. Over time the character qi was gradually charged with all these meanings.

"Human life is a coming together of qi. When qi comes together there is life. If it scatters there is death." (Zhuang Zi 《庄子》 Zhuang Tzu).



#### **ABOUT THE AUTHOR**

Elisabeth Rochat de la Vallée, she studied philosophy, literature and classics at the Paris University and completed her Master's degree in Classics. When she was 20 she met Claude Larre s.j. while he was working on his PhD. thesis on the Huainanzi (淮南子) and making a translation of the Laozi (老子). As a result of his influence she began to study Chinese, working with him on Chinese classical texts. She also studied modern Chinese with a native speaker and spent a year in Taiwan to further her studies. Elisabeth worked closely with Father Larre on the Grand Ricci dictionary, managing the project as Father Larre's health declined. The first edition—two volumes of single characters—was completed in 1999. The second edition of seven volumes was finally published at the time of Father Larre's death in December 2001. This awsome achievement is testament to an inspiring collaboration which lasted over 30 years. Elisabeth continues to teach worldwide, working with both classical medical and philosophical texts.

# The Earliest Monographs on Gerontology in Medical History

### By Fu Weikang ( 傳维康 )

The 20th century advances in medical science and healthcare technologies have contributed to a substantial increase in life expectancy and aging population. Thus, it is urgent to study about this subject in order to deal with aging issues. On that account, the World Health Organization (WHO) held a worldwide conference on aging in 1981, which caught the attention of many countries paid to the field.

Regarding world medical history, China most likely ranks first with its particularly long history of gerontology supported by abundant documents. As long as 1300 years ago, in medical literature monographs on gerontology existed: Yang Lao Da Li(《养老大例》General Description on Health Preservation for the Aged) & Yang Lao Shi Liao(《养老食疗》Medical Diet on Health Preservation for the Aged) in Qian Jin Yi Fang(《千金翼方》 Supplement to the Formulas of a Thousand Gold Worth) completed by Sun Simiao(孙思邈) in approximately 680.

According to the natural law of life processes, when a human grows old, various aspects such as physiology, psychology, constitution, character, temperament, interests, words and behaviors will all experience a series of changes. Yang Lao Da Li recorded vivid descriptions on these changes. It also mentioned that the elderly tend to squander the last hours to their hearts' content and not follow common regulations. Sun emphasized that offspring should be fully aware of the changes mentioned and avoid being impatient or even resenting them because of wrong assumptions that 'aged people possess a peculiar temper with an aversion to repeated suggestions'. He warned that descendants should take the characteristics of the elderly into consideration and concede to their needs in order not to impair their emotions or health.

Diet is closely related to the health and longevity of human beings. And a chapter of Yang Lao Shi Liao, "the human body settles its root in diet". It mentioned raw meat and vegetables, wine and foods with strong sour or salty tastes were not suitable for the elderly. According to modern research, these foods usually are hard to digest, which not only affects the vessels



Sun Simiao (孙思邈)







and blood pressure but also results in communicable and parasitic diseases. In a chapter of Yang Lao Shi Liao, Niu Ru (牛乳 milk), Hei Zhi Ma (黑芝麻 black sesame) and Feng Mi (蜂蜜 honey) were especially recommended. It states, "with a neutral nature, milk can supplement heart vessel, benefit the heart and generate muscles, making one healthy with a moistened body and shiny complexion". It also pointed out that milk was far superior to meat and suggested that the young generation should provide their parents with it. Modern scientific experiments have proved the efficacy of the foods (mentioned above) to different degrees in improving the body's physiological functions and coordination, lowering blood lipids and boosting the immune system.

Milk is found to contain, exceptionally rich amounts of protein, fats, carbohydrates, vitamin A/B $_1$ /B $_2$ /C, nicotinic acid, and calcium/phosphorus/iron/magnesium, etc. The proteins in milk are mainly casein, albumin and globulin, which make of essential amino acids for the human body and is indeed "far superior to meat". In addition, black sesame is composed of lecithin and vitamin E which the former is highly valued, for being one of the vital materials to maintain the normal functions of the brain and the latter is essential to promoting fertility. It has also been known to delay cell aging and to improve heart and cerebrovascular functions.

The constituents in honey vary in different seasons and regions, but usually include abundant fructose and glucose, protein, yeast, enzymes, organic acids, essential oils, mineral substances, microelements and vitamins, etc. With the functions of supplementing the middle, moisturizing dryness, relieving pain and eliminating toxins, it can greatly benefit the human health. It is clear the records of Yang Lao Shi Liao that "along consumption (of black sesame) expels all diseases and frequent consumption leads to longevity" and "along consumption (of honey) supplements flesh and increases life expectancy" making scientific sense. Although Sun Simiao (孙思邈) spoke highly of the benefits of milk and other substances promoting human health, he also warned people regarding their manner and intake quantity in consuming there

foods, as in "Milk (乳), cheese (酪), pastry (酥) and honey (蜜) should be ingested warm to benefit the aged; even so, a sudden intake of much of such foods will cause distention and diarrhea, and it is recommended to eat little by little".

Furthermore, exercise is important in activating the metabolism, strengthening constitution and delaying aging. Yang Lao Shi Liao reminds us that "running water never goes stale and a rotating door spindle won't corrode" (流水不腐, 户枢不蠹) and emphasized that the elderly must "learn about regulation of body, massage, shaking joints, Dao Yin (导引) and moving qi" to strengthen the body and prolong life. Due to deficiency of essence, the aged tend to suffer from many diseases, therefore much importance should be attached to the prevention and treatment of geriatric diseases. Further more, the medical treatise on gerontology by Sun Simiao provided many valuable opinions on taking care of elderly people's emotions, behavior, life habits and hobbies, such as "those who are good at health preservation won't read books, listen to sounds, perform behaviors or eat foods if they are not to their taste" and advised them to avoid unfavorable weather such as "strong wind, heavy rain, extreme cold or heat, heavy dew/frost/hail/snow, tornado and pernicious gi". In summary, Sun holds that it is advisable for the elderly to 'keep a moderate degree between hunger and fullness, coldness and heat', and that if they 'behave rationally with walking, residing, sitting, lying, speaking and laughing, and sleeping and eating, longevity can be expected'. Sun Simiao lived to the age of 101, which certainly had something to do with his master techniques on senile health preservation.

The discussion in Yang Lao Da Li & Yang Lao Shi Liao from Qian Jin Yi Fang by Sun Simiao not only revealed valuable scientific knowledge about gerontology in 7th century China, but also displayed the morality of respecting the aged, which has long been a tradition of Chinese civilization.

Translator: Duan Yingshuai (段英帅)



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# Medical Scenes in Qing Ming Shang He Tu(清明上河图)

### By Zhang Shujian ( 张树剑 )

Qing Ming Shang He Tu (《清明上河图》Riverside Scene at Qingming Festival) is a painting by the artist Zhang Zeduan (张择端 1085-1145) of the Northern Song Dynasty (北宋 960-1127). It was mentioned in the postscript by Zhang Zhu (张著) who lived in the Jin Dynasty (金朝 1115-1234). After being painted it was collected and transferred from imperial families to the general public during turbulent times. Finally, it was preserved in the Palace Museum in 1953 after 900 years of drifting.

Qing Ming Shang He Tu vividly reproduces the prosperous life of Bianliang City ( 汴梁)-the capital city of the Northern Song Dynasty. Most scholars agree that what the painting wants to show is a prosperous and harmonious society. In the Yuan Feng Period ( 元丰 1078-1085), Li Ding ( 季定)-the Minister of National Revenue in the Northern Song Dynasty, talked about the riverside business in his report to the throne. Urban prosperity can be seen in the picture. One scholar has said that no painting of the Song Dynasty can match this one, because it is a pure depiction of reality, completely on its own from any painting style.

The Chinese Canadian scholar Cao Xinyuan (曹星原) interprets this painting from a different perspective and says that this painting reproduces a peaceful and relatively rich social landscape in a seemingly impartial and realistic way. It expresses the spirit of solidarity of the chaos caused by war. He also gives his opinion on the frequently appearing liquor stores in this painting. The government in the Northern Song Dynasty was harsh to the liquor business because making and selling liquor contributed a major part of the government's revenue. The prosperity of the liquor business displayed in the painting implies the importance of liquor in the national economy, and further shows that food was sufficient, and that the royal administration and water transport were efficient in the Song Dynasty.

In fact, apart from the liquor industry, the government had also monopolized the medical industry since the Xining Reform (熙宁变法 1069-1085), thus the prosperity of the medical business also reflected the economic power of the government and the richness of society. The rich life described in Yuanlao Meng's (孟元老) Dong Jing Meng Hua Lu (《东京梦华录》 The Dream of Tokyo) complements the painting.

Qing Ming Shang He Tu focuses a lot on the medical businesses including medical stores, clinics, and roving medical practitioners. The following is a description of the scroll with all its medical references.

### **Decoction Stores**

On the south bank of the Rainbow Bridge, in front of the inn, a shade-shed is put up and there hangs a Decoction (饮子) sign. It is diagonally opposite to a liquor store. The decoction seller seems to be standing there holding a cup and there is a wooden barrel containing a decoction behind him. There is another decoction store diagonally opposite to the cart garage at the crossroad outside the city gate, but only the store sign and half of the shade-shed can be seen. Outside an inn named Jiu Zhu Wang Yuan Wai Jia (久住王贞外家) stands two shade-sheds with the signs "Decoction" and "Aromatic Decoction". Under the shed of Aromatic Decoction, two people sit relaxed, and there is a container with a decoction on the table.

The decoction stores are operating in a similar way. Shade-sheds are set up with some tables and benches under them, meaning people were beginning to sell decoctions. It is common to see decoction stores in Bianliang City at that time. Besides the three stores listed above, there is another shade-shed opposite to the Sun Lamb Store (孙羊店), which seems to be a decoction store as well.

Decoctions are not only drinks similar to herbal tea, but also a kind of traditional Chinese medicine. The well-known decoctions like Di Huang Yin Zi (地黄饮子 Rehmannia Glutinosa Decoction), Xiao Ji Yin Zi (小蓟饮子 Cirsium



A Decoction Store ( 饮子铺 )



Qing Ming Shang He Tu (《清明上河图》 Riverside Scene at Qingming Festival) drawn on silk, 24.9 cm wide and 528.7 cm long, preserved in the Palace Museum.

setosum decoction) and so on are still widely used in clinics today. The decoctions sold in the street of this painting should have been the healthy drink kind suitable for the public. People in the Song Dynasty had the custom of "greeting people with tea and departing with aromatic decoction". They loved aromatic herbs and decoction. The raw materials of the decoctions were mostly fragrant herbs including Zi Su (紫苏) and Gan Cao (甘草 Radix Glycymhizae), and thus the drink was also called Xiang Yin Zi (香饮子 aromatic decoction).

### **Aromatic Herb Stores**

There is a large aromatic herb store opposite to the Sun Lamb Store and diagonally opposite to the Yang Jia Ying Zheng (杨家应症). In front of the aromatic herb store is a decorated archway. The store is entitled "Liu Jia Shang Se Chen Tan Zhang Xiang"(刘家上色沉檀樟香). Shang Se (上色) means high quality, and Chen (沉香 agilawood Tan), Tan (檀香 sandalwood) and Zhang Xiang (樟香 Cinnamomum hupehanum Gamble) refer to the major products sold in the store. Moreover, the store next to the Sun Lamb Store with the sign Xiang (Lao) (香醪) should be a liquor store selling aromatic herbs as well. In Bianjing of the Song Dynasty, herb stores were in abundance.

Aromatic herbs were popular with the Song government, as they not only cured diseases and helped to stay healthy, but also could be made into various desserts for teahouses and liquor stores. In the liquor stores in Bianjing of the Song Dynasty, there were Xiao Si (小厮 manservants) namely Si Bo (厮 波) and Sa Zan (撒智) selling snacks and aromatic herbs. Sometimes the manservants just put the goods on the table and requested the customers to pay regardless if they wanted them or not. The desserts and snacks sold in the teahouses or liquor stores were definitely not medicines that had special natures or flavors to cure diseases. They were merely aromatic ingredients that were used in both medicine and foods, Most commonly used were Chen Pi (陈皮 Pericarpium Citri Reticulatae), Fu Ling(茯苓 Poria), Mu Xiang (木香 Radix Aucklandiae), Gan Cao(甘草 Radix Glycyrrhizae), etc. The Mu Xiang Bing Zi (木香饼子) recorded in He Ji Ju Fang (《和剂局方》 Tai-Ping Imperial Grace Pharmacy Formulas) used aromatic herbs such as Sha Ren (砂仁 Fructus Amomi Villosi), Tan Xiang (檀香 Lignum Santali Albi), Gan Song (甘松 Radix et Rhizoma Nardostachyos), Ding Xiang (丁香 Flos Caryophylli) and Gan Cao (甘草 Radix Glycyrrhizae) to make pills. There were no time specifications for when to take the pill, however It should have been taken



An Aromatic Herb Store



The Liquor Store Selling Aromatic Herbs

with a fresh ginger decoction (生姜汤) or yellow wine (黄酒). If one took the pill regularly, it had the effect of relieving the chest, moving the depressed qi, dispersing the static cold, and improving the appetite. Despite these desserts and snacks, people in the Song Dynasty were also fond of wearing perfume satchels and burning incense. Therefore, at that time temples and palaces were surrounded with fragrant smoke.

### **Clinics**

There are two clinics in this painting. Both are situated at the bustling crossroads within the city gate. The good location and fairly large scale indicates that the clinic practitioners may had have a relatively good income. One clinic with the sign "Yang Jia Ying Zheng (杨家应症)" shows that it was owned by a doctor whose family name is Yang. "Yang Jia Ying Zheng" is located at the north of Sun Lamb Store and at the crossroad within the city gate. Although only one room of the clinic can be seen, from its signage, we can infer that its scale is not small. In the painting, someone with a child is walking towards the clinic. They are supposed to becoming for a doctor's visit



The Clinic Named Yang Jia Ying Zheng (杨家应症)

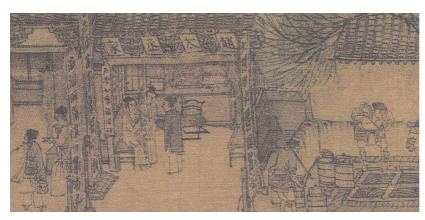
while a cart pulled by four mules is carrying a patient away.

