Introduction to TCM

With a history of 2000 to 3000 years, Traditional Chinese Medicine (TCM) has formed a unique system to diagnose and cure illness. The TCM approach is fundamentally different from that of Western medicine. In TCM, the understanding of the human body is based on the holistic understanding of the universe as described in Daoism, and the treatment of illness is based primarily on the diagnosis and differentiation of syndromes.

The TCM approach treats zang--fu organs as the core of the human body. Tissue and organs are connected through a network of channels and blood vessels inside human body. Qi (or Chi) acts as some kind of carrier of information that is expressed externally through jingluo system. Pathologically, a dysfunction of the zang-fu organs may be reflected on the body surface through the network, and meanwhile, diseases of body surface tissues may also affect their related zang or fu organs. Affected zang or fu organs may also influence each other through internal connections. Traditional Chinese medicine treatment starts with the analysis of the entire system, then focuses on the correction of pathological changes through readjusting the functions of the zang-fu organs.

Evaluation of a syndrome not only includes the cause, mechanism, location, and nature of the disease, but also the confrontation between the pathogenic factor and body resistance. Treatment is not based only on the symptoms, but differentiation of syndromes. Therefore, those with an identical disease may be treated in different ways, and on the other hand, different diseases may result in the same syndrome and are treated in similar ways.

The clinical diagnosis and treatment in Traditional Chinese Medicine are mainly based on the yin & yang and five elements theories. These theories apply the phenomena and laws of nature to the study of the physiological activities and pathological changes of the human body and its interrelationships. The typical TCM therapies include acupuncture, herbal medicine, and tai chi and qigong exercises. With acupuncture, treatment is accomplished by stimulating certain areas of the external body. Herbal medicine acts on zang-fu organs internally, while qigong tries to restore the orderly information flow inside the network through the regulation of Qi. These therapies appear very different in approach yet they all share the same underlying sets of assumptions and insights in the nature of the human body and its place in the universe. Some scientists describe the treatment of diseases through herbal medications, acupuncture, and qigong as an "information therapy".
The Theory of Yin-Yang

The philosophical origins of Chinese medicine have grown out of the tenets of Daoism (also known as Taoism). Daoism bases much of its thinking on observing the natural world and manner in which it operates, so it is no surprise to find that the Chinese medical system draws extensively on natural metaphors. In Chinese medicine, the metaphoric views of the human body based on observations of nature are fully articulated in the theory of Yin-Yan and the system of Five Elements.

The direct meanings of yin and yang in Chinese are bright and dark sides of an object. Chinese philosophy uses yin and yang to represent a wider range of opposite properties in the universe: cold and hot, slow and fast, still and moving, masculine and feminine, lower and upper, etc. In general, anything that is moving, ascending, bright, progressing, hyperactive, including functional disease of the body, pertains to yang. The characteristics of stillness, descending, darkness, degeneration, hypo-activity, including organic disease, pertain to yin.

The function of yin and yang is guided by the law of unity of the opposites. In other words, yin and yang are in conflict but at the same time mutually dependent. The nature of yin and yang is relative, with neither being able to exist in isolation. Without "cold" there would be no "hot"; without "moving" there would be no "still"; without "dark", there would be no "light". The most illustrative example of yin-yang interdependence is the interrelationship between substance and function. Only with ample substance can the human body function in a healthy way; and only when the functional processes are in good condition, can the essential substances be appropriately refreshed.

The opposites in all objects and phenomena are in constant motion and change: The gain, growth and advance of the one mean the loss, decline and retreat of the other. For example, day is yang and night is yin, but morning is understood as being yang within yang, afternoon is yin within yang, evening before midnight is yin within yin and the time after midnight is yang within yin. The seed (Yin) grows into the plan (Yang), which itself dies back to the earth (Yin). This takes place within the changes of the seasons. Winter (Yin) transforms through the Spring into Summer (Yang), which in turn transforms through Autumn into Winter again. Because natural phenomena are balanced in the constant flux of alternating yin and yang, the change and transformation of yin-yang has been taken as a universal law.

