

CERTIFIED CHINESE HERBOLOGY ONLINE COURSE - SESSION 3

- Raw Materials, Preparation, Toxicity, Efficacy, Ecological Impact
- Chinese Patent Medicine, How are Chinese Herbs prescribed?
- Age-to-Dose & Weight-to-Dose Dosing Guidelines
- Correct and Incorrect Ways of Choosing Herbs: Benefits and Pitfalls in Choosing and Using Herbal Products

Raw Materials

Ginger is consumed in China as food and as medicine. There are roughly 13,000 medicinals used in China and over 100,000 medicinal recipes recorded in the ancient literature. Plant elements and extracts are by far the most common elements used. In the classic *Handbook of Traditional Drugs* from 1941, 517 drugs were listed - out of these, only 45 were animal parts, and 30 were minerals. For many plants used as medicinals, detailed instructions have been handed down not only regarding the locations and areas where they grow best, but also regarding the best timing of planting and harvesting them.



Some animal parts used as medicinals can be considered rather strange such as cows' gallstones. Some can include the parts of endangered species, including tiger penis and rhinoceros horn. The black market in rhinoceros horn decimated the world's rhino population by more than 90 percent over the past 40 years. Concerns have also arisen over the use of turtle plastron and seahorses. In general, Chinese traditional medicine emphasizes the penis of animals as therapeutic. Snake oil, which is used traditionally for joint pain as a liniment, is the most widely known Chinese medicine in the west, due to extensive marketing in the west in the late 1800s and early 1900s, and wild claims of its efficacy to treat many maladies; however, there is no clinical evidence that it is effective.

Traditional Chinese Medicine also includes some human parts: the classic *Materia medica* (Bencao Gangmu) describes the use of 35 human body parts and excreta in medicines, including bones, fingernail, hairs, dandruff, earwax, impurities on the teeth, feces, urine, sweat, organs, but most are no longer in use.

Preparation

This is a picture of a ready-to-drink macerated medicinal liquor with goji berry, tokay gecko, and ginseng, for sale at a traditional medicine market in China.



Each herbal medicine prescription is a cocktail of many substances, tailored to the individual patient. One batch of medicinals is typically decocted twice over the course of one hour.

The practitioner usually designs a remedy using one or two main ingredients that target the illness. Then other ingredients are added to adjust the formula to the patient's individual disease pattern. Ingredients are also added in order to cancel out toxicity or side-effects of the main ingredients; on top of that, some medicinals require the use of other substances as catalysts. Overall, the balance and interaction of all the ingredients are considered more important than the effect of a single ingredient.

Other than in decoctions, Traditional Chinese drugs can also be given as pills, tablets, capsules, or tinctures. Another way of application is via a plaster (e.g., in treating muscular pain).

Toxicity

From the earliest records regarding the use of medicinals to today, the toxicity of certain substances has been described in all Chinese materiae medicae. The toxicity in some cases could be confirmed by modern research (i.e., in scorpion); in some cases it couldn't (i.e., in curculigo).

Substances known to be potentially dangerous include aconite, secretions from the Asiatic toad, powdered centipede, the Chinese beetle (*Mylabris phalerata*, Ban mao), and certain fungi. Further, ingredients may have different names in different locales or in historical texts, and different preparations may have similar names for the same reason, which can create inconsistencies and confusion in the creation of medicinals, with the possible danger of poisoning.

Efficacy

Regarding Traditional Chinese herbal therapy, only few trials of adequate methodology exist and its effectiveness therefore remains poorly documented. For example, a 2007 Cochrane review found promising evidence for the use of Chinese herbal medicine in relieving painful menstruation, compared to conventional medicine such as NSAIDs and the oral contraceptive pill, but the findings have to be interpreted with caution due to the generally low methodological quality of the included studies (as, amongst others, data for placebo control could not be obtained).