On the very left side of the scroll stands a larger clinic - "Zhao Tai Cheng Jia (赵太丞家 Medical Official Zhao's Clinic)". In the light of its layout, the clinic has three courtyards. The name "Zhao Tai Cheng Jia" makes it obvious that its owner or the owner's ancestors must have been government officials. It seems that the business of this clinic ranges widely from internal medicine to pediatrics. Also, the sign says it cures alcohol damage suggesting the prevailing custom of drinking at that time.

Up till the Northern Song Dynasty, Chinese medicine had developed into different branches. "Zhao Tai Cheng Jia" and "Yang Jia Ying Zheng" are supposedly larger clinics. According to Dong Jing Meng Hua Lu, there were many specialized clinics in Bianliang City such as orthopaedics, pediatrics, ear, nose and throat (ENT), and obstetrics. Both Dong Jing Meng Hua Lu (《东京梦华录》 The Dream of Tokyo) and Tie Wei Shan Cong Tan (《铁围山丛谈》 Historical Record Made in Tie Wei Mountain) have described the thriving business of clinics at Ma Xing Street( 马行街 Horse Passing Street).

### **Roving Medical Practitioners and Medical Stalls**

Doctors of the Song Dynasty could be divided into four categories. Medical officials belonged to the upper class. They were officially assigned and worked in the Hanlin Medical Institute (翰林医官院), which was renamed Hanlin Medical Bureau (翰林医官局) in the first year of the Yuan Feng Period (元丰元年 1078). The second class included doctors who treated patients at clinics such as "Zhao Tai



The Clinic Named Zhao Tai Cheng Jia (赵太丞家 Medical Official Zhao's Clinic)

Cheng Jia" and "Yang Jia Ying Zheng". Generally these kinds of clinics sold herbs as well, therefore the doctors prescribed medicine which the patients could get directly from the clinics. The third class was composed of roving medical practitioners, who carried their luggage of books and practiced medicine in the streets. They were often Buddhist or Taoist medical practitioners. Besides who ate the food provided in temples and cured patients out of charity. Some monks with medical knowledge traveled around as medical practitioners as well. In the painting, folk and monk medical practitioners are found in two scenes.

In the painting, at the crossroads of ssuburb and opposite to the cart garage, an old man is on the floor selling tens of herbs. People around are watching a man roll up his trousers to show the old man his swollen leg. What's more, in front of "Zhao Tai Cheng Jia", a travelling monk with straw shoes on his feet and a bamboo basket full of herbs on his back is knocking on a clapper to sell the herbs.

If we dig further into Qing Ming Shang He Tu from a perspective of medical history, we'll find the prevalence of the aromatic herbs from the clinics and herb shops of this painting. This is partly related to the introduction of foreign aromatic herbs, as well as to the fact that the patent medicine mainly comprised of aromatic herbs had become an important part of Tai Ping Hui Min He Ji Ju Fang (《太平惠民和剂局方》 Tai-Ping Imperial Grace Pharmacy Formulas). Under such circumstances, practitioners of that time liked to prescribe aromatic herbs naturally. Therefore, the famous physician Zhu Danxi (朱丹溪) of the Jin and Yuan Dynasties started the school of Nourishing Yin to prevent the aromatic and dry herbs from damaging the yin, which is meant to protect the patient from and saving the disadvantages of the aromatic herbs. All of these conclusions are well beyond Zeduan Zhang's intentions.





A Medical Stall



The Travelling Monk Selling Medicine



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### Two Anecdotes about Chinese Materia Medica

By Qu Lifang (曲丽芳)

### Bi Ba ( 荜茇 Fructus Piperis Longi )

Being overjoyed, the Emperor ennobled Zhang with the title "official of the fifth rank." However, Prime Minister Wei Zheng (魏征) was jealous and didn't execute the ennoblement. When the Emperor learned of this, he asked for an explanation. Zheng Wei made the excuse of not being "sure whether to ennoble him as a civil official or military officer."

Emperor Taizong was furious: "A doctor who cured your disease would be awarded the official position of the third rank, why not my doctor?" Then he sealed an order to bestow Zhang the civil official position of the third rank.

Amazingly, the little piperis longi was a stepping-stone for promotion towards nobility in a feudal society.

(From Zhong Yao De Gu Shi (《中药的故事》 Stories of Chinese Materia Medica)







Taizong (唐太宗 627-649)

### Li Lu ( 藜芦 Veratri Nigri Radix et Rhizoma)

There once was a woman ill with epilepsy ever since her first seizure at the age of six or seven. Over time, the disease worsened and her seizures became more and more frequent, and at the age of forty, she was having seizures every day. Consequently, she became dull and forgetful, and couldn't help but to think of suicide.

At the time of the great famine of the Xingding years ( $\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensuremath{\%}}\mbox{\ensurema$ 

She was not sure what exactly she had eaten to have resolved her seizures, and asked others if they knew. Someone told her that Ben Cao Gang Mu《本草纲目》 Compendium of Materia Medica) called it Li Lu (藜芦 Veratri Nigri Radix et Rhizoma). According to the Tu Jing (《图经》 Map of the Channels), the emetic properties in Li Lu can cure epilepsy. Who could have imagined her epilepsy being cured in this manner!

(From Ru Men Shi Qin · Ou You Suo Yu Jue Ji Huo Chou Ji Shi Yi (《儒门事亲·偶有所遇厥疾获瘳记十一》 *Confucians' Duties to Their Parents*, Record 11)

Translator: Cong Yilei (丛忆蕾)



Li Lu (藜芦 Veratri Nigri Radix et Rhizoma)





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## Thoughts on the Chinese Medicine Transmitted to the West

By Zhang Bohao (张博昊), Wang Zhihong (王志红) and Sun Jun (孙君)

Traditional Chinese culture and philosophy have greatly influenced development of human beings over several thousands of years.

Today, when we have just come to realize the significance of traditional Chinese culture, it is surprising to find out that many foreign countries had started to study Chinese culture a long time ago. Traditional Chinese medical culture, for example, is one of the most important components of traditional Chinese culture, and it embodies typical features and the unique glamour of Chinese culture.

### TCM in Korean and Japan

After being introduced to Korea, traditional Chinese medicine (TCM) was renamed as Korean Medicine and integrated with local traditional medicine. Similarly, TCM in Japan was renamed as "Kampo Medicine" after the Meiji Restoration. The Japanese government officials placed such a high value on the development of TCM in Japan that, for example, since the 1980s, medical universities in Japan have begun to offer TCM lectures or seminars by Chinese TCM professionals. In addition, they started to publish TCM magazines and develop collaborative programs with China's TCM universities, etc. Statistically more than one hundred thousand people in Japan have now been engaged as TCM physicians and about 85% of the people in the country have accepted TCM treatment. Regarding media, broadcasting networks and some major TV stations, such as, NHK in Hokkaido (北海道) have produced programs on TCM culture for more than one thousand times since the 1990s.

### **TCM in Europe**

Since the 1980s, acupuncture and moxibustion therapies have been so widely used in obstetric care that the medical universities added a new diploma program called "acupuncture and moxibustion therapies for obstetric care". Clinically, acupuncture and moxibustion therapies have been applied during gestation, delivery, and postpartum care, and have proven to be effective for overall gynecological issues. According to Denis Colin, a French obstetrician, the application of acupuncture and moxibustion therapies in France has greatly reduced the number of cesarean section cases. Whereas in China, where acupuncture and moxibustion therapies originated, cesarean

section cases surprisingly reached a record high.

The five-element acupuncture and moxibustion therapies were created by Dr J.R.Worsley at the end of the 1960s, and focus on the body's care for one element (个体"护持一行") integrating it into methods of modern psychology to achieve the physical, mental and spiritual balance.

The heavenly-stem (夭千) and earthly-branch (地支) acupuncture and moxibustion therapies were created by Dr. J.D. Vail Buren in the 1970s. These therapies aimed to study how the Qi or energy of nature circulated, transformed, and interacted between people to people, and between people and nature mainly from three aspects—Yin Yang, the five elements, and Tian (五十)  $\frac{1}{1000}$ 

(天 heaven)、Di (地 earth) and Ren (人 man).

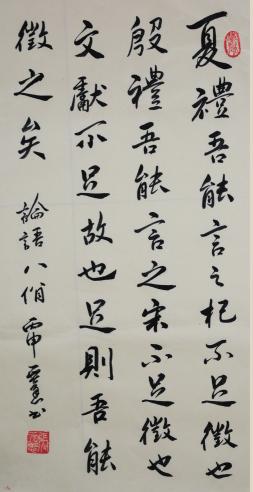
The medical study and application of these two kinds of acupuncture and moxibustion therapies are innovative in theoretically researching "nature—human integration" (  $\mathcal{F}$   $\wedge$  ) in modern TCM.

The idea of the Confucius

We learned it from Lun Yu (《论语·入佾第三》Analects of Confucius), the decay of the monuments of antiquity. The Master said, "I could describe the ceremonies of the Xia Dynasty, but Qi cannot sufficiently attest my words. I could describe the ceremonies of the Yin dynasty, but Sung cannot sufficiently attest my words. (They cannot do so) because of the insufficiency of their records and wise men. If those were sufficient, I could adduce them in support of my words." ("夏礼吾能言之,杞不足徵也。殷礼吾能言之,宋不足徵也。文献不足故也,足则吾能徵之矣。")

Since ancient times, Chinese civilization has been pursuing harmony. The descendants of the Xia ( 夏 ) Dynasty were called Qi ( 杞 ). The descendants of the Yin ( 殷 ) Dynasty were called Song( 宋 ). The Yin Dynasty overturned the Xia Dynasty but freed its people and renamed its descendants to establish affiliated countries to inherit their customs and rituals. After that, the Zhou Dynasty destroyed the Yin Dynasty to

The decay of the monuments of antiquity, Analects of Confucius; Chinese calligraphy by Bohao Zhang



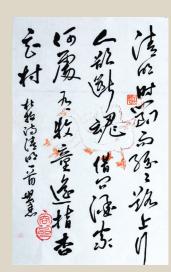


Plain Question

forgive its people and called them Song. Confucius who was from a different dynasty, however, was able to objectively comment on the ceremonies and rituals from past dynasties. But the descendants of the Xia or Yin Dynasties could not prove Confucius' comments right or wrong. Similarly in China nowadays, few Chinese people will respond confidently and accurately when they are challenged by the questions from foreigners concerning Chinese traditional culture. Why is that? The answer to this question was offered in the Analects of Confucius, i.e. "because of the insufficiency of their records and wise men." Confucius regarded Wen (  $\boldsymbol{\chi}$  ) and Xian (  $\boldsymbol{k}$  ) as the two most critical aspects in the cultural inheritance.

### Wen and Xian, the key words of Cultural studies

The interpretation of Wen (文) should not be confined to the classics, it should also cover speech and words. The Chinese civilization for thousands of years has mainly relied on the vitality of the language, just as the inheritance of culture depends on words as carriers. After the New Culture Movement, (新文化运动) Chinese language in the cultural structure changed greatly with the popularity of modern literature, modern Chinese language and simplified characters. However, recently the Chinese language has been changing in terms of pronunciations, forms, characters, and meanings, (即"音韵学""文字学""训诂学") so the implication of Liu Shu (六书) has begun to fade



Qing Ming, Tang poem, Chinese calligraphy by Bohao Zhang

away. And these changes have created more and more obstacles for modern people to "communicate" with their ancestors. The poets from ancient China used to express their emotions and feelings in poetic recitals. It is difficult to understand classical Chinese literary works without following certain rhythms in reading. For example, Professor Xu Jianshun (徐健顺) at the Capital Normal University indicated that understanding a Chinese language lesson plan of the Qing Ming(《清明》唐·杜牧), a popular Tang poem, is totally different from the interpretation of the poet himself. Consequently, modern Chinese people have come to misunderstand Chinese traditional culture. Professor Fu Haiyan (傳海燕) at the Liaoning University of TCM concluded in studying Huang Di Nei Jing (《黄帝内经》 Yellow Emperor's Internal Classic) that the meanings of Chinese characters with the same pronunciation may have a different meaning because of the radical difference in Chinese character components.

### Conclusion

The interpretation of the classics is directly affected by pronunciations and handwritings. Our understanding of the classics primarily depends on either the translation from the original scripts or the interpretation of later generations but in the absence of interpreting and understanding of the original. As Huaijin Nan (南怀瑾) put it, "The learning of modern people is likely repeating what our ancestors have done." Cultural inheritance or the technological application will need deep understanding of cultural background and professional knowledge because TCM culture is an important part of Chinese traditional culture. And classical texts are the key in the learning process. The individual characters are fundamental to fully understanding the classics, therefore we should place high value on the understanding of fundamental elements in traditional culture. As Lao Zi (老子 Lao Tze) had said: "Tree trunks around which you can reach with your arms were at first only minuscule sprouts. A nine-storied terrace began with a clod. A thousand-mile journey began with a foot put down." (九层之台起于累土,合抱之木生于毫末) We should consolidate the foundation of Chinese ancient culture if we want to promote the traditional culture or to reinforce TCM culture. As the old saying goes "The mechanic, who wishes to do his work well, must first sharpen his tools." (工欲善其事,必先利其器). Once we build a sound foundation of the understanding of traditional Chinese culture, all of us shall be professionals in the study of TCM.