Traditional Chinese Medicine holds that human life is a physiological process in constant motion and change. Under normal conditions, the waxing and waning of yin and yang are kept within certain bounds, reflecting a dynamic equilibrium of the physiological processes. When the balance is broken, disease occurs. Typical cases of disease-related imbalance include excess of yin, excess of yang, deficiency of yin, and deficiency of yang.
The Theory of Five Elements

Similar to the theory of yin and yang, the theory of five elements, wood, fire, earth, metal and water was an ancient philosophical concept used to explain the composition and phenomena of the physical universe. In Traditional Chinese Medicine the theory of five elements is used to interpret the relationship between the physiology and pathology of the human body and the natural environment. According to the theory, the five elements are in constant move and change, and the interdependence and mutual restraint of the five elements explain the complex connection between material objects as well as the unity between the human body and the natural world.

In traditional Chinese medicine, the visceral organs, as well as other organs and tissues, have similar properties to the five elements; they interact physiologically and pathologically as the five elements do. Through similarity comparison, different phenomena are attributed to the categories of the five elements. Based on the characteristics, forms, and functions of different phenomena, the complex links between physiology and pathology as well as the interconnection between the human body and the natural world are explained.

The five elements emerged from an observation of the various groups of dynamic processes, functions and characteristics observed in the natural world. The aspects involved in each of the five elements are follows:

Fire: draught, heat, flaring, ascendance, movement, etc.

Wood: germination, extension, softness, harmony, flexibility, etc.

Metal: strength, firmness, killing, cutting, cleaning up, etc.

Earth: growing, changing, nourishing, producing, etc.

Water: moisture, cold, descending, flowing, etc.
The following table shows the categorization of phenomena according to the five elements:

<table>
<thead>
<tr>
<th></th>
<th>Wood</th>
<th>Fire</th>
<th>Earth</th>
<th>Metal</th>
<th>Water</th>
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</thead>
<tbody>
<tr>
<td>Flavors</td>
<td>sour</td>
<td>bitter</td>
<td>sweet</td>
<td>pungent</td>
<td>salty</td>
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<td>Zang</td>
<td>liver</td>
<td>heart</td>
<td>spleen</td>
<td>lung</td>
<td>kidney</td>
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<tr>
<td>Fu</td>
<td>gall bladder</td>
<td>s. intestine</td>
<td>stomach</td>
<td>l. intestine</td>
<td>urinary</td>
</tr>
<tr>
<td>Senses</td>
<td>eye</td>
<td>tongue</td>
<td>mouth</td>
<td>nose</td>
<td>ear</td>
</tr>
<tr>
<td>Tissue</td>
<td>tendon</td>
<td>vessel</td>
<td>muscle</td>
<td>hair/skin</td>
<td>bone</td>
</tr>
<tr>
<td>Directions</td>
<td>east</td>
<td>south</td>
<td>center</td>
<td>west</td>
<td>north</td>
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<tr>
<td>Changes</td>
<td>germinate</td>
<td>grow</td>
<td>transform</td>
<td>reap</td>
<td>store</td>
</tr>
<tr>
<td>Color</td>
<td>green</td>
<td>red</td>
<td>yellow</td>
<td>white</td>
<td>black</td>
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</tbody>
</table>

Between the five elements there exists close relationships that can be classified as mutual promoting and mutual restraining under physiological conditions, and mutual encroaching and mutual violating under pathological conditions. By mutually promoting and restraining, functions of the various systems are coordinated and homeostasis maintained. By encroaching and violating, pathological changes can be explained and complications predicted.