Ecological impacts

Dried seahorses like these are extensively used in traditional medicine in China and elsewhere



Animal products are used in certain Chinese preparations, which may disturb conservationists, vegans and vegetarians. If informed of such restrictions, practitioners can often use alternative substances.

The practice of using endangered species is controversial within TCM. Modern Materia Medicas such as Bensky, Clavey and Stoger's comprehensive Chinese herbal text discuss substances derived from endangered species in an appendix, emphasizing alternatives.

Poachers hunt restricted animals to supply the black market for such products.

The animal rights movement claims that traditional Chinese medicinal solutions still use bear bile. In 1988, the Chinese Ministry of Health started controlling bile production, which previously used bears killed before winter. Now bears are fitted with a sort of permanent catheter, which was more profitable than killing the bears. The treatment itself and especially the extraction of the bile is very painful, and damages their stomach and intestines, often resulting in their eventual death. Increased international attention has mostly stopped the use of bile outside of China; gallbladders from butchered cattle are recommended as a substitute for this ingredient.

Medicinal use is Impacting Seahorse Populations

Ecological effects are greater than just on the species used in TCM. The worldwide shark population has been devastated to a small fraction of its original population by a growing demand for shark fin soup. Sharks fins are cut off and the live shark which is then dumped back in the ocean to sink and slowly die. Once considered only for rare occasions, with a growing Asian middle class, there is an accompanying demand for shark fin.



Sharks take many years to mature to give birth. The problem does not only affect sharks. Since sharks are the top predator in the food chain, the impact on shark populations threatens to throw the entire marine ecosystem out of balance, with an unpredictable outcome.

Chinese Patent Medicine

Chinese patent medicine is a kind of traditional Chinese medicine. They are standardized herbal formulas. From ancient times, pills were formed by combining several herbs and other ingredients, which were dried and ground into a powder. They were then mixed with a binder and formed into pills by hand. The binder was traditionally honey. Modern tea pills however, are extracted in stainless steel extractors to create either a water decoction or water-alcohol decoction, depending on the herbs used. They are extracted at a low temperature (below 100 degrees Celsius) to preserve essential ingredients. The extracted liquid is then further condensed and some raw herb powder from one of the herbal ingredients is mixed in to form an herbal dough. This dough is then machine cut into tiny pieces, a small amount of excipients are added for a smooth and consistent exterior, and they are spun into pills. Tea pills are characteristically little round black pills. Chinese patent medicines are easy and convenient. They are not easy to customize on a patient-by-patient basis, however. They are often used when a patient's condition is not severe and the medicine can be taken as a long-term treatment.



These medicines are not patented in the traditional sense of the word. No one has exclusive rights to the formula. Instead, "patent" refers to the standardization of the formula. In China, all Chinese patent medicines of the same name will have the same proportions of ingredients, and manufactured in accordance with the PRC Pharmacopoeia, which is mandated by law. However, in western countries there may be variations in the proportions of ingredients in patent medicines of the same name, and even different ingredients altogether. Several producers of Chinese herbal medicines are pursuing FDA clinical trials to market their products as drugs in U.S. and European markets.

Age-to-Dose & Weight-to-Dose Dosing Guidelines



The standard dose of herbal extracts for an average adult is 6 grams per day. However, not everybody is an "average adult." The fundamental concept in dosing is to realize that one size does not fit all. Every person is unique and must be treated individual.

The principle behind the Age-To-Dose Dosing Guideline is based on the maturity of the organs to metabolize, utilize and eliminate herbs. This chart is very detailed and is especially useful for infants and younger children. The recommendations are taken from "Herbology" published by Nanjing College of

Traditional Chinese Medicine in 1986.

The principle behind Weight-To-Dose Dosing Guideline is based on the effective concentration of the herb after it is distributed to different parts of the body. This dosing strategy is especially useful for patients whose body weight falls outside of the normal range which may require an increase or a decrease in dose. All calculations are based on Clark's Rule in "Pharmaceutical Calculations" written by Mitchell Stoklosa and Howard Ansel and published by Lea and Febiger in Philadelphia.