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### Research on Chinese Medicine by Professor Unschuld (Part One)

Introducing Chinese Medicine to the West from a Study on Chinese Herbs (本草)

### By Zheng Jinsheng (郑金生)

Introduction: Professor Paul Ulrich Unschuld (文林德), born in 1943, is a German medical historian, specializing in the comparative history between Chinese and European medicine & life sciences, especially in research on history of medical ideas and ethics. He started to study Chinese medicine in 1969, and he was appointed the title professor in 1984, acting as the Director of the Institute for the History of Medicine at the University of Munich in 1986. He published several papers such as Zhong Guo Yi Xue: Yao Xue Shi (《中国 医学: 药学史》Medicine in China: A History of Pharmaceutics), Zhong Hua Di Guo De Yi Xue Lun Li (《中华帝国的医学伦理》Medical Ethics in Imperial China), Zhong Guo Yi Xue Si Xiang Shi (《中国医学思想史》Medicine in China: A History of Ideas), and Shen Me Shi Yi Xue: Dong Xi Fang De Zhi Liao Zhi Dao (《什么是医学:东西方的治疗之道》What is Medicine? Western and Eastern Approaches to Healing), and translated ancient Chinese medical literature such as Nan Jing (《难经》The Classic Canon of Difficult Issues), Huang Di Nei Jing Su Wen (《黄帝内经素问》Huang Di's Inner Classic·Basic Questions), and Bei Wang Que De Zhong Guo Gu Dai Yi Xue Chuan Tong (《被忘却的中国古代医学传统》Forgotten Traditions of Ancient Chinese Medicine). In recent decades, he has expanded his research on medical history to new areas using antiques and manuscripts as important sources, bringing out his broad vision in the field.

The name 文材德 is uncannily Chinese that many would mistake him for a Chinese citizen or an overseas Chinese, yet he is German with the full name of Paul Ulrich Unschuld. His Chinese name 文材德 was given to him by a Chinese teacher in Taiwan (台湾), the charm of which lies both in being homophonic of his German family name and in revealing his profession, hobby and nationality.

Professor Unschuld (文材德) mainly studies comparative history between Chinese and European medicine & relevant life sciences, especially in the field of the history of medical ideas and ethics. He is also a renowned historical philologist of Chinese medicine in the West. He worked as the Director of the Institute for the History of Medicine at the University of Munich (1986-2006) and is the Director of the China Life Science Theory  $\cdot$  History  $\cdot$  Ethics



Professor Paul Ulrich Unschuld (1943-)

Research Institute of Berlin Charité Medical University (2006-now). Among the China-related society titles he took are the Vice Chairman of the Chinese and German Medical Association (1984-2004) and to be Chairman of the International Society of East Asian Science, Technology and Medical History (2008-2011). Therefore, he is well-known figure in the fields of Chinese science, technology and in the history of medical literature.

I made my acquaintance with Mr. Unschuld in 1986 and we have cooperated together on several projects in the past 26 years. During our previous collaborations I know in detail, the process, characteristics and achievements of his research on historical literature of Chinese medicine. He is an energetic, optimistic, outgoing, studious and diligent scholar. Over the last 40 years, he has published more than 30 papers and 120 articles, he's almost second to none among western scholars in the field. I have not found another western person who has studied Chinese medicine as enthusiastically as Unschuld. Once I asked his reason for his ardent interest in Chinese Medicine. He raised his eyebrows and shrugged his shoulders like a crafty child, and answered 'I maybe was Chinese in my previous life'. He is readily attached to Chinese medicine and has a passion for studying Traditional Chinese Medicine (TCM).

He was born on August 19th, 1943. His parents were both pharmacists and owned a drugstore. With such a background, he learned pharmacy in college and graduated from the School of Pharmacy at the University of Munich in 1968. Since high school he had taken an interest in international politics, especially in the former Soviet Union. He therefore selected Russian as a foreign language in high school and college. In 1969, the Treasure Island incident between China and the Soviet Union astonished the world and Mr. Unschuld was eager to know the details. After looking up files about China he began to learn more about that faraway country with such a long history with brilliant culture. When he realized the foreign information about China was limited, in order to read the firsthand files in Chinese, he and his wife Ulrike Unschuld (1944-) decided to learn Chinese.

The sinology study in West Germany at that time emphasized the pre-Ming period and lacked interest in modern and contemporary Chinese history and culture. The language teaching was mainly on ancient Chinese. Since China didn't establish diplomatic relations with West Germany at that time, the Unschulds studied Chinese and finished their Ph.D courses in Taiwan during 1969-1970. In those days, the academic world in West Germany focused on Chinese politics and economy, but the study on ancient Chinese medicine



文树德 (Right) and his supervisor Professore Na Qi (那琦) in Taiwan on Sep. 2nd of 1970

that was deemed unscientific and raised almost no attention. Except for the English version of Zhong Guo Yi Shi (《中国医史》History of Chinese Medicine) coauthored by Wong K. Chimin (王吉民) and Wu Lien-teh (伍连德), there were few books on the history of Chinese medicine available in western languages. Mr. Unschuld knew nearly nothing about Chinese medicine before he went to Taiwan.

The pharmaceutical background the Unschuld's held lead to a deep interest in traditional Chinese medicine, so they decided on comparing Chinese and western medicine as their research specialty. Mr. Unschuld's supervisor in Taiwan was the well-respected professor Na Qi (那琦 1919-1992) highly regarded in the field of pharmacognostics. When Mr. Na was a lecturer at the Department of Pharmacy, National Medical College of Shenyang (沈阳), he once learned Chinese herbs from the renowned Japanese herbalist Tameto Okanishi (冈西为人 1898-1973). After gaining essence from his teacher, he wrote Ben Cao Xue (《本草学》Herbalism) and other works. Beginning with a study of Chinese herbs and under the guidance of professor Na, the Unschulds started to research Chinese medicine.

Mr. Unschuld interviewed local people to understand their attitudes and cognition toward Chinese and western medicine, while Mrs. Unschuld studied Tang Ye Ben Cao (《汤液本草》Decoctions and Herbs) of Wang Haogu (王好古) in the Yuan Dynasty. Their experience in Taiwan for over one year aided the Unschulds in obtaining preliminary perceptual knowledge about Chinese medicine and herbs, helping with their data collection for their doctoral

dissertations respectively. In Sep tember 1970, they went back to West Germany and got Ph.D degrees in sinology on various topis of Chinese medicine.

The next year Mr. Unschuld published his first article on the separation of pharmacy and medicine in the Northern Song dynasty, and a formal article in a scientific journal on the meaning of the term du (毒) in Chinese herbs. Since then he began a career on studying the history of Chinese medicine. His wife, doctor Ulrike Unschuld, dedicated herself to her family with 1 son and 2 daughters, and fit to did some translation and research work. For instance, she translated Tian An Men (《天安门》The Gate of Heavenly Peace) by American writer Jonathan Spence (史景迁) into German, informing the readers about old-generation scholars like Ding Ling (丁玲) through to the 20th century in China. She also wrote a biography for a German Jewish emigrant who went to China to escape the Holocaust. She once held a short-term post at the University of Munich and the Berlin Charité Medical University, participating in the dictionary project of Ben Cao Gang Mu (《本草纲目》 Compendium of Materia Medica) in charge of pharmaceutical identification. She has always been the strongest supporter of Mr. Unschuld's life's work.

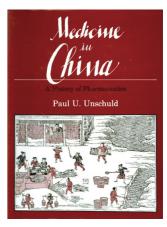
On July, 26th, 1971 James Reston, a reporter of the New York Times (《纽约时报》) in the U.S. helped to promote Unschuld's research on Chinese medicine. wrote an article about his experience of going through appendectomy and receiving post adjuvant treatment of acupuncture in Beijing. This news together with the subsequent breakthrough of China-US relations.

One of the most prevalent stories regarding TCM at that time was that when Nixon first visited China, a young reporter in the delegation received an appendectomy with acupuncture anesthesia. The reporter then wrote about his treatment which triggered a wave of "acupuncture heat" heat (针灸热) throughout the country and attracted the attention of many people in the West.

Although practitioners of Chinese medicine existed in western countries and relevant ancient literature had been introduced to Europe before, prior to the 1960s, Chinese medicine was nothing but a timeworn medicine in history according to many westerners. Very few people knew about TCM and many thought acupuncture was the only form of therapy involved in TCM, They knew nothing of the broader the application of Chinese herbs. As Mr. Unschuld had just returned from learning about the history of Chinese medicine in Taiwan and had published papers on it, people rushed to him for information. When he answered their questions, he realized that the people asking the question



Cover of Das Pen-ts'ao p'in-hui ching-yao. Ein Arzneibuch aus dem China des 16. Jahrhunderts (1973) written by 文材德



Cover of Medicine in China. A History of Pharmaceutics (1995) written by 文材德

knew little about TCM or otherwise held an old-fashioned point of view regarding it. Subsequently, Unschuld tried to introduce the long history and current situation of Chinese medicine in a systematic way to the West.

The early publications of Mr. Unschuld are related to the history of Chinese herbs. In 1973, his German works of Ben Cao Pin Hui Jing Yao-16 Shi Ji De Zhong Guo Yao Shu (《本草品汇精要 —16 世纪的中国药书》Das Pen-ts'ao p'inhui ching-yao. Ein Arzneibuch aus dem China des 16. Jahrhunderts) and Ben Cao-2000 Nian Chuan Tong Zhong Guo Yao Xue Wen Xian (《本草 -2000 年传统中国药学文献》Pen-ts'ao. 2000 Jahre Traditionelle Pharmazeutische Literatur Chinas) were published successively. The latter included over one hundred pieces of ancient literature on the Chinese Materia Medica. The knowledge he learned in Taiwan about Chinese herbs was included as was his valuable research experience (instead of the mere translation of existing similar works at that time). For instance, when he introduced the essential works on Chinese Materia Medica of different time periods he would choose the same herb, list relevant items to show different styles of ancient records, and then compare them to obtain its development track. The time span of the history of Chinese Materia Medica that he studied extends from ancient history to the pharmaceutical development after establishment of the People's Republic of China. After revising, the book was renamed Zhong Guo Yi Xue: Yao Xue Shi (《中国医学: 药学史》Medicine in China: A History of Pharmaceuticals?), published in 1985 in English and reprinted in 1995. The book takes examples of different herbs and introduces their pharmaceutic relevance in ancient and modern China in a systematic and comprehensive way, thus promoting the appreciation of Chinese medicine therapies among western readers for the first time in a charming manner.

#### References

- 1. Qi Na. Herbalism[M]. Taipei: Wen Da Printing CO., Ltd (enlarged edition), 1982: 673.
- 2. Yongming Li. American acupuncture heat legend [M]. Beijing: People's Health Publishing House, 2011.
- 3. Unschuld P.U. Das Pen-ts'ao p'in-hui ching-yao. Ein Arzneibuch aus dem China des 16. Jahrhunderts[M]. München: H. Moos Verlag, 1973.
- 4. Unschuld P U. Pen-ts'ao. 2000 Jahre Traditionelle Pharmazeutische Literatur Chinas[M]. München: H. Moos Verlag. 1973.
- 5. Unschuld P U. Medicine in China. A History of Pharmaceutics[M]. Berkeley, Los Angeles: University of California Press. 1986. 2. edition 1995.

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# Collecting Medicinal Herbs at the Top of Mount Ao (Part Two) By Yang Yaming (杨亚明)

The landscape of Mountain Ao ( 鳌山)

We arrived to a piece of lofty yet sparse coniferous forest, and the branches and leaves of each tree were scanty as restrained against the high cold. The cold blue sunlight from the sky penetrated through the forest and shone on the green carpet-like moss and lichen attached to the ground. In addition, the crawling grass was a couple of inches high, characteristic of plants at high altitudes. There usually aren't such big herbs found in forests at 3000 meters altitude, however, this strain of Zhang Ye Da Huang (掌叶大黄 Rheum palmatum L.) overset our traditional knowledge about alpine plants without mercy. It only had three leaves, with each of a size larger than half a human. This discovery relieved all the tiredness of all the experts of the School of Pharmacy, Shaanxi University of Traditional Chinese Medicine. Furthermore, all the members, including captain Wang Jitao (王继涛), had a group photo with the herb star. The roots and rhizomes of Zhang Ye Da Huang (掌叶大 黄 Rheum palmatum L.) are used for medicinal purposes, having a bitter taste, cold nature, and functions to purge stagnation, drain fire to cool blood, move stasis and dissipate accumulation, clear heat and relieve toxins, and purge heat to free bowels. It is indicated for excess heat accumulated in the stomach and intestines with constipation as in Da Cheng Qi Tang (大承气 肠 Major Qi-promoting Decoction); or for constipation with cold accumulation due to insufficiency of spleen yang as in Wen Pi Tang (温脾汤 Spleenwarming Decoction).

We made it through a tough walk in the forest and came across a vacant lot, which surprised every one. It was approximately several hundred square meters, however, it was without a single tree which is in sharp contrast with surrounding towering pine trees, as if a mountain hermit cleared the land to grow flowers and grass. Within our eyes' reach, there was a sea of flowers



Zhang Ye Da Huang (掌叶大黄 Rheum palmatum L.)

dotted with white or slightly purple spiciform stars. They seemed to be cultivated instead of growing in the wild. In fact, there was no trace of human activities here, and the unexpected space was possibly made by a mountain fire after a lightning incident rather than human felling. The phoenixes rebom were called Liao Sui Qiu (麥穗珠 Polygonum spicule), wild polygonaceae plants, with the medicinal name of Cao Xue Jie (草血竭 Rhizoma Polygoni Paleacei) commonly used by folk practitioners in Taibai (太白). On the open land, there were many plants with corymbose yellow flowers and green spots on their petals. They were called Qin Ling Long Dan. The medicinal herb Zhu Ling Cao is the whole herb of Qin Ling Long Dan (秦岭龙胆 Gentiana apiata). Although it was the season for harvesting Zhu Ling Cao (茱苓草 Herba Gentiana apiata), no one would think to come to such a steep place for collection. Only the immortals wander here. Our survey team members played live immortals today and were awarded with the best specimens and medicinal herbs.