The order of mutual promoting among the five elements is that wood promotes fire, fire promotes earth, earth promotes metal, metal promotes water, and water promotes wood. In this way each of the five elements has this type of mutual promoting relationship with the other, thus promoting is circular and endless. According to the order of mutual restraining, however, wood restrains earth, metal restrains wood, etc. Each of the five elements also shares this restraining relationship with the other. Mutual promoting and mutual restraining are two aspects that cannot be separated. If there is no promoting, then there is no birth and growth. If there is no restraining, then there is no change and development for maintaining normal harmonious relations. Thus the movement and change of all things exists through their mutual promoting and restraining relationships. These relationships are the basis of the circulation of natural elements.

Encroaching and violating are the pathological conditions of the normal mutual promoting and restraining relationships. Encroaching denotes that the restraining of one of the five elements to another surpasses the normal level, while violating means that one of the five elements restrains the other opposite to the normal mutual restraining order.
Acupuncture

The practice of acupuncture and moxibustion is based on the theory of meridians. According to this theory, qi or chi (vital energy) and blood circulate in the body through a system of channels called meridians, connecting internal organs with external organs or tissues. By stimulating certain points of the body surface reached by meridians through needling or moxibustion, the flow of qi and blood can be regulated and diseases are thus treated. These stimulation points are called acupuncture points, or acupoints.

Acupoints reside along more than a dozen of major meridians. There are 12 pairs of regular meridians that are systematically distributed over both sides of the body, and two major extra meridians running along the midlines of the abdomen and back. Along these meridians more than three hundred acupoints are identified, each having its own therapeutic action. For example, the point Hegu (LI 4), located between the first and second metacarpal bones, can reduce pain in the head and mouth. The point Shenmen (HT 7), located on the medial end of the transverse crease of the wrist, can induce tranquilization.

In acupuncture clinics, the practitioner first selects appropriate acupoints along different meridians based on identified health problems. Then very fine and thin needles are inserted into these acupoints. The needles are made of stainless steel and vary in length from half an inch to 3 inches. The choice of needle is usually determined by the location of the acupoint and the effects being sought. If the point is correctly located and the required depth reached, the patient will usually experience a feeling of soreness, heaviness, numbness and distention. The manipulator will simultaneously feel that the needle is tightened.

The needles are usually left in situ for 15-30 minutes. During this time the needles may be manipulated to achieve the effect of tonifying the qi. Needle manipulations are generally involved with lifting, thrusting, twisting and rotating, according to treatment specifications for the health problem. Needling may also be activated by electrical stimulation, a procedure usually called electro-acupuncture, in which manipulations are attained through varying frequencies and voltages.

Treatment protocols, frequency and duration are a matter of professional judgment of the practitioner, in consultation with the patient. A common course of treatment may initially involve between ten and fifteen treatments spaced at approximately weekly intervals, and spread out to monthly later in a program.

A professional practitioner will always warn the patient of the possibility of exacerbation at the start of a course of treatment. The patients may find that in the short term after treatment, the
symptoms may in fact get worse before an improvement sets in. This is a quite common feature of acupuncture treatment.

Patients should inquire about types of needles used prior to treatment. Most practitioners now use pre-packed and sterilized disposable needles that are only once. If re-useable needles are being used patients should ask to see the sterilization procedures that the practitioner adopts.

The effectiveness of an acupuncture treatment is strongly dependent upon an accurate Chinese medical diagnosis. The needling skills and techniques of the practitioner will also influence greatly the effectiveness of the outcome. Acupuncture can be remarkably effective in many conditions, but in the West, patients often use acupuncture as the last option for their long-term chronic problems. Therefore, we sometimes see the treatment as slow and in some cases of marginal benefit. With the gradual establishment of acupuncture as the treatment of choice for many people, the effectiveness of the approach with acute as well as with more chronic conditions is being recognized.