These two charts provide every herbal practitioner with a handy reference for dosing for those patients who fall outside the definition of an "average adult." It is still important to keep in mind, however that these charts serve only as a guideline - not an absolute rule. One must always remember to treat each patient as an individual, not as a chart!

AGE-TO-DOSE DOSING GUIDELINE

Age	Recommended Daily Dosage	Fine Granules	Capsules (0.5 gm)	Tablets (0.3 gm)
0-1 month old	1/18 - 1/14 of adult dose*	0.3 - 0.4 grams		
1-6 months old	1/14 - 1/7 of adult dose	0.4 - 0.9 grams		
6-12 months old	1/7 - 1/5 of adult dose	0.9 - 1.2 grams		
1-2 years old	1/7 - 1/5 of adult dose	1.2 - 1.5 grams		
2-4 years old	1/4 - 1/3 of adult dose	1.5 - 2.0 grams		
4-6 years old	1/3 - 2/5 of adult dose	2.0 - 2.4 grams		
6-9 years old	2/5 - 1/2 of adult dose	2.4 - 3.0 grams	5 - 6 capsules**	8 - 10 tablets**
9-14 years old	1/2 - 2/3 of adult dose	3.0 - 4.0 grams	6 - 8 capsules	10 - 13 tablets
14-18 years old	2/3 - full adult dose	4.0 - 6.0 grams	8 - 12 capsules	13 - 20 tablets
18-60 years old	full adult dose	6.0 grams	8 - 12 capsules	13 - 20 tablets
60+ years old	3/4 of adult dose or less	4.0 - 6.0 grams	9 - 12 capsules	15 - 20 tablets

WEIGHT-TO-DOSE DOSING GUIDELINE

Weight	Recommended Daily Dosage	Fine Granules	Capsules (0.5 gm)	Tablets (0.3 gm)
30-40 lbs	20% - 27% of adult dose*	1.2 - 1.6 grams		
40-50 lbs	27% - 33% of adult dose	1.6 - 1.9 grams		
50-60 lbs	33% - 40% of adult dose	1.9 - 2.4 grams		
60-70 lbs	40% - 47% of adult dose	2.4 - 2.8 grams		
70-80 lbs	47% - 53% of adult dose	2.8 - 3.2 grams	5 - 6 capsules**	8 - 10 tablets**
80-100 lbs	53% - 67% of adult dose	3.2 - 4.0 grams	6 - 8 capsules	11 - 13 tablets
100-120 lbs	67% - 80% of adult dose	4.0 - 4.8 grams	8 - 10 capsules	13 - 16 tablets
120-150 lbs	80% - 100% of adult dose	4.8 - 6.0 grams	10 - 12 capsules	16 - 20 tablets
150-200 lbs	100% - 133% of adult dose	6.0 - 7.9 grams	12 - 16 capsules	20 - 26 tablets
200-250 lbs	133% - 167% of adult dose	7.9 - 10.0 grams	16 - 20 capsules	26 - 33 tablets
250-300 lbs	167% - 200% of adult dose	10.0 - 12.0 grams	20 - 24 capsules	33 - 40 tablets

* Standard Adult Dosage is 6 grams of herbal extract per day. ** Capsules or tablets should be used with caution in young children due to possible difficulty in swallowing. Each capsule weighs 0.5 grams and each table weighs 0.3 grams.

Correct and Incorrect Ways of Choosing Herbs (Benefits and Pitfalls in Choosing and Using Herbal Products)

How traditional Chinese (TCM) herbalists achieve clinical effectiveness without side-effects by choosing herbs and herbal formulas for whole-body symptom-sign patterns rather than for individual symptoms.

What should you do when an Herbal Product Doesn't Act as Desired?

Have you ever used herbs, vitamins, or other natural products because of an interest in improving your health? If so, you may have noticed one of several results:

1. You improved your health with no side-effects.
2. No noticeable changes occurred.
3. Some symptoms improved, but others were unchanged.
4. Some symptoms improved, others were aggravated.
5. You felt noticeably worse from the experience.