As we climbed up, the pine forest became sparser and sparser with only a few scattered trees, not enough to make a forest. We were at an altitude of about 3,000 meters and we could sense the changes the high altitude bring. The aggressive cold haunted us amid the surrounding craggy stones, wuthering mountain winds, ground-bound grasses, slippery lichens, and the downcast cloud clusters from the sky. Against such a setting, the pine trees couldn't keep their manners as graceful ladies or detached gentlemen, yet displayed peculiar poses, with countless scars or traces of being burnt, or even withered by the wind and colds. All of a sudden, we felt that the beauty atop a high mountain lies in its coldness and harshness far from the ordinary aesthetic standard. But I witnessed a warm and familiar beauty too, a sudden encounter with a grey bird about the size of a chicken. It had a black crest on the head, feathers with well-proportioned jagged white lines giving it a strong sense of movement, and striking red spots on its mouth, claws and tail. It was finding food without haste. We stopped moving on and everybody felt hungry. It reminding us that had been five or six hours since breakfast and sat down to process specimens, and then began to eat Shao Bing (烧饼 Chinese style of baked roll) with Zha Cai (榨菜 preserved szechuan pickle). Vicecaptain Xiaoping Xu (徐小平) held his Shao Bing (烧饼) and said, with a smile, that he would go and fetch some Shan Cong (山葱 Allium senescens) to accompany our meal. He walked away and picked several yellow fringy flowers to eat as if he were a native of Shannxi eating a steamed bun with Da Cong (大葱 Allium fistulosum) at his own doorway.

After eating, we continued to climb and decided to reach the peak unless it



Qin Ling Long Dan (秦岭龙胆 Gentiana apiata)



Shan Cong (山葱 Allium senescens)

rained. Along way, we saw many plants not easily seen at a lower altitudes, such as Cu Ye Huang Jing (簇叶黄精 Polygonatum sibiricum) and Zhong Hua Hua Ren (中华花荵 Polemonium coeruleum), etc. The former has slender leaves like those of bamboo being of varying lengths of up to a dozen centimeters long, which Also, it was the blossom season for the latter, with small and exquisite soybean-sized flowers composed of purple petals and yellow pistils. So elegant and simple! The river of thousands of flowers together was magnificently beautiful. Looking at the flowers in full blossom, I almost forgot it was already late autumn or early winter for the three-seasoned Taibai (太白). Suddenly I felt poetic thinking that spring is the business of others and not caring if the seasons have changed or not; and it is your spring when you bloom for yourself, have fun on your own and smile to yourself. The grass on Mount Ao (鳌山) knew this for sure, and it was if it was taking its time and reserving the beauty and leisure for its own spring.

Approaching the top, the plants became weaker and more humble, unable to play heroes or dominate the giant mountain and stones. Green turned blue

Zhong Hua Hua Ren (中 华 花 荵 Polemonium coeruleum)





Tai Bai Yin Lian Hua (太自银莲花 Anemone taipaiensis)

and retreated into itself sadly while massive or strange-shaped rocks came on stage. They exposed themselves unscrupulously, recumbent or towering arbitrarily. Some were standing like erect pyramids while others looked like high sky ruins having been beaten down, contributing to an aggressive but formidable scene which encouraged us to move through. We had to climb over these bare rocks with care and conquering each one was like summiting a high mountain. Our sweat dripped on the surface of the rocks and magically turned the seemingly dead moss into a bright green carpet. Naturally, the team members didn't miss the opportunity to take pictures standing on the gigantic rocks as if having conquered a summit of victory.

We were reminded that life was unrelentless. Wherever the rocks seemed to be taking control, green life was keeping a low profile while still trying to dominate. The tiny white Tai Bai Yin Lian Hua (太白银莲花Anemone taipaiensis) struggled to survive in the thin layer of earth on top of the rocks. The mini-sized white flowers were held up high by long stalks, radiating spots of brilliance and beauty in distinct contrast against the surrounding cold and cruel rocks. Although Tai Bai Yin Lian Hua is not used frequently as herb, scientific experimental research in recent years has confirmed it contains some active ingredients to inhibit tumors, and thus harbors a promising future.

The plants with tiny bell-shaped red violet flowers are Qin Ling Dang Shen (秦岭党参 Codonopsis tsinlingensis Pax et Hoffm). On seeing them, we knew we had surpassed the 3000 meter altitude mark even without a GPS. These flowers only exist at that elevation or above. Qin Ling Dang Shen is a local medicinal herb, used as an alternative for Dang Shen (党参 Codonopsis pilosula) with similar efficacies. We were able to obtain five beautifully processed specimens of Qin Ling Dang Shen from that area.

When we really set foot at the top of the mountain, we were surprised to see a blue sky with white clouds. Miraculously, the drooping dark clouds and oncoming rain had gone. Perhaps our competitive climbing had left them behind at the hillside. What wasn't expected was to find a piece of flat open land on top of Mount Ao as if the peak had been cut off with the gods' magic



Tai Bai Yin Lian Hua (太白银莲花 Anemone taipaiensis)

knife. This area, named Pao Ma Liang ( 跑马梁 running horse ridge) Da Ye Hai (大爷海 Grandpa Sea), the highest peak of Mount Taibai (太白山). Nevertheless, no one could ever gallop a horse at that skyscraping height. Even backpackers who thrive on challenge and push their limits would lose their way and lives at the place.

Looking at Pao Ma Liang, I remembered a verse Chairman Mao (毛主席) once wrote about the Kunlun Mountains (昆仑)— "Where to get a treasured sword and cut you into three parts against the sky..." Maybe the top of Mountain Ao had already been cut into three parts by an immortal, granted to the past, present and future respectively. Mount Ao in the Qin Ling Mountains (秦岭) functions as a giant natural treasure vault, for it boasts incredible medicinal herbs. They must be well preserved in order to pass these resources down to the future generations. Furthermore, it is worthy to point out that we carried out the survey of Chinese herb resources and climbed our way up Mount Ao successfully against much danger and many hardship.

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#### What do we know, and how do we know it?

There are people in the medical and scientific establishments of the West who would like to discredit acupuncture as a non-scientific form of voodoo medicine. By and large, these are not the same people who are conducting studies which investigate sham vs. real acupuncture. In every medical and scientific area, it is important to test the principles and practices of one's discipline. It is important to disseminate scientific investigations in professional journals, and it is important for the press and media outlets to inform the public of the latest research and discoveries. Unfortunately, the acupuncture naysayers are only too willing to exploit statistical inconsistencies, inconclusive results and sincere questioning as "evidence" that acupuncture is false and unreliable. Even when there is no intention to make acupuncture look bad, the sham vs. real acupuncture controversy has left policy makers and the general public with the interpretation that real and fake acupuncture produce the same result.

It can be frustrating to feel that one has to defend something which should not need defense. When I encounter people who have doubts about the validity of acupuncture, I stress three main points: the mechanism studies which provide scientific evidence that acupuncture has verifiable physiological effects; the accumulated clinical trials and practitioner experience which document centuries of successful outcomes when acupuncture is applied by highly-trained professionals; and the strong institutional support of acupuncture, based on experience and reliability. These considerations, taken together, provide a convergence of evidence that acupuncture is a reliable, repeatable, coherent medicine.

#### Mechanism studies

The anecdote about the arthritic woman and her dog in part 1 of this article

is extremely relevant when discussing the scientifically-verifiable aspects of acupuncture. It is well-known that humans are suggestible and often credulous, especially about their health. But when acupuncture works on an animal, and when the effects of acupuncture stimulation can be verified by blood tests and brain scans, there has to be a real effect.

The action mechanism of acupuncture has been of great interest to many researchers. Numerous mechanistic studies of acupuncture in animal and human model suggest that the effect of acupuncture is primarily based on stimulation to and the responses of the neuroendocrine system involving the central and peripheral nervous systems. The following are several examples of scientists' attempts to identify and understand the mechanisms of acupuncture.

Scientific research has developed and confirmed convincing explanations as to how acupuncture produces its proven analgesic effects. Neuroscience has identified two main pathways (the spinothalamic tract and the spinoreticular tract) in the central nervous system that carry nociceptive signals to higher centers in the brain. Following these pathways, nociception moves from the spinal cord through the medulla, pons, and midbrain, and terminates in the thalamus. The spinothalamic tract transmits nociceptive signals that are important for pain localization. The spinoreticular tract is involved in the emotional aspects of pain. Acupuncture blocks pain impulses by exciting receptors or nerve fibers, precipitating interactions with neurotransmitters or neuropeptides along each stage of the pathways. Acupuncture can mobilize enkephalin and dynorphin to block incoming pain messages in the spinal cord. Acupuncture inhibits spinal cord pain transmission through its synergistic effect on monoamines, serotonin, and norepinephrine in the midbrain. Acupuncture can increase the release of β-endorphin into the blood from the pituitary gland, and affect the chemistry of cerebrospinal fluid (CSF) from the hypothalamus to cause analgesia. This multiple level and multiple center integration process demonstrates that acupuncture needling provokes subtle and complex effects on the autonomic nervous system to accomplish the mission of pain control 1-3. These studies have become the foundation for pain management of acupuncture.

Research<sup>4-7</sup> suggests that acupuncture is partially mediated through opioidergic and/or monoaminergic neurotransmission involving the brainstem, thalamus, hypothalamic as well as pituitary function. Human neuroimaging data<sup>8-14</sup> from functional magnetic resonance imaging (fMRI), positron emission





tomography (PET), and electroencephalography (EEG) have demonstrated that acupuncture stimulation moderates a wide network of brain regions, including the primary somatosensory, secondary somatosensory, and anterior cingulated, prefrontal, and insular cortices, amygdale, hippocampus, hypothalamus, and other areas.

Acupuncture has also effectively addressed disorders associated with hormone imbalances, such as polycystic ovary syndrome and menopause. Researchers 15-17 are seeking the underlying mechanism that allows acupuncture to treat hormone balance disorders effectively. Studies show that stress decreases reproductive functions by increasing the activity of the hypothalamic-pituitary-adrenal (HPA) axis, which is a complex set of direct influences and feedback interactions among three endocrine glands: the hypothalamus, the pituitary gland, and the adrenal glands. There is a close relationship between hormones of the HPA axis and those of the hypothalamic-pituitary-gonadal (HPG) axis which is a critical part in the development and regulation of a number of the body's systems, such as the reproductive system. Acupuncture is considered to influence both the HPA axis and the HPG axis. Existing research shows that acupuncture may be able to regulate the hypothalamic-pituitary-ovarian axis in many ways. and correct abnormal functioning. These studies justify the application of acupuncture to a number of woman's disorders.

Several animal models demonstrate that acupuncture and other stimulation methods of acupuncture points could down-regulate the expression of the Transforming Growth Factor (TGF). Studies  $^{18-19}$  on rat models of liver fibrosis and chronic renal failure found an inhibition of TGF-  $\beta$  1 expression in the tissues after acupuncture points were stimulated. It has been suggested that acupuncture stimulates the production of the granulocyte colony-stimulating factor (G-CSF) and granulocyte-macrophage colony-stimulating factor (GM-CSF) in animal models treated with myelosuppressive chemotherapy  $^{20}$ . In one controlled non-randomized human clinical trial  $^{21}$  with seven patients undergoing chemotherapy, acupuncture treatments significantly increased G-CSF levels, along with an increase in white blood cell count level. These studies provide the potential value of acupuncture to cancer care.

## Clinical practice; clinical trials

As mentioned previously, at least five thousand scientific studies and clinical trials have been conducted over the last thirty years. They have used modern standards for scientific design and data collection, and have overwhelmingly confirmed the effectiveness of acupuncture as a therapeutic medical modality. I will not take up space here citing the many conclusive and convincing studies, but interested readers can explore such resources as PubMed, the online medical research database maintained by the United States National Library of Medicine (NLM) at the National Institutes of Health.

In addition, Chinese textbooks of traditional Chinese medicine are an inexhaustible source of clinical experience and results, based on empirical evidence, which go back thousands of years. Acupuncture students and practitioners in every country are familiar with the Huang Di Nei Jing (《黄帝内经》 Yellow Emperor's Internal Classic), Nan Jing (《难经》 Classic of Difficult Issues), Shang Han Lun (《伤寒论》 Treatise on Cold Febrile Diseases), Zhen Jiu Jia Yi Jing (《针灸甲乙经》 Systematic Classic of Acupuncture and Moxibustion) and Zhen Jiu Da Cheng (《针灸大成》 Great Compendium of Acupuncture and Moxibustion), and many other texts.

## **Institutional support**

In China, all Chinese medical schools have established an acupuncture college with a stable enrollment of students pursuing bachelor's, master's, and Ph.D. degrees in medicine in the fields of acupuncture. All medical universities also have associated hospitals which train students in Western and Chinese medicine. Ph.D.-level research is conducted at these hospitals and universities, and is published in peer-reviewed journals. Acupuncture is taught at the university level in East Asian countries, and acupuncture schools and colleges are very well-established in Germany, France, the UK, and other European countries.

In the United States, sixty colleges of acupuncture and Oriental medicine offer acupuncture education for students pursuing masters of acupuncture and doctoral degree of acupuncture and Oriental medicine. Among the one hundred-fifty plus medical schools, most of them have established an Alternative and Complementary Medicine (CAM) Department with acupuncture as the leading modality of practice. This has resulted in widespread

familiarization of medical students, nurses, and hospital administrators with CAM. An increasing number of medical schools in the United States are hiring acupuncture doctors as permanent faculty members. Leading medical centers across the country have started to establish their integrative medicine departments in which acupuncture is an essential component. The National Institutes of Health grants the most funding to acupuncture research among the different modalities of complementary medicine. Forty-six states currently license acupuncture professionals.

The World Health Organization (WHO) has long recommended acupuncture for a variety of health conditions. In its institutional support of acupuncture, it has established international standards of acupuncture terminology, acupuncture point locations, acupuncture research protocols, and acupuncture treatment protocols. The ICD-10 manual is the current version of international disease classifications. For the ICD-11, WHO is instrumental in including pattern differentiation of diseases based on traditional Chinese medicine.

Hospitals across the United States are incorporating acupuncture and traditional Chinese medicine into their services, and this trend is rapidly gaining momentum. The Cleveland Clinic has used acupuncture for years, and in 2014 it began to offer Chinese herbal medicine prescriptions to its patients. This is a substantial upper-level institutional move that influences the cultural view of medicine.

Minneapolis's Abbott-Northwestern Hospital reports success using acupuncture in its emergency room to treat conditions ranging from car accident injuries to migraines to kidney stones. One of its stated objectives is to prove that traditional Chinese treatment can reduce doctors' reliance on addictive opioids to manage patients' pain. The Minneapolis hospital was the first in the nation to staff its ER with an acupuncturist two years ago, as part of a broader campaign to promote Eastern medicine as a complement to Western mainstream medicine.

Leading cancer centers in the United States such as the Dana-Farber Cancer Institute (DFCI) in Boston, Memorial Sloan-Kettering Cancer Center in New York, and M.D. Anderson Cancer Center in Houston are integrating acupuncture into cancer care. They use acupuncture to treat a variety of symptoms and conditions associated with cancer and the side effects of cancer treatments, such as nausea and vomiting, postoperative pain,



Minneapolis's Abbott-Northwestern Hospital

cancer related pain, chemotherapy-induced leukopenia, post-chemotherapy fatigue, xerostomia, and possibly insomnia, anxiety and quality of life. This trend parallels a broader trend of the increasing use of Complementary and Alternative Medicine (CAM) among cancer patients, estimated in some surveys to range between 48% and 83%. Specific use of acupuncture by cancer patients is estimated as high as 31%<sup>22</sup>.

## Perspectives on acupuncture's provability

Science-based studies which conclude that there is no statistically significant difference between true acupuncture and sham acupuncture have caused constemation among acupuncture professionals and confusion in the public. Even when the studies assert that acupuncture is definitely more effective than no treatment or other conventional treatments, the implication remains that even a poorly-trained practitioner could insert needles randomly and still obtain some positive "acupuncture" result. Acupuncturists who have invested years of their lives in training and practice know that this is not true, but may feel dismayed, discouraged and even insulted by this turn of events.

It is easy to dismiss a study we disagree with by saying there must be something wrong with it. Unfortunately, there have been more and more indications lately that there actually is something "wrong" with science these days. Recently, a report<sup>23</sup> in the Economist claimed that over half pf various medical studies which had previously been published in leading journals could not be duplicated and verified. The pressure on scientists and academics of every type to "publish or perish" the bias of even reputable journals in favor of provocative and definitive studies, and the desire of media outlets to provide the public with dramatic tidbits of information ensure that quite a lot of "junk science" is being created and circulated. I am not calling any specific sham vs. real acupuncture study into question, nor do I intend to discredit any researcher. In fact, it is just as likely that junk science is being performed which unconditionally supports acupuncture. But all scientists must be ready and willing to re-examine the premises, protocols and conclusions of their studies, especially when those studies could have real-life consequences in terms of influencing public health or determining the allocation of research funding.

My strongest reservation in regard to the sham vs. real acupuncture studies is my doubt that the subject is amenable to being studied in these terms.

Scientific studies are essentially linear in nature, and based in mathematical principles. Mathematics has been spectacularly successful at solving problems in physics, astronomy, probability, etc. But most scientists and mathematicians acknowledge that the linear approach breaks down when it comes to examining complex biological systems such as synaptic connections in the human brain, or complex socio-political systems such as economic behavior (or even arranging a car pool). Consider the number of variables involved in a typical acupuncture treatment. The practitioner's knowledge base and academic grounding in Chinese medicine and bioscience; the practitioner's level of clinical experience and ability to diagnose according to TCM principles; the practitioner's choice of modalities to use and his/her skill in applying those modalities; the practitioner's people skills in general and his/her relationship a particular patient. There are still more variables in terms of the modalities applied to the patient by the practitioner: choice of acupuncture point combinations; method of needle insertion and manipulation; application of herbs or body work; dietary or lifestyle advice. The patient is a unique individual in his/her expression of age, basic constitution, life experience, health conditions, and predisposition for treatment. More importantly and almost impossible to categorize are the patient's mental state in general, beliefs about health, and attitude to acupuncture in particular. Does the patient "believe" in acupuncture and expect it to work? Is the patient skeptical or fearful of acupuncture? What are the patient's feelings about the practitioner? Think back to the anecdote about Walter Graff's intestinal obstruction at the beginning of the article. Walter may not have had any expectations or beliefs about acupuncture to begin with, but how much was he influenced by the calm assurance of Dr. He, or by his wife's positive response to acupuncture, and how much did these factors contribute to the success of the treatment?

It is possible that the sham vs. real acupuncture studies will open new avenues of scientific inquiry and provide significant insights into the essential nature of acupuncture. It is also possible that they will prove to be a blind alley, leading to nowhere. The best guess is that these studies will continue to be conducted, and continue to be disputed, into the foreseeable future. It seems unlikely that a zigzag road in the short term will derail the fundamental trajectory of acupuncture medicine in the 21st century: robust demand, increasing research, solid institutions and expanding scope of practice. The needle continues to be sharpened by practicing clinicians, scientific researchers and satisfied patients.

#### **References:**

- 1. Cho, Z.H., et al., Neuro\_Acupuncture, Volume 1: Neuroscience Basics, Q. Puncture Inc., 2001.
- 2. Zhang R, Lao L, Ren K, Berman BM. Mechanisms of acupuncture-electroacupuncture on persistent pain. *Anesthesiology*. 2014 Feb;120(2):482-503.
- 3. Stux G, Berman B, Pomeranz B, P. Kofen, K.A. Sahm. *Basics of Acupuncture 5th Edition*. 2003. Springer.
- 4. Han JS, Tang J, Ren MF, Zhou ZF, Fan SG, Qiu XC. Central neurotransmitters and acupuncture analgesia. *Am J Chin Med* 1980 Winter;8(4):331–348.
- Han JS, Xie GX, Zhou ZF, Folkesson R, Terenius L. Enkephalin and beta-endorphin as mediators
  of electro-acupuncture analgesia in rabbits: an antiserum microinjection study. Adv Biochem
  Psychopharmacol 1982;33:369–377.
- Han JS, Xie GX, Zhou ZF, Folkesson R, Terenius L. Acupuncture mechanisms in rabbits studied with microinjection of antibodies against beta-endorphin, enkephalin and substance P. Neuropharmacology 1984 Jan;23(1):1–5.
- 7. Han JS. Acupuncture: neuropeptide release produced by electrical stimulation of different frequencies. *Trends Neurosci* 2003 Jan;26(1):17–22.
- 8. Hui KK, Liu J, Makris N, et al. Acupuncture modulates the limbic system and subcortical gray structures of the human brain: evidence from fMRI studies in normal subjects. *Hum Brain Mapp* 2000;9(1):13–25.
- Hui KK, Liu J, Marina O, et al. The integrated response of the human cerebro-cerebellar and limbic systems to acupuncture stimulation at ST 36 as evidenced by fMRI. Neuroimage 2005 Sep;27(3): 479–496.
- Napadow V, Makris N, Liu J, Kettner NW, Kwong KK, Hui KK. Effects of electroacupuncture versus manual acupuncture on the human brain as measured by fMRI. Hum Brain Mapp 2005 Mar;24(3): 103, 205
- 11. Hsieh JC, Tu CH, Chen FP, et al. Activation of the hypothalamus characterizes the acupuncture stimulation at the analgesic point in human: a positron emission tomography study. *Neurosci Lett* 2001 13;307(2):105–108.
- 12. Wong VC, Sun JG, Yeung DW. Pilot study of positron emission tomography (PET) brain glucose metabolism to assess the efficacy of tongue and body acupuncture in cerebral palsy. J Child Neurol 2006 Jun;21(6):456–462.
- 13. Kim MS, Nam TC. Electroencephalography (EEG) spectral edge frequency for assessing the sedative effect of acupuncture in dogs. *J Vet Med Sci* 2006 Apr;68(4):409–411.
- Litscher G. Effects of acupressure, manual acupuncture and Laserneedle acupuncture on EEG bispectral index and spectral edge frequency in healthy volunteers. Eur J Anaesthesiol 2004 Jan;21 (1):13–19.
- 15. Chen, BY, Acupuncture Normalizes Dysfunction of Hypothalamic-Pituitary-Ovarian Axis, *Acupuncture & Electro-Therapeutics Res, INT. J.*, 1997: Vol. 22, pp. 97-108.
- Stener-Victorin, E, Lundeberg, T, Waldenstrom, U, Manni, L, Aloe, L, Gunnarsson, S, and Janson,
   PO. Effects of Electro-Acupuncture on Nerve Growth Factor and Ovarian Morphology in Rats with

- Experimentally Induced Polycystic Ovaries. Biology of Reproduction 2000, 63, 1497–1503.
- 17. Stener-Victorin E et al. Effects of electro-acupuncture on corticotropin-releasing factor in rats with experimentally-induced polycystic ovaries. Neuropeptides 2001, 35:227-231.
- 18. Liu HR, Ma XF, Zhao TP, Wu HX. Regulation of acupuncture & moxibustion on collagen and TGF- $\upbeta$ mRNA in colon of Crohn's disease rats. Journal of Anhui Tradiational Chinese Medicine College 2005:24(4):25-28.
- 19. Zhou AL, Luo L, Zhou CH, Jiang DR, Mao JH, Zhu Y. Effects of acupoint injection with oxymatrine on expression of type IV collagen and TGF-  $\beta$  mRNA on rat liver fibrosis. Chinese Medical Journal of Communications 2005;19(5):421-424.
- 20. Jiang D, Xu Y, Qi Z, Yuan W. Effect of electroacupucnture on peripheral leukocyte count, CFU-GM frequency and plasma cGMP level in rats. Bulletin of Hunan Medical University, 1989;14(4):335-337.
- 21. Zhao X, Wang H, Cao D, Li W, Tian K. Influence of acupuncture and moxibustion on serum CSF activity of patients with leukopenia caused by chemotherapy. Zhen Ci Yan Jiu 1999;(1):17-19.
- 22. Lu W, Dean-Clower E, Doherty-Gilman A, Rosenthal DS. The value of acupuncture in cancer care. Hematol Oncol Clin North Am. 2008 Aug;22(4):631-48, viii.
- 23. How Science Goes Wrong? Economist, Oct. 19, 2013.



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## TCM Interventions for Back and Neck Diseases

## By Deng Hongyong (邓宏勇)

For a long time, various Traditional Chinese medicine (TCM) interventions, such as acupuncture, massage and Chinese herbal medicines, were applied to prevent and treat neck and back pain and other spinal disorders. Thousands of clinical studies were carried out to explore the efficacy and safety. Most of all, some high quality systematic reviews conducted by Cochrane Back and Neck (CBN) were reported in the Cochrane library, which provided the best evidence of TCM interventions for back and neck diseases.

Low-back pain (腰 痛 LBP) is one of the most common and costly musculoskeletal problems in modern society. 70% to 80% of adults suffer from it at some time in their lives. Some TCM therapeutic approaches have the potential to minimize pain and speed recovery to normal function. Furlan et al. conducted two systematic reviews in 2005 and 2015. One of them (Furlan et al. 2005) assessed the effects of acupuncture and dry-needling (千针) for LBP. They searched randomized trials of acupuncture (that involvd needling) for adults with non-specific (sub)acute or chronic LBP, or dry-needling for myofascial pain syndrome in the low-back region reported from 1996 to 2003 in databases. Thirty-five RCTs (2861 patients) were included in this review, only three trials of acupuncture for acute LBP among them. The data did not justify firm conclusions, because of the small sample sizes and low methodological quality of the studies. For chronic LBP there was an evidence of pain relief and functional improvement for acupuncture, compared to no treatment or sham therapy. These effects were only observed immediately after the end of the sessions and with short-term follow-ups. There was an evidence that acupuncture, added to other conventional therapies, relieved pain and improved function better than the conventional therapies alone. However, the effects were small. Dryneedling appeared to be a useful adjunct to other therapies for chronic LBP. No clear recommendations could be made about the most effective acupuncture technique. The results suggested that acupuncture and dry-needling may be useful adjuncts to other therapies for chronic LBP.

The other article (Furlan et al. 2015) reviewed the effects of massage therapy for people with non-specific LBP. Massage was defined as soft-tissue manipulation using the hands or a mechanical device. In total they included 25 RCTs and 3096 participants in this review. Only one trial included patients with acute LBP (pain duration less than four weeks), while all the others included patients with sub-acute (four to 12 weeks) or chronic LBP (12 weeks or longer). Pain intensity and quality were the most common outcomes measured in these studies, followed by back-related function, such as walking, sleeping, bending and lifting weights. There were eight studies comparing massage to inactive controls (sham therapy, waiting list, or no treatment) and 13 studies comparing massage to active controls (manipulation,

mobilization, TENS, etc.). Massage was better than inactive controls for pain and function in the short-term, but not in the long-term follow-up. Massage was better than active controls for pain both in the short and long-term follow-ups, but there were no differences for function, either in the short or long-term follow-ups. There were no reports of serious adverse events in any of these trials. The authors have very little confidence that massage is an effective treatment for LBP because most of the included studies were small and had methodological flaws.

The prevalence of mechanical neck disorders (MND) is known to be both a hindrance to individuals and costly to society. As such, massage is widely used as a treatment for MND. Patel et al. (2012) assessed the effects of massage on pain, function, patient satisfaction, global perceived effect, adverse effects and cost of care in adults with neck pain versus any comparison at immediate post-treatment to long-term follow-up. The authors included 15 trials in this review that assessed whether massage could help reduce neck pain and improve function. The results concluded that there was only a small amount of evidence that certain massage techniques (traditional Chinese massage, and so on) may have been more effective than control or placebo treatment in improving function and tenderness. Also, minimal evidence showed that massage may have been more beneficial than education in the short term for pain bothersomeness or that ischaemic compression combined with passive stretches may have been more effective than it used alone for pain reduction. Overall, as a stand-alone treatment, massage for MND was found to provide an immediate or short-term effectiveness for both pain and tenderness. Additionally, future research is needed in order to assess the longterm effects of treatment and treatments provided on more than one occasion. The quality of the above studies was poor and the number of participants in most trials was small. Therefore, no firm conclusions could be drawn at that time.