Acupuncture is often conducted in combination with Moxibustion. Moxibustion is the process where moxa sticks, made of dry moxa leaves (Artemisia vulgaris) is ignited and held about an inch above the patient’s skin over specific acupuncture points. Moxa is available in a loose form that can be used for making moxa cones. Alternatively, moxa is packed and rolled in a long stick like a large cigar, about 15-20 cm long and about 1-2 cm in diameter. The purpose of this process is to warm the qi and blood in the channels. Moxibustion is most commonly used when there is the requirement to expel cold and damp or to tonify the qi and blood. A single treatment of moxibustion usually lasts 10-15 minutes. Needle-warming moxibustion combines needling and moxibustion by attaching a moxa stub (about 2 cm long) to an inserted needle. This method enhances the effects of needling and is often used to treat chronic rheumatism and rheumatoid arthritis.
Herbal Therapy

Together with acupuncture, herbal medicine is a major pillar of Chinese medicine. The Chinese pharmacopoeia lists over 6,000 different medicinal substances in terms of their properties and the disharmonies that they were helpful with. There are about 600 different herbs in common use today.

Herbs are classified in two major dimensions. The first dimension refers to the temperature characteristics of the herb, namely hot (re), warm (wen), cold (han), neutral (ping), and aromatic. The second dimension refers to the taste property of the herb, namely sour (suan), bitter (ku), sweet (gan), spicy (xin), and salty (xian).

The various combinations of temperature and taste give the herb its properties that can influence the yin and yang energy patterns of the body. For example, sour, bitter and salty tastes are related to yin, whereas acrid, sweet are attributed to yang. There are herbs that will warm, herbs that will cool, herbs that will tonify, herbs that will move stagnation and so on. It is also important to understand that herbs do not possess one quality. They are most always a combination of properties and temperatures and may reach one to as many as twelve organ systems. Warm herbs can be used with individuals suffering from Heat disorders, but the herb with warm energy must be mixed with herbs with Cool/Cold energy so that the overall balance of the mixture is on the Cool side. Likewise, Cool herbs can be used with people with Cold disorders as long as the overall balance of the mixture is warm. Neutral herbs are those that are neither hot nor cold, so they are often considered gentle herbs. There are not too many neutral herbs in the pharmacopoeia.

As for the tastes, sour constricts or consolidates. Herbs of sour taste are often indicated for use in perspiration due to deficiency, protracted cough, chronic diarrhea, seminal and urinary incontinences, leakage or spermatic fluid, and other conditions related to hypo-metabolism (under-performance). In traditional Chinese medicine, they are seen as deficient or cold patterns.

Bitter possesses the function of clearing heat, purging the bowels, lowering the qi, improving appetite and drying dampness or wetness. Bitter herbs are commonly used in fire-heat patterns, such as the acute stage of infectious disease, and the patterns of damp-heat or damp-cold, such as in arthritis or leucorrhoea.

Sweet has the function of toning, improving, moistening and harmonizing many of the important systems of the body, including the digestive, respiratory, immune and endocrine systems. Sweet tastes also relieve urgency and inhibit pain due to the constrictive action of muscles. They are
commonly used for treating deficiency patterns such as dry cough, and dysfunction of the gastro-intestinal tract such as spleen and stomach disharmony.

Spicy disperses, circulates qi and vitalizes blood. This group of herbs can stimulate the sweat glands to perspire, circulate qi, activate the function of meridians and organs and vitalize blood to promote blood circulation. Spicy herbs have the overall effect of activating and enhancing metabolism. Spicy herbs are commonly used in the treatment of external patterns (catching a cold), when the function of the meridian and organs is weakened and circulation of blood has been impeded. In traditional Chinese medical terminology, this is the stage of qi stagnation and blood cloudiness.

Salty herbs have the function of softening firm masses and fibrous adhesions. The salty taste purges and opens the bowels. Salty agents are often indicated in sores, inflammatory masses, cysts, and connective tissue proliferation.

**Herbal Formulas**

The unique characteristic of Chinese herbal medicine is the degree to which formulation is done. In other forms of herbal medicine, especially western herbal medicine, herbs are often delivered singly or combined into very small formulas of herbs with the same function. In contrast, Chinese herbalists rarely prescribe a single herb to treat a condition. They create formulas instead. A formula usually contains at least four to twenty herbs.