This should not be surprising, since this list covers most of the possible outcomes. Yet the majority of books, courses, and many professional training programs in natural health care fail to provide specific guidance when a supplement or herb does not act as desired. If you are determined to find a solution, one option is to simply try the next item on the list of herbs or products reputed to be helpful.

There is another option. It is a system that has been refined over thousands of years by practitioners of traditional Chinese health care. It can save valuable time and hundreds to thousands of dollars by avoiding unnecessary and inappropriate health products. By using specific criteria for assessing health, it can zero in on only those herbs and methods which are most likely to help.

Many magazines of popular herbalism gain advertising dollars by helping to promote maximum consumption of herbal products, which tends to encourage excessive and exaggerated claims for the benefits of specific herbs or products. Educating the public about how to use fewer herbs, with greater results and effectiveness, tends not to be in the interest of short-term profits.

How does Chinese Herbal Practice Differ from Other Types of Clinical Herbology?

To the casual observer, an herbalist skilled in the methods of clinical Chinese herbology appears to operate as any other herbalist around the world. He or she assesses an individual's problems and chooses appropriate herbs and herbal formulas; textbooks can be consulted which list herbs and formulas for each type of health problem. A pile of various dried herbs may be bagged and given to the individual to cook up at home and drink as a tea, or commercial preparations of freeze-dried powders, pills or liquid extracts may be given instead.

A certain mystique has accompanied the introduction of Chinese herbs into the West, and many people have assumed that there is something especially potent about "Chinese" herbs. Chinese herb shops have intensified this mystique by prominently displaying dried sea horses, woody funguses, ginkgo, and other plant and animal products foreign to America and Europe. However, plant products such as mint, dandelion, rhubarb root, cattail pollen, fennel, and licorice root are included in the Chinese pharmacopeia, yet each one of these plants is also common to North America and Europe. Black pepper, turmeric, cinnamon, and ginger are common table spices in the West, yet these herbs originally were introduced from Asia; they too are included in the Chinese pharmacopeia.

Useful medicinal plant products can be found throughout the world, and the Chinese were probably the first to actively seek out plant products from other countries. At various phases in China's history, myrrh and frankincense were imported from the Middle East, cinchona bark (useful for malaria) was imported from South America, and, recently, American ginseng (Rx Panacis quinquefolium) has been imported from Wisconsin.



If there is nothing particularly unique about "Chinese" herbs, what is unique about Chinese herbology? If we look more closely at the routine of a skilled herbalist, we will observe several curious techniques that are considered essential by all properly trained TCM herbalists. While taking an individual's pulse the herbalist seems to take an inordinate amount of time; palpation of the radial pulse is performed not just at one position, but at several positions and

depths at both wrists. In addition to a simple count of the pulse rate, other pulse qualities seem to be of interest. The TCM herbalist also carefully inspects the tongue, preferably using a bright, full-spectrum lamp, noting the color, thickness and distribution of tongue coating, and color and texture of tongue tissue. She will ask about the individual's complaints and symptoms, especially those which reveal the individual's metabolic and neuroendocrine characteristics, such as thirst, appetite, perception of body heat or coolness, general energy level, urination and bowels, moods and mental states.



After pondering and evaluating all of this information, TCM herbalists develop herbal formulas that are tailored to each individual's total body characteristics, as well as the chief complaint and primary symptoms. Note that they do not choose herbs or herbal formulas based solely upon the chief complaint, nor do they choose formulas based on the medical condition that a physician may have diagnosed. Why? The answer to this question will reveal the crucial philosophical and scientific differences between the Chinese herbal sciences and Western medicine.

The Dangers of Using Single Symptoms or Medical Disease Labels to Choose Herbs

To correctly apply the methods of traditional Chinese herbology requires that people rethink basic assumptions about how one chooses herbs. To understand why a new perspective is necessary, let us examine the consequences of asking the question: What herbs (foods, etc.) would be appropriate for specific conditions such as pneumonia, influenza, or insomnia?

First, many people assume that these terms are accurate and complete descriptions of specific health problems, adequate for the purpose of choosing appropriate herbs. They are not. A person with pneumonia has a condition of viral or bacterial infection in his lungs; this term says nothing about the condition of the person's other internal organs or behavior patterns. Likewise, influenza refers to the presence of one of a number of influenza viruses which have proliferated within a person's body. It does not specify how the person's body is responding to the infection. Different individuals may respond in different ways to the same infectious organism. Insomnia refers only to a person's inability to sleep soundly; temperature sensations, vitality levels, appetite, bowel patterns, and thirst may vary considerably among a group of people suffering from insomnia.

The human body is a complex creation, with all of its component parts functioning together, each organ having direct and indirect effects on every other part of the body. In practice, it is seldom possible to ingest a food, herb, or medicine which affects only one organ or body tissue without simultaneously affecting many other organs and tissues.

Traditional Chinese herbalists have found that to obtain precise results, a complete description of the individual's state of health is required. Scientific and medical labels such as influenza, pneumonia, hepatitis, PMS, arthritis, or peptic ulcer do not provide all of the necessary information. These ideas may become clearer if we explore several examples.

Example 1: Rhubarb Root and Constipation



Laxatives are one of the most widely purchased preparations either as herbal formulas or as chemically produced medications. Many people become dependent on certain laxatives. The traditional Chinese viewpoint helps us to understand why. Rhubarb root is a common herb in many laxative formulas, and both the Western and Chinese pharmacopeia list it. Western herbal texts describe its physiological actions as purgative, peristaltic, cholagogue, sialagogue, hepatic, and anthelmintic. The indications (conditions for which it is useful) include: constipation, diarrhea, weakened digestion, abdominal pains with distended bowels. Before giving you the traditional Chinese description of rhubarb root's properties, consider trying to make a real-life decision based on physiological information only.

In this first example, two individuals complain of constipation. Person A has dry and hard stools, tends to feel hot easily, is frequently thirsty, and is easily angered. On inspection the tongue appears very red with thick yellow coating, and the pulse is forceful and slightly rapid. Person B has a constipation characterized by severe sluggishness, yet the consistency may be normal. He complains of constant fatigue, hands and feet become cold easily, is rarely thirsty, and often has indigestion, gas and abdominal bloating. On inspection, the tongue is pale and wet appearing, with very thin white coating, and the pulse is very weak.

Can you determine which of the two people, A, B, or both, would benefit by taking rhubarb root by considering its physiological properties only? You might analyze the problem as follows. Both people have constipation; rhubarb root stimulates peristalsis, which might be helpful in both cases. In addition, rhubarb root's properties of stimulating digestion and promoting bile and saliva secretion would seem to be beneficial for B. Therefore, according to the limited information we have considered so far, rhubarb root might be more beneficial for B, but also helpful for A.

Now consider the information about rhubarb root from the Chinese pharmacopeia: it is bitter in taste and has a cold action. Its functions include: Drains Heat and moves stool; drains Damp Heat; detoxifies Fire Poison. (English translations of traditional Chinese texts often capitalize words used to indicate TCM functions to remind the reader that these special words denote specific functions and symptom-sign complexes.) Tastes are important in Chinese herbal science; the taste buds contain sensitive chemical analyzers, as noted previously. Bitter tastes generally tend to have "draining" and "cooling" effects.

Without knowing any more about Chinese herbal theory, you should now have no doubt about which individual should take rhubarb and which should not. The answer is A should, B should not. In practice, if B takes it, he will eventually become very fatigued and easily chilled, indigestion will become worse, and he will become dependent on harsh laxatives to stimulate peristalsis. Traditional Chinese theory would say that the bitter cold quality will exhaust the Middle Burner Fire of digestion and drain the central Qi or energy from the body, leaving him fatigued. For A, the rhubarb root would quickly resolve the constipation as well as the tendency to feel hot and irascible. This is because all of rhubarb root's properties closely match the requirements of A's total symptom pattern.

The Dangers of not Paying Attention to One's Symptoms and Sensations

While blood and urine tests are often useful indicators of serious problems, it is common for people to notice definite symptoms well before these tests become abnormal. To understand why this is possible, we need to examine the characteristics of our own senses. The body's sensory system consists of nerve cells connecting together a network of sensitive detectors of light, temperature, pressure, chemical makeup, and sound. These sensors provide the basis of sight, touch and pain, taste and smell, and hearing. Scientific studies have shown that the sensitivity of many of these biological detectors approaches or



exceeds that of state-of-the-art instrumentation. A person who is consciously aware of his sensory perceptions can detect health problems long before medical instrumentation will be able to detect problems. Traditional Chinese herbology places emphasis on directly perceived sensory information: symptoms that an individual reports plus the herbalist's perceptions of that individual (clinical signs). The latter include tongue examination, palpation of the pulse for rate, strength and quality, abdominal palpation, and observation of mannerisms, movement and speech qualities.

People in technologically-based societies are taught to ignore or suppress important indicators of health problems. Pain medication manufacturers encourage people to suppress pain and discomfort; co-workers pressure individuals to continue a job or activity in spite of health risks and the onset of chronic symptoms; and medical care consumers are often told that their own perceptions are imaginary if these can't be verified with diagnostic instrumentation. As a result, people often ignore perceptions that signal something is not quite right.

The Most Common Mistake People Make When Using Herbs

Lack of sensory awareness is an obstacle to improving both personal and planetary health. Tasks ranging from choosing correct herbal formulas and diet plans to reversing global environmental destruction are hampered by this lack of awareness. The most common mistake people make in using medications, vitamins, herbs or diet plans is to continue using a product even when their symptoms are worsening; they often persist in believing theories, advice from an "expert", and scientific data even when their own senses warn them to stop. Shifting focus to a larger scale, while scientists reassure the public that they are investigating effects of environmental damage, people's senses detect the nature and severity of effects long before results of scientific studies are available. Until people learn to demand action on what their senses are telling them, we will continue to be fleeced by slick-talking agents of the corporate profit machines.

Choosing Herbs is like Following a Road Map; First, You Need the Right Map

How do we understand and analyze our sensory perceptions in order to take correct action? We can find clues in the way in which we use maps. If you need to determine how to drive from Denver to Seattle, you would be wise to refer to a road map of the western U.S. It is obvious that a vegetation map of the western U.S. would not be helpful for this purpose. Likewise, an herbalist collecting herbs would not refer to a geological map for likely collecting areas; a vegetation map would be useful here. This same principle applies to using herbs to improve health. You need a special type of information to make real-life decisions about helping someone with a specific set of symptoms and body type.

What is necessary to correctly choose herbs is a "map" of the herbal pharmacopeia that matches symptom-sign patterns to specific herbs and herbal formulas that counteract the health imbalance as a whole. If we think of our state of health (symptom-sign description) as being analogous to a location in space, then the herbal properties should be described in a manner that tells us how the herb alters the total symptom pattern and moves us from one state of health to another, just as a road map tells us how to get from one location to another by means of a road network. If the herb is chosen correctly, it will eventually move us in a direction of better health. Conversely, incorrectly chosen herbs may move us in the wrong direction, intensifying existing symptoms.

If the information you have about an individual consists of their symptoms and what you perceive about their body surface, then a collection of information on the physiological effects of an herb ("physiological data maps") will not be very useful. You cannot "see" a person's biological chemicals (hormones, enzymes, proteins, minerals, etc.) without sophisticated equipment. What many people do not realize about the knowledge in physiology texts is that much of this information has been obtained at very high cost, both in time and money. Even if you could afford to subject yourself to the most complete chemical analysis money could buy, you still might not be able to predict the effect of an herb or medication on your total set of symptoms. To analyze the body in terms of all of its component chemicals and parts and predict its response to common situations is a feat that continues to elude science. Physiological knowledge may be useful, but it cannot provide the basis for a complete clinical system without other information.

Ancient Chinese Physicians Compile Precise Symptom-Sign "Maps" of Human Health

Ancient Chinese physicians recognized that the body itself provides sensitive signals about the nature of a potential problem, even though they did not understand the structure of sensory cells and the nervous system. These signals are perceived as symptoms such as abnormal temperature sensations, altered thirst and appetite, and emotional state. Chinese physicians created a precise system for describing the properties of herbs, acupuncture points, foods, climate, and other environmental factors in terms of how these alter an individual's entire set of symptoms and perceptions, and therefore his or her health. This system is the most detailed symptom-sign "map" of human health currently available in the world.

What this means for the herbalist is that with traditional Chinese assessment methods, a client's condition can be characterized by the total set of symptoms together with the clinical signs (general appearance, body structure, tongue appearance, and palpated quality of the radial pulse). Commonly observed patterns of symptoms and signs are given descriptive labels for convenience. Armed with this description, herbs and herbal formulas are then chosen which have been shown to be effective in counteracting the specific pattern.

Example 2: Ginseng and Enhancing the Immune Response



We can apply these principles to choosing herbs for enhancing immune system response. From a physiological perspective, many herbs have been shown to increase white blood cell count and activity. However, for a specific individual only some of these herbs may be better than others for enhancing overall health. To illustrate this, let us consider two very different examples of people who both suffer from frequent bouts of colds and flu. (Neither person actually has a cold or flu at the time; we are considering preventive strategy

only.) Person C complains of additional symptoms of poor appetite, fatigue and desire for lots of sleep, easily chilled, shortness of breath; on examination, the pulses are weak and

soft in quality and the tongue is pale. Person D, on the other hand, is easily fatigued but nervously active, has insomnia, tends to be thirsty, and frequently perspires during sleep; the pulses are weak, slightly rapid, and thready in quality; and the tongue is reddish with almost no coating.

Panax ginseng is one herb which has potent tonification properties, can alleviate fatigue, and has been shown to enhance the immune response in some people. Its nature is warm, sweet and slightly bitter. It is said to strongly tonify the central Qi (loosely translated as "energy"). If administered to person C, it will indeed enhance the immune response and will alleviate all of the other symptoms as well. If administered to person D, the insomnia may be aggravated, and the night sweats may increase. If ingested for a prolonged period, it will be deleterious to D's health. Hopefully, even if D knew nothing about traditional Chinese herbology, he would have the sense to listen to his body's signals and stop taking it. For C, however, there are few other herbs on the planet that would be matched to his needs as closely as *ginseng*.

Summary

All of an individual's characteristics must be considered in order to improve overall health without side effects. Because all of the body's component systems are closely interdependent, to effectively handle a person's main complaint it is usually necessary to consider the whole complex of symptoms and clinical signs in determining a strategy for restoring health.

Herbs in use

There are over three hundred herbs that are commonly being used today. The most commonly used herbs are *Ginseng*, wolfberry, Dong Quai (*Angelica sinensis*), astragalus (huángqí), *atractylodes* (báizhú), *bupleurum* (cháihú), cinnamon (cinnamon twigs (guìzhī) and cinnamon bark (ròuguì)), *coptis* (huánglián), ginger (jiāng), *hoelen* (fúlíng), licorice (gāncǎo), *ephedra sinica* (máhuáng), peony (white: báisháo and reddish: chisháo), *rehmannia* (dìhuáng), *rhubarb* (dàhuáng), and *salvia* (dānshēn). These are just a few of the herbs.

Ginseng



The use of ginseng is well over two thousand years old in Chinese medicine. Ginseng contains ginsenosides. The amount of ginsenosides in ginseng depends on how the plant was cultivated and the age of the root. Wild ginseng is rare and commands the highest prices on the market, but most Ginseng on the market today is a reasonable price. Red *Panax ginseng* is the most popular form of ginseng and it is usually packaged as a liquid or tea. Ginseng comes in two kinds, red and white.

The color of the ginseng depends on how it is processed. White ginseng is unprocessed and dries naturally. Red ginseng is processed with steam and is believed to be more effective. Native Americans have used American ginseng for dry coughs, constipation and fevers.

TCM Information: Species: *Panax ginseng*. Pinyin: Ren Shen. Common Name: Chinese Ginseng. Quality: Sweet, Bitter, Warm. Meridians: Lung, Spleen, Heart. Actions: Tonifies yuan qi to treat collapse of qi, tonify spleen and lung, generates fluids, mildly tonifies heart qi. Species: *Elutherococcus senticosus*. Pinyin: Ci Wu Jia. Common Name: Siberian Ginseng. Quality: Pungent (Acrid), Slightly bitter, Warm. Meridians: Spleen, Heart, Kidney. Actions: Tonify spleen and kidney, mildly tonify heart qi, promotes blood circulation, calm shen. Species: *Panax quinquefolius*. Pinyin: Xi Yang Shen. Common Name: American Ginseng. Quality: Sweet, Slightly bitter, Cold. Meridians: Heart, Kidney, Lung. Actions: Tonify lung and spleen qi, tonify lung yin, cools fire from lung yin deficiency, and generates fluids.



Mushrooms

Mushrooms have long been used as a medicinal food and as a tea in Chinese herbology. Clinical, animal, and cellular research has shown mushrooms may be able to up-regulate aspects of the immune system. Notable mushrooms used in Chinese herbology include Reishi and Shiitake.



Wolfberry

Wolfberry is grown in the Far East and is grown from shrubs with long vines. The shrubs are covered with small trumpet-shaped flowers, which turn into small, bright red berries. The berries are usually fresh and sometimes used when it is dried. **TCM Information:** Species: *Lycium barbarum*. Pinyin: Gou Qi Zi. Common Name: Chinese Wolfberry. Quality: Sweet, Neutral. Meridians:

Liver, Lung, Kidney. Actions: Tonifies kidney and lung yin, tonifies liver blood, tonifies jing, and improves vision.



Dang Gui

Dang Gui (*Angelica sinensis* or "female ginseng") is an aromatic herb that grows in China, Korea and Japan. **TCM Information:** Species: *Angelica sinensis*. Pinyin: Dang Gui. Common Name: Chinese Angelica Root. Quality: Sweet, Pungent (Acrid), Warm. Meridians: Liver, Heart, Spleen. Actions: Tonify blood, invigorate blood, regulate menstruation, relieve pain, unblocks bowels by moistening intestine.



Astragalus

Astragalus is a root used for immune deficiencies and allergies. **TCM Information:** Species: *Astragalus membranaceus*. Pinyin: Huang Qi. Common Name: Astragalus Root, Milkvetch Root. Quality: Sweet, Slightly warm. Meridians: Lung, Spleen. Actions: Raise yang qi to treat prolapse,

tonify spleen and lung qi, tonify wei qi, increases urination, promotes drainage of pus, generates flesh.



Atractylodes

Atractylodes is believed to be important in the treatment of digestive disorders and problems of moisture accumulation. **TCM Information:** Species: *Atractylodes lancea*. Pinyin: Cang Zhu. Common Name: Atractylodes Rhizome. Quality: Pungent (Acrid), Bitter, Warm. Meridians: Spleen, Stomach. Actions: Strong to dry dampness, strengthens the spleen, induce sweating, expel wind-cold, clears damp-heat from lower jiao, improves vision.



Bupleurum

Bupleurum is believed to be useful for the treatment of liver diseases, skin ailments, arthritis, menopausal syndromes, withdrawal from corticosteroid use, nephritis