Degenerative changes of the cervical spine are quite common and can cause severe neck pain, impairment and decreased quality of life. Degenerative disc disease of the cervical spine can result in severe pain, instability and radiculopathy (pain spreading down the arms and into the head), myelopathy (spasticity and weakness of arms or hands, which may include "numb and clumsy" hands) or both. Chinese oral and topical herbal medicines are being used to treat many neck disorders. Cui et al. (2010) performed a review to evaluate the effectiveness of Chinese herbal medicines in treating chronic neck pain due to cervical degenerative disc diseases with radicular signs or symptoms. The interventions were Chinese herbal medicines, defined as products derived from raw or refined plants or parts of plants, minerals and animals that are used for medicinal purposes in any form. Four RCTs from China were included in this review. Two trials (680 participants) reported

that Compound Qishe Tablets, a kind of Chinese herbal medicine product, was better in relieving pain than either a placebo or Jingfukang in the short-term; one trial (60 participants) reported that an oral herbal formula combined Huang Qi (黄芪 Radix Astragali) etc. and was better in relieving pain than Mobicox or Methycobal. One trial (360 participants) showed that a topical herbal medicine, Compound Extractum Nucis Vomicae, may have be more effective in relieving pain than Diclofenac Diethylamine Emulgel. However, the size of the study was small and the effect was measured only in the short-term. Further research is very likely to change both the size of the and thus our confidence in the results.

Outside the framework of the Cochrane, Yuan et al. (2015) reviewed and analyzed the existing data about pain and disability in various TCM interventions for neck pain (NP) and LBP. Studies were identified by a comprehensive search of databases, such as MEDLINE, EMBASE, and Cochrane Library, up to September 2013. A meta-analysis was performed to evaluate the efficacy and safety of interventions. Seventy five randomized controlled trials (n=11077) were included. Results showed that acupuncture was more effective than sham-acupuncture in reducing pain in post-treatment for chronic NP, chronic LBP, and acute LBP. Cupping could be more effective than waitlist in VAS for chronic NP or medications (e.g. NSAID) for chronic LBP. Overall, acupuncture, acupressure, and cupping could be efficacious in treating the pain and disability associated with chronic NP or chronic LBP in the immediate term. Scraping, tai-chi, qigong, and Chinese manipulation showed moderate effects, but any definite conclusion is difficult to confirm due to the inadequate quality of previous studies. The efficacy of massage ( # \$\pm\$ tuina) and moxibustion is unknown because no direct evidence was obtained.

#### External links: About Evidence-based Medicine and the Cochrane

Evidence-based medicine (EBM) is an approach to health care that promotes the collection, interpretation, and integration of evidence. Furthermore, it includes the, importation and applicable patient-reported, clinician-observed, and research-derived evidence. The best available evidence, moderated by patient circumstances and preferences, is applied to improve the quality of clinical judgments (McKibbon et al. 1995). The idea of evidence-based medicine is generally thought to be originated from the book,, Effectiveness and Efficiency: Random Reflections on Health Services, published by Archie Cochrane (1909-1988) in the 1970s, and then developed into practice by David Sackett (1934-2015) et al in the early 1990s. The most important evidence of EBM systematic review, especially if created and maintained by the Cochrane.



The Cochrane (http://www.cochrane.org), formerly known as the Cochrane Collaboration, founded in 1993 under the leadership of lain Chalmers (1943-), is now an international non-profit, non-governmental and independent organization, dedicated to listing up-to-date, accurate information about the effects of health care readily available worldwide. Thousands of reviewers from across the globe, were grouped into more than fifty clinic-question-resolving groups, and produced systematic reviews of healthcare interventions under the support and coordination of the Cochrane. Cochrane systematic reviews are known for their standardization, stringent requirements and high quality. All these reviews are collected into The Cochrane Database of Systematic Reviews (CDSR) and then disseminated in the electronic Cochrane Library. There are about 7% systematic reviews assessing the benefits and disadvantages of TCM interventions in the CDSR.

#### Reference

Cui X, Trinh K, Wang YJ. Chinese herbal medicine for chronic neck pain due to cervical degenerative disc disease. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No.: CD006556. DOI: 10.1002/14651858.CD006556.pub2.

Furlan AD, van Tulder MW, Cherkin D, Tsukayama H, Lao L, Koes BW, Berman BM. Acupuncture and dryneedling for low back pain. Cochrane Database of Systematic Reviews 2005, Issue 1. Art. No.: CD001351. DOI: 10.1002/14651858.CD001351.pub2.

Furlan AD, Giraldo M, Baskwill A, Irvin E, Imamura M. Massage for low-back pain. Cochrane Database of Systematic Reviews 2015, Issue 9. Art. No.: CD001929. DOI: 10.1002/14651858.CD001929.pub3.

McKibbon, K.A. et al (1995). The medical literature as a resource for evidence based care. Working paper from the Health Information Research Unit, McMaster University, Ontario, Canada.

Patel KC, Gross A, Graham N, Goldsmith CH, Ezzo J, Morien A, Peloso PMJ. Massage for mechanical neck disorders. Cochrane Database of Systematic Reviews 2012, Issue 9. Art. No.: CD004871. DOI: 10.1002/14651858.CD004871.pub4.

Yuan QL, Guo TM, Liu L, Sun F, Zhang YG. Traditional Chinese medicine for neck pain and low back pain: a systematic review and meta-analysis. PLoS One. 2015 Feb 24;10(2):e0117146. doi: 10.1371/journal.pone.0117146. eCollection 2015.



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## **Medicinal Diet in Spring**

## By Ye Jin (叶进)

Spring brings new beginnings and new growth. In spring, Yang Qi (  $\mathfrak{P}$   $\mathfrak{T}$  ) within the human body flows upward and outward, and therefore, needs to be protected. In addition, spring is a windy season. In Chinese medicine, wind is known as the "spearhead of all pathogenic factors". Since wind is the most prevalent pathogenic factor in spring, it's essential to "supplement yang and stay away from wind". The health-cultivation porridges that contain Chinese herbs help to increase bodily fluids, prevent illnesses and benefit the overall health.



Examples of such porridges are listed as follows:

## Porridge to supplement anti-pathogenic Qi and reinforce deficiency to provide anti-common cold defense (补虚正气粥)

Ingredients: Huang Qi (黄芪 Radix Astragali )30g, Ren Shen (人参 Radix Ginseng )5g, Polished round-grained rice 100g.

**Functions:** Tonifies Yuan-primordial qi,reinforces deficiency,fortifies the spleen and stomach and delays aging [ Sheng Ji Zong Lu (《圣济总录》 *Comprehensive Recording of Divine Assistance*)].

Suitable population: People with Qi deficiency.

Cooking and dining methods: Slice Huang Qi (黄芪) and Ren Shen (人参) into thin pieces and soak them in cold water for half an hour. Bring fire

to low after the water boils extract the first condensed boils. Apply the same method and extract the second condensed juices. Merge the two condensed juice, and add polished round-grained rice into the water to make porridge. Eat one bowl of porridge twice per day on an empty stomach, once in the morning and the other in the. The treatment course lasts 5 days and an appropriate amount of sugar can be added.



补虚正气粥

Comment: Huang Qi and Ren Shen are two essential herbs to tonify qi. Ren Shen tonifies qi of the five Zang-organs and exerts a long-lasting effect, whereas *Huang Qi* tonifies *Wei-*defensive gi, consolidates the exterior and exerts a fast, extensive effect. When used in combination, the two herbs produce a stronger qi-tonifying effect. It's stated in some medical texts that "coupled with Huang Qi, Ren Shen can have a better effect in supplementing gi". As a result, the combined Huang Qi and Ren Shen are indicated for all types of qi deficiency. For instance, for poor digestion, a poor appetite, loose stools and general fatigue due to qi deficiency of the spleen and stomach, the two herbs can activate gi of the middle jiao, fortify the spleen and promote digestion; for prolapsed stomach or uterus due to spleen qi sinking, the two herbs can supplement qi, lift yang and restore prolapsed organs to their natural positions; for sweating upon physical exertion and frequent common colds due to deficiency of the lung/Wei-defensive qi, the two herbs can tonify gi, consolidate the exterior and prevent common colds; and for mild or severe palpitations due to heart gi deficiency, the two herbs can supplement heart gi and blood. In addition, they can also be used for bleeding due to spleen gi failing to control blood within the vessels and fever due to gi deficiency. However, it's worth noting that the two herbs should not be taken in a large dose for a long period of time, because they may cause qi to clog up. It's contraindicated for people during common cold, having severe internal heat, dampness or food retention.

## Scallion and Fermented Soybean Decoction for common colds due to wind cold ( 葱豉汤 )

Ingredients: Cong bai (葱 白 Allium schoenoprasum L.) 30g, Dou Chi (豆豉 Semen Sojae Preparatum) 10g, Sheng Jiang (生姜 Rhizoma Zingiberis Recens) 3g, rice wine 30g.

**Functions:** Dispels wind , dissipates cold, releases the exterior and harmonizes the Middel Jiao (中焦).

**Suitable population:** Patients with common cold (wind cold).

Cooking and eating methods: Cook the scallion root, fermented soybean and fresh ginger with 500mg water and bring to the boiling point. Add rice wine and bring to a boil again. Drink the decoction 2 to 3 times per day when it is hot. Cover the patient with a quilt to promote sweating after having drunk the decoction.





**Comment:** Scallion root dispels wind and dissipates cold; sweating helps to unblock the Yang. Fresh ginger releases the exterior and dissipates cold. These two medicinal ingredients can boost the stomach's functions, and have been used for medical and cooking purposes since ancient China. Fermented soybeans can release the exterior and relieve restlessness. Rice wine helps to warm the body, unblock Qi and blood, and relax the sinews and quicken the collaterals. All these ingredients together creat a formula that releases the exterior, suitable for externally-contracted cold symptoms.

## Shen Xian Porridge (神仙粥) for common colds due to wind cold

Ingredients: Sheng Jiang (生姜 Rhizoma Zingiberis Recens) 5g,Cong bai (葱白 Allium schoenoprasum L.) 5-7 stems, sticky rice or polished round-grained rice 100g, rice vinegar 15ml.

**Functions:** Disperses wind cold, warms the middle jiao and arrests vomiting (Experienced Formula).

**Suitable population:** Patients with wind cold and vomiting due to stomach cold.

Cooking and dining methods: Clean the ginger, scallion root and rice. Add the rice, ginger and water together and cook at a high strong fire. Then add the scallion root and bring to a boil. Add the vinegar to the porridge when it is almost finished cooking. Eat while it is hot.

Comment: This porridge is an effective recipe for removing wind cold. Fresh ginger and scallions are both daily foods and medicinal ingredients that are commonly used in TCM. Rice vinegar, also called bitter alcohol in ancient China, is a food flavoring agent and has of detoxicating function. It has also been reported that vinegar is very effective in preventing influenza, and that fumigating the vinegar could kill the influenza virus, especially Group A Streptococcus. The combination of these three ingredients is effective in treating common colds, if cooked in the specified manner. The name itself, Shen Xian porridge, means speedy recovery. The porridge should be taken when it is hot. Patients should cover themselves with a quilt after taking the porridge and the best results come about when a slight sweat ensues. It is not an appropriate decoction for patients with wind heat and high fever, restlessness, or aversion to heat. It is noted that the rice vinegar should be put at the end and should not be cooked for long.

Translator: Long Kun (龙堃)



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# The Theoretical Foundation of Ba Duan Jin (八段锦)

## By Zhao Xiaoting ( 赵晓霆 )

In terms of the function of body movements alone, Ba Duan Jin ( 入 段 锦 Eight Sets of Movements) is similar to broadcast gymnastics and self-care massage. However, mental intention and the state of one's essential qi are crucial to its function in nurturing one's character and promoting health. To fully understand the spirit, essence, character and qi, one needs to first be familiar with basic concepts in traditional Chinese culture. In other words, one needs to understand the underlying truth before practicing Ba Duan Jin. Otherwise, it's like "a blind man riding a blind horse approaching the brink of an unfathomable pool at midnight".

## The way to pursue underlying truth

The theoretical system of traditional Chinese culture is totally different from that of modern science. Modern science aims to pursue truth or knowledge of phenomena in the "physical world" and therefore highlights "physical evidence"; whereas traditional Chinese culture focuses on Dao (  $\dot{\mathbf{u}}$  )— the underlying natural order of the Universe. All phenomena in the "physical world" are just the manifestation of "Dao"— a "phase" that changes all the time.

Dao can be thought of as the flow of the Universe. The basic law of the Dao is to transform nothingness into existence. The Dao De Jing¹ (《道德经》 Tao Te Ching) states, "There was something undefined and complete, coming into existence before Heaven and Earth. We look at it, and we do not see it. We listen to it, and we do not hear it. How still it was and formless, standing alone, and undergoing no change, reaching everywhere and in no danger of being exhausted! It may be regarded as the Mother of all things. I do not know its name, and I give it the designation of the Dao." This text says, "Conceived of as having no name, it is the Originator of heaven and earth; conceived of as having a name, it is the Mother of all things," and "the Dao produced One; One produced Two; Two produced Three; Three produced All things." The law of the Dao is its being what it is.

Chapter 66 of the Huang Di Nei Jing Su Wen (《黄帝内经·素问》Yellow Emperor's Internal Classic Plain Question) states, "the extension of the Tai Xu (太虚 Great Void) is boundless; it is the basis of all founding and it is the principal source of all transformation. The myriad beings depend on the Tai Xu to come into existence, and it is because of the Tai Xu that the Wu Yun (五运 five movements) complete their course in heaven. The Tai Xu spreads the true magic power of qi, and it exerts control over the principal qi of the earth. Hence the nine stars are



1. Also simply referred to as the Laozi (《老子》 Lao Tzu), is a Chinese classic text. According to tradition, it was written around 6th century BC by the sage Laozi.

suspended in heaven and shine and the seven luminaries revolve in a cycle. This is called yin; this is called yang. This is called soft; this is called hard. Hence when that which is in the dark and that which is obvious have assumed their positions, there is cold and summer-heat, tension and relaxation. Generation follows upon generation, transformation follows upon transformation, with the result that all the things come into open existence."

From the perspective of traditional Daoist culture, the above theoretical system can be summarized into Dao (natural order) → qi (transformation) → physical world (changes). Unlike modern scientific view, Daoism believes there are changes of qi and Dao before manifestation of the material world. The Yi Men Fa Lv (《医门法

律》 Precepts for Medical Practice) (1658) says, "When qi gathers, the physical body is formed; when qi disperses, the body dies." This can be best explained from the following story of Zhuangzi's wife death (庄子妻死).

When Zhuangzi's wife died, Hui Shi (惠施) came to give his condolences. As for Zhuangzi, he was squatting with his knees out, drumming on a pot and singing. "When you have lived with someone," said Hui Shi, "and brought up children, and grown old together, to refuse to bewail her death would be bad enough, but to drum on a pot and sing - could there be anything more shameful?" "Not so. When she first died, do you suppose that I was able not to feel the loss? I peered back into her beginnings; there was a time before there was a life. Not only was there no life, there was a time before there was a shape. Not only was there no shape, there was a time before there was energy. Mingled together in the amorphous, something altered, and there was the energy; by the alteration in the energy there was the shape, by alteration of the shape there was the life. Now once more altered, she has gone over to death. This is to be companion with spring and autumn, summer and winter, in the procession of the four seasons. When someone was about to lie down and sleep in the greatest of mansions, I with my sobbing knew no better than to bewail her. The thought came to me that I was being uncomprehending towards destiny, so I stopped weeping."

Apparently, Dao is the most







fundamental element in the above theoretical system; and qi (transformation) and physical world (changes) are different forms of Dao. Therefore, it is important to comprehend and follow the Dao. Otherwise, it's like "going south by driving the chariot north (doing something counterproductive to one's goal)". One cannot study "Dao" and "Logic" in traditional Chinese culture from the mindset of "physical evidence".

In essence, traditional health cultivation practice including Ba Duan Jin tends to return to the origin: physical world (changes) → qi (transformation) → Dao (natural order). They stress more

on "the cleansing and uplifting" process, in which the essence, qi and spirit or temperament  $\longleftrightarrow$  qi are discussed.

## The origin of Zhen (Genuine) Qi ( 真气 )

Qi Gong practice (气功) pursues "Zhen qi" and "Zheng(healthy/positive) qi" (正气), which are closely associated with "Dao" and "De" (德 virtue).

Dao is the underlying natural order of the Universe. The Zhou Yi² Xi Ci (《周易·系辞》Philosophical interpretation on the Book of Changes) states that "One Yin

and One Yang are called Dao" and "the Dao of heaven is known as yin and yang". Confucius (孔子551 B.C.-478 B.C.) believed "what is above the form (metaphysical) is called Dao; what is under the form (physical) is called a tool". As a result, "Dao is the interaction between yin and yang".

"De" is one's inherent nature or character. Meng Zi (《孟子》 Mencius) states, "the feeling of commiseration is essential to man, that the feeling of shame and dislike is essential to man, that the feeling of modesty and complaisance is essential to man, and that the feeling of approving and disapproving is essential to man. The feeling

2. An ancient divination text and the oldest of the Chinese classics







of commiseration is the principle of benevolence. The feeling of shame and dislike is the principle of righteousness. The feeling of modesty and complaisance is the principle of propriety. The feeling of approving and disapproving is the principle of knowledge. Men have these four principles just as they have their four limbs. Yet, they just do not realize they have them."

the highest point of Dao De (道德 inner strength/personal character)". Today, "Dao De" is a social ideology, referring to a body of standards or principles derived from a code of conduct. It can be seen that the word "Dao De" in traditional Chinese culture is far more profound than in any other modern text.

"Dao" and "De" were first used in combination in the Quan Xue (《劝学》 the chapter of "Persuading/Encouraging Learning") by Xunzi³ (荀子 about 313 B.C.-238 B.C.) as "...therefore learning reaches its completion with the rituals, for they may be said to represent

### The basic concept of Qi

Qi is the most essential substance that constitutes the universe and human body and acts to maintain vital activities. It can be better understood from an examination of energy and functions.





 Along with Confucius and Mencius, Xun Zi was one of the three great early architects of Confucian philosophy.

#### © Energy

Energy in this context includes Qing Qi (清气 clean qi ), Ying Qi (营气 nutrients qi) from water and grains and Yuan Qi (元气 yuan-primordial qi ). In order to understand Qing Qi, the following is an example to clarify meaning. After living in a city for a long period of time, travelling to a place with fresh air, because we were able to breathe in fresh air from nature through our lungs. This is Qing Qi.. As for Ying Qi, humans need energy from food and water which is absorbed through our stomach and intestines. Finally, Yuan Qi is the energy passed down from the parents to their offspring, thus some children are born weak, while others strong, and some children smart while others are relatively dull.

#### Functions

The functions of qi include qi activity, vital activity, mental intention and regulation. For example, anger causes qi to ascend, leading to a red face and elevated blood pressure.

However, the aforementioned gi is not the "gi" we pursue in Qi Gong practice. As we mentioned before, Qi Gong practice pursues "Zhen qi" and "Zheng gi" which are closely associated with "Dao" and "De". This is what we say "when there is sufficient healthy gi inside, the pathogenic gi have no way to invade the body" and "genuine qi will be with you when you achieve Tian ( 恬 peaceful joy), Dan (淡 no greed for fame and wealth), Xu (虚 void) and Wu (无 nothingness)". To acquire Zhen QI and Zheng QI, we need to follow Dao and cultivate our virtue. The Dao De Jing states, "All things are produced by the Dao, and nourished by the De. They receive their forms according to the nature of each, and are completed according to the circumstances of their condition. Therefore all things without exception honor the Dao, and exalt the virtue. This honoring of the Dao and exaltation of its operation is not the result of any ordination, but always a spontaneous tribute." In summary, "Dao" produces all things and "De" nourishes all things. The outer chapter Heaven and Earth in Zhuang Zi (《庄子·外篇·天地》Chuang Tzu) states, "Pervading heaven and earth, that is the Dao; moving among the ten thousand things, that is the De." This chapter also states, "Without Dao, the body can have no life. Without De, life can have no clarity. To preserve the body and live out life, to establish De and clarify Dao-is this not kingly (De) virtue?" Mencius says, "I'm good at nourishing my flood-like righteous qi..." He goes on to describe what he means by "flood-like righteous qi": It is the sort of qi utmost in vastness and power. If, by uprightness, you nourish it and do not interfere with it, it fills the space between Heaven and Earth. It is the sort of qi that matches virtue and morality; without these, it starves. It is generated by the accumulation of virtue and morality – one cannot attain it by sporadic righteousness. If anything one does fails to meet the standards of one's heartmind, it starves.

The principle of our revised Ba Duan Jin lies in that the "genuine gi will be with you when you achieve Tian, Dan, Xu and Wu". Tian, Dan, Xu and Wu are four levels of following the Dao. Tian means tranquil, serene and joyful. This peaceful joy arises from the inner heart and has nothing to do with gain and loss in real life. Dan means not to seek fame and wealth. One can only determine his/her aspiration by not seeking secular fame and wealth; one can only achieve his/her ambition by having a tranquil peaceful mind. Xu and Wu are more difficult to explain. These four levels can be explained from the following example (metaphor). Imagine you are in a room with a closed door, windows and thick wool curtain. You cannot see your own fingers in this dark room. This is a normal state of ordinary people. When the curtain is pulled aside, the sunlight enters the room, allowing you to see the scene outside through the window. This is the first level "Tian". When the door and windows are open, you feel the room is connected with the outside world. This is the second level of "Dan". When you are still in the room but feel like the house is absent, this is the third level of "Xu". When you forget yourself, this is the fourth level of "Wu".

During Qi Gong practice, to connect with the Zhen Qi between the heaven and earth, you need to forget yourself in tranquil stillness. This can be vividly reflected in a poem by  $Zhu Xi^4$  ( $\frac{1}{4}$   $\frac{1}{4}$  130-1200):

A small square pond an uncovered mirror Where sunlight and clouds linger and leave I asked how it stays so clear It said spring water keeps flowing in

Through Qi Gong practice, we can seek the truth about our life and universe. Through Qi Gong practice, we are willing to assume responsibility of our life. Zhou Yi (《周易》Book of Changes) states, "As Heaven keeps vigor through movement, a gentleman should unremittingly practice self-improvement. As the earth bears everything on it, a gentleman should generously cultivate to become tolerant."

4. A Song Dynasty Confucian scholar who became the leading figure of the School of Principle and the most influential rationalist Neo-Confucian in China

## The Differences between Ba Duan Jin practice and modern physical exercise

#### O Difference in Teaching Method

Student-tailored teaching methods are often adopted in traditional Qi Gong learning. Taking individual constitutions and lifestyles into consideration, every exercise can be tailored to fit the individual. For example, some students can begin with static meditation, others with active body movements, still others with "essence", and others with "qi" or "spirit". Due to differences in talent and knowledge regarding traditional Chinese culture, some can begin with the whole (Dao), others with a part, while others with inaction, whereas others begin with action, some with mental intention or with body movements.

Above all, teachers play the most important role in learning traditional Qi Gong exercises. the experience, guidance and instruction of teachers is an extremely significant factor.

#### O Difference in Key Principles and Movement Requirements

Under the framework of scientific theory, movements are unified and standardized. However, traditional health cultivation practice varies greatly between different schools. Movements may also vary among students even though they learn from the same teacher, since traditional Qi Gong practice focuses more on mental intention than specific movements. Due to differences in gender, age, and abilities in understanding underlying ideas, there are appropriate movements instead of fixed, standardized ones.

#### Difference in Theoretical System

Modern physical exercises, body building exercises and recuperative gymnastics are based on the human anatomy, physiology and biochemical indices. However, traditional health cultivation practice aims to achieve moderation and balance through exercise in the right place at the right time based on Dao (natural order)  $\rightarrow$  qi (transformation)  $\rightarrow$  physical world (changes), yin-yang changes, five-Zang organs (五脏), circulation of qi and blood along meridians.

Translator: Han Chouping (韩丑萍)

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## **Pregnancy and Gestation**

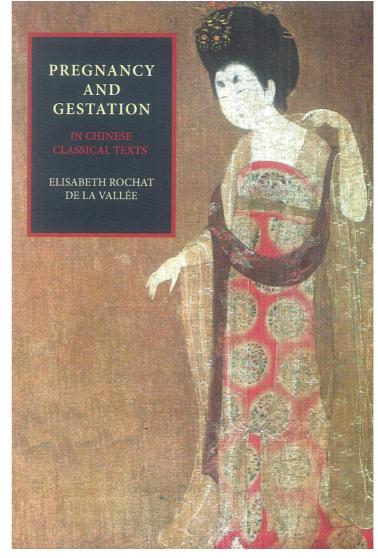
In this sister companion to *The Essential Woman*, Elisabeth Rochat de la Vallée explores the transformations which occur within the mother and the developing foetus during pregnancy.

The book begins with a study of Huang Di Nei Jing Su Wen (《黄帝内经·素问》 Plain Question of Yellow Emperor's Internal Classic) Chapter 1, which describes the unfolding of female fertility through seven year cycles. At the age of fourteen, "two times seven years", the menstrual cycle begins:

Pregnancy and Gestation by Elisabeth Rochat de la Vallée Published by Monkey Press, London,

This arrival of fertility is dependent on the proper functioning of both the Ren Mai and Chong Mai, not only in the general physiology of women, but specifically for menstruation, fertility and during pregnancy. Chong Mai and Ren Mai are responsible for both the quality and quantity of blood, and its regulation by menstruation. During pregnancy, the blood is required to nourish the foetus. Ren Mai assures the quality of blood, Chong Mai its distribution.

Elisabeth goes on to explore the pulse during pregnancy, beginning with the text of Su Wen (《素问》Plain Question) Chapter 40, which suggests that pregnancy is likely when there are external signs of change, but the pulses remain normal; the most obvious example being the cessation of menstruation, but with no sign of a pathological amenorrhoea detectable in the pulse. According to the 16<sup>th</sup> century commentator Ma Shi (马莳),



pregnancy is not detectable in the pulse until the third and fourth months. There follows a discussion of the text of Su Wen Chapter 7:

"When the Yin (  $\mbox{ }$  $\mbox{ }$  $\mbox{ }$  $\mbox{ }$ ) pulse beats strongly and the Yang (  $\mbox{ }$  $\mbox{ }$ 

This strength of the Yin pulse suggests a gathering of essences and blood which need to accumulate in the depths of the body. The Zhu Bing Yuan Hou Lun (《诸病源候论》Treatise on Pathogenesis and Manifestation of Disease), a compilation text from the 7<sup>th</sup> century CE, comments on Su Wen 7:

"The kidneys are called the gate of the uterus, the door of the child. The pulse of the kidneys is full in the proximal position of the pulses, and if on palpation



the pulse comes continually without interruption, this is a sign that the woman is pregnant."

Similarly Su Wen Chapter 18 describes a concentration within the Shao Yin (少例). This is interpreted in different ways by different commentators as representing either the pulse of the heart or the kidneys — or both. The fullness of the blood is said to be perceptible at Shen Men (神门 HT-7)—which has the feeling of a pea under the fingers.

After this general introduction, the book moves on to its main subject of inquiry – an in-depth study of the nine (or ten) months of pregnancy, through the texts of the Zhu Bing Yuan Hou Lun, the Ma Wang Dui (马王堆) manuscripts and the writings of the Tang Dynasty (唐代 618-907) physician Sun Simiao (孙思邈 581-682).

Elisabeth Rochat begins her inquiry with the study of an early non-medical text, chapter 39 of the Guan Zi (《管子》Kuan Tzu),:

"When essence and Qi (气) of male and female unite, water flows between them and assumes a form. At the third month the resulting foetus begins to suck. What does it suck? The answer is the five tastes. What do these five tastes produce? The answer is the five Zang (五 $\mathfrak{H}$ ). After the five Zang have been formed, they produce the five constituents of the body. After the five constituents of the body have been formed, the nine orifices are developed. By the fifth month the foetus is fully formed; in the tenth month it is born."

Elisabeth suggests that water here is a kind of intermediary between what has form and what has no form. The waters of the earth are also seen to represent the flow of blood in the body. At three months the foetus is able to nourish itself through the mother, the essences of the five tastes begin to build the five Zang. In this text the description of the five Zang and their dependent body parts does not follow the more consistent pattern to be developed within the medical texts (the spleen produces the diaphragm, the kidneys the brain, the lung the bones...) but it is interesting to see that this kind of correlative thinking is beginning to be established. There is a gradual development from the most interior towards the exterior, with the final formation of the nine orifices in order to establish communication with the outside world.

A similar kind of description is found in Chapter 10 of the Ling Shu(《灵枢》 The Magic Pivot ); after this description of the formation of the body, the text



continues with its detailed descriptions of the twelve meridians and the fifteen Luo ( 络):

"When a human being begins life, first the essences are perfectly formed. When the essences are perfectly formed the brain and marrow are produced. The bones make the framework, the Mai (脉 channel) give nourishment; the musculature makes what is hard, the flesh makes the partitions. The layers of the skin are firm and the body and head hair grow in length."

Another early example of this kind of embryological development within a non-medical text is found in Huai Nan Zi(《淮南子》 Huai Nan Tzu) Chapter 7, which explores the meaning of being human. The section begins with a quotation of Lao Zi(《老子》 Lao Tzu) chapter 42:

"One gives rise to two
two gives rise to three
three gives rise to the ten thousand beings
the ten thousand beings lean on the yin and embrace the yang
and their powerful blending of qi makes harmony."

The text continues with this description of the foetus during each of the nine months of gestation, and the tenth of birth.

#### Therefore it is said:

At one month it is a rich Gao (膏 paste)

At two months it is a Die ( 肤 bulge)

At three months it is a Tai (胎 fetus)

At four months it has Ji ( 肌 flesh)

At five months it has Jin (筋 sinews)

At six months it has Gu (骨 bones)

At seven months it is Cheng (成 complete)

At eight months it Dong (动 moves)

At nine months it Zao ( 躁 quickens)

And at ten months it is Sheng (生 born)

In using this part of Lao Zi chapter 42, an ancient and obviously well known passage on cosmic generation, as an introduction to this section of the text, the authors of the Huai Nan Zi are linking the process of human generation

with that of the cosmos. This seems to be a common theme in  $2^{nd}$  century BCE, when the vision of the universe and its generation was seen in terms of a kind of Gan Ying (& $\not$ E mutual resonance) –a theme explored in Chapter 6 of the Huai Nan Zi.

### Elisabeth explains this phenomenon:

"Any manifestation of life, any event, any circumstance, is the manifestation of a specific activity of Qi. From that many other things may ensue. The Huai Nan Zi suggests that if we observe the duration of the gestation period in mammals carefully we can learn something about their true nature. It is not by chance that a female human being gives birth after ten natural revolutions of the moon. It is not by chance that a female tiger gives birth after seven months. Numbers are not an abstraction; they are a reality of time and a quality of Qi which give an indication of the characteristic qualities of each species. So for many reasons ten is the number for human beings."

The development of the foetus as described within the Zhu Bing Yuan Hou Lun is explained in depth, and acts as the basis for the remainder of the book. Each month of pregnancy and gestation is explored and comparisons and contrasts are made with the texts of the Ma Wang Dui manuscripts and those of Simiao Sun. Each section includes the kind of diet and activity the woman should engage in each month to support the specific stage of the developmental process. The texts also describe the meridians which come into play at each stage of development, as we can see from this extract from the Zhu Bing Yuan Hou Lun on the first month of pregnancy:

"The first month of pregnancy is called the Shi Xing (始形 beginning of the form). The woman must nourish herself with Jing Shu (精熟 essences and cooked foods), and choose sour tastes. It is therefore appropriate to eat Da Mai (大麦 barley), but she must not eat acrid and pungent foods. This is called the gestation of the innate material. The Zu Jue Yin Jing (足厥阴经 Jue Yin of the Foot) supports it. The Jue Yin of the Foot is the circulation of the liver, the liver governs the blood. During the first month the blood flows with difficulty and no longer flows out (of the body), this is why the Jue Yin of the Foot supports it. The point on the Jue Yin of the Foot is found at the interval of the big toe, at the limit of the white flesh."

In the ninth month the text suggests that the woman "loosens her belt

and waits"! The text goes on to mention that the 'circulations' are now fully complete. And in the tenth month:

"...the five Zang are perfectly formed, the six Fu all communicate, the qi of heaven and earth are introduced into the Dan Tian ( 月田 cinnabar field), which means that the Guan Jie ( 关节 articulations and relays) and the Ren Shen ( 人神 human spirits) are all complete."

With the introduction of the Qi of heaven and earth to the cinnabar field the child is able to carry out the alchemical transformations of life independent of the mother. Food (Earth) and breath (heaven) are transformed into life energy under the direction of the spirits.

The final line of the text of the Zhu Bing Yuan Hou Lun reads:

"These are the rules for preventing accidents in pregnancy."

These teachings are rooted in the ancient texts of the Ma Wang Dui manuscripts, which originate in 3<sup>rd</sup> century BCE; they were elucidated in the 7<sup>th</sup> century in the Zhu Bing Yuan Hou Lun, and later by Simiao Sun. But the material is not only of historical value. When reading this book we are amazed at its pertinence and relevance for our lives and clinical practice today. It reminds us of the great importance within Chinese Medicine of detailed observation, of gathering information over the centuries and putting it to the test. Elisabeth Rochat has provided us with a wonderful guide to this extraordinary process of pregnancy and gestation.



ABOUT THE EDITOR OF THE BOOK

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## the Solar Term Regimen













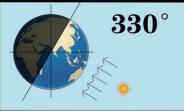


February 18th-20th

ainwat



315°





## **IGrade Seven**

Overcoats, woolen suits, and leather jackets







Getting up Early



## **Frequently Occurring Diseases**

**GOID**—Adjust the body to accommodate to the weather

Pneumonia—Defense the external pathogen

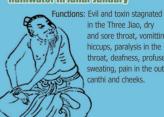
Arthritis—Avoid coldness and dampness





#### **Sitting Gong Exercise of**

**Rainwater in lunar January** 



in the Three Jiao, dry and sore throat, vomitting, hiccups, paralysis in the throat, deafness, profuse sweating, pain in the outer canthi and cheeks.



March 5th-6th



March 20th-21st

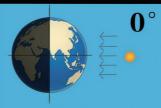


April 4th-6th



April 19th-20th





15°





## **IGrade Sixl**

Sweaters, windbreakers, woolen suits, and suits



## **IGrade Fivel**

Woolen sweaters, suits, waistcoats & jackets &trousers

## [Grade Four]

Knitted long-sleeved shirts &vests, trousers, and light suits











Airing the Room



Taking a Walk



Airing the Quilts



Going to Bed Late

## astric Ulcer—Eat more sweet but less sour.

and choose a light diet
——keep away from the infection source, live a
regular daily life, and keep exercising

**YPETTENSION**—Adjust the emotions, and learn to control anger

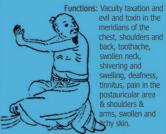
## **Health Tips**

- 1. Quit smoking, have less wine or coffee.
- 2. keep away from allergens and crowded public places.
- 3. Choose a light diet, and eat less greasy, fried, and spicy foo
- 4. Adjust the body to accommodate to the weather.
- 5. Sleep well, and keep exercising.
- 6. keep a placed mind.

#### Sitting Gong Exercise of Waking of Insects In Junar February



## Sitting Gong Exercise of Spring Equinox in lunar February



## Sitting Gong Exercise of Qingming in Junar March

Functions: Vacuity and evil stagnated in the waist, spine, intestine, stomach, heat in the preauticular area, aversion to coldness, deafness, sore throat, pain in the neck & nape & shoulders & arms, and the waist.

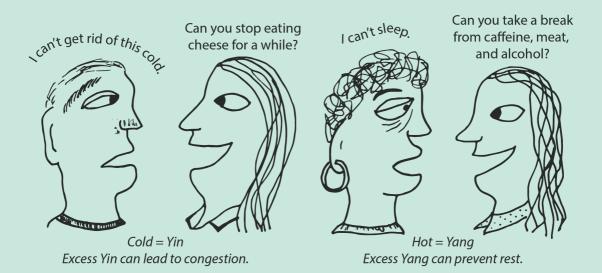
## SittingCongCerelseofCrainfaí /fillmarMarch

Functions: lump glomus and stablood, yellow eyes, n bleeding, swollen cheeks and chin, pair in the exterial lateral side of the elbows an arms, and heat in the palms.

## Hot and Cold in TCM

By Trina Lion (USA)

## **Find Your Yin** by Trina Lion, L.Ac.

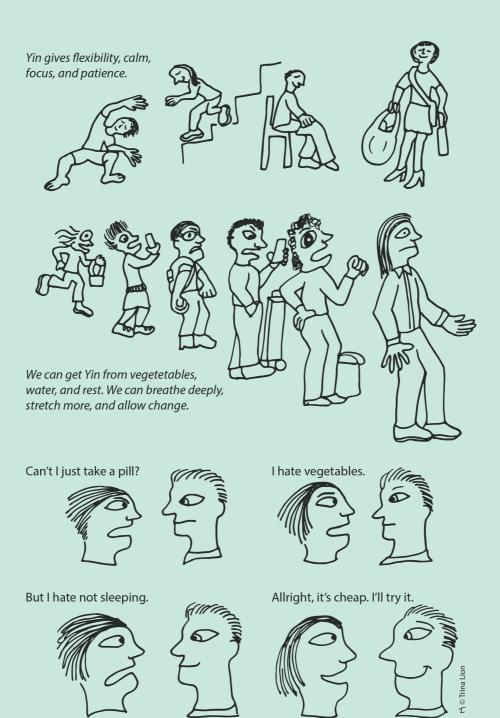




Sometimes, even though we know better, we try to fake it...



Yin: Rest, intuition, privacy, sadness & worry Yang: Alertness, logic, publicity, joy & anger Your lifestyle choices affect your symptoms.





#### **ABOUT THE AUTHOR**

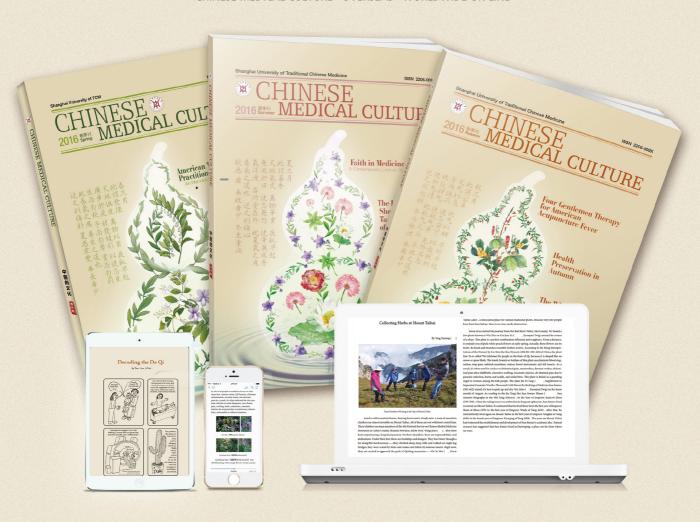
Trina Lion is a licensed acupuncturist at Mercy Medical Center in Baltimore, MD, USA. During her ten years in Shanghai, she was an acupuncture intern at ShuGuang Hospital; lectured on TCM at Shanghai Jiao Tong University, NYU in Shanghai, L'Oréal China, and NFL China; was a special guest on TCM for the International Channel Shanghai (ICS-TV) show "Culture Matters," and was the cover story for Shanghai Family magazine. Trina believes that our lifestyle is as important as any treatment; by finding balance in our diet, fitness, and schedule, we can support our own health and healing. trinaliontcm.com. E-mail: trinaliontcm@gmail.com

# 中医文化东方智慧

**Healthcare Wisdom In Traditional Chinese Medicine** 

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# ISO 18666: 2015 Traditional Chinese Medicine—General Requirements of Moxibustion Devices

Moxibustion is a traditional Chinese medicine therapy which consists of burning dried mugwort (moxa) on particular points on the body. It plays an important role in traditional medical systems in the world. Nowadays, there are more than 100 patents for moxibustion devices registered in China and about 70 types of moxibustion devices available in the market. But due to the absence of unique standard on moxibustion devices, it has the risk to cause the misuse and can't ensure the quality and safety of the devices.

On November 6, 2015, International Organization for Standardization (ISO) published ISO 18666:2015 Traditional Chinese Medicine-General Requirements of Moxibustion Devices. This international standard specifies the general requirements for configuration, materials, performance and safety requirements of moxibustion devices. It also specifies the minimum requirements for moxibustion materials used in moxibustion

devices. It is applicable across a wide range of moxibustion devices that uses moxa floss as the main combustion materials and can remain on or over the body throughout the moxibustion process. It is applicable to moxibusiton devices for both single and repeated usage.

The project was registered on March 4, 2013 and was led by Prof. Baixiao Zhao (赵百孝) from China and cooperated with Dr. RYU Yeonhee from Korea. Eight countries were committed to participation in this project and finally approved by ISO members in 2015 after 32 months hard working. This international standard will benefit for improving the quality and safety of moxibustion devices, promoting the use of moxibustion therapy around the world more scientifically, safely, and effectively. It will also enhance the international trade and the globalization of Traditional Chinese Medicine.

(ISO/TC 249 Secretariat)



中医文化 东方智慧 Healthcare Wisdom in Traditional Chinese Medicine