Herbal formulas can be delivered in all manners of preparation. Pre-made formulas are available as pills, tablets, capsules, powders, alcohol-extracts, water-extracts, etc. Most of these formulas are very convenient as they do not necessitate patient preparation and are easily taken. However, the concentration of the herbs in these products is low and don't allow the practitioner to adjust the contents or dosages. These products are usually not as potent as the traditional preparation of decoction.

Decoction is the traditional method of preparing herbal medicine. A decoction is a concentrated form of tea. The practitioner weighs out a day's dosage of each herb and combines them in a bag. A patient is given a bag for each day the herbal formula will be taken. The herbs are then boiled in water by the patient at home. The boiling process takes from 30-60 minutes and the resulting decoction will be consumed several times during the day.

Another modern way of delivering herbs is through granulated herbs, which are highly concentrated powdered extracts. These powders are made by first preparing the herbs as a traditional decoction. The decoction is then dehydrated to leave a powder residue. Practitioners can then mix these powders together for each patient into a custom formula. The powder is then placed in hot water to recreate the decoction. This eliminates the need to prepare the herbs at home, but still retains much of the original decoction's potency.
Qigong and Tai Chi Therapeutic Practices

The concept of qi

Like the theory of yin and yang, qi was derived from ancient Chinese philosophy, which believes everything is related. In traditional Chinese medicine, qi is treated as the fundamental substance of the human body, and its movements explain various life processes. Qi in its physiological sense constitutes, replenishes and nourishes the human body. Qi is often called vital energy because it is believed to be the motive energy derived from the essential substance for various vital processes.

Qi is often classified according to what it acts on. For example, the heart-qi refers to the force with which the heart works and the blood circulates, so it regulates the cardiac function; the stomach-qi refers to the force with which the stomach functions, so it regulates the gastric function. The qi that maintains normal functioning for resistance against disease is called zheng-qi, which means genuine energy or body resistance. The qi that warms the body and maintains normal body temperature is called yang-qi, which is similar to the heat energy. Metabolism of materials and energy also depends on the action of qi, including metabolism of blood, fluids and other essential materials.

Qi is formed from the inhaled oxygen, the dietary nutrients, and the inborn primordial qi stored in the kidney, which may be genetically related. Qi circulates along meridians and collaterals. A healthy body requires normal circulations of qi. Health problems occur if the flow of qi is stagnated. The circulation of qi is also closely related to mental conditions. Emotional instability may cause the stagnation of qi. For example, anger may lead to dizziness, headache, distress in the hypochondriac regions, or distention in the stomach with impairment of appetite. On the other hand, the exercise of mind can help the circulation of qi, which is the purpose qigong exercise.

General methods of qigong

Qigong is an exercise to regulate the mind and breathing to control or promote the flow of qi. Since qi plays such an important role in the vital processes of the human body, the regulation of qi flow is therefore being used to preserve health and treat disease. Medical qigong, the qi exercise practiced to prevent and treat disease, is different from general physical exercise. While physical exercise is aimed at building up health or restoring physical functioning by enhancing strength, medical qigong is focused on the mobilization of functional potentialities by regulating the mind. In other words, physical exercise is purely somatic, while qigong exercise is generally psycho-somatic. Another important difference between physical exercise and qigong is that physical exercise expends energy by tensing the muscles and accelerating the heart beat and respirations, while qigong works to ease, smooth and regulate breathing to store up or accumulate energy in the body.
Medical qigong can be divided into two main categories: internal qigong, which is practiced by the patients themselves to preserve and promote their own health, and external qigong, which is performed by a qigong master on a person with health problems. Practicing internal qigong requires regulation of the mind, body and respiration. There are many kinds of internal qigong, some with motion and others without. Qigong can be practiced while sitting still, standing upright, or lying on the back or side. The basic requirement is to stay comfortable and relaxed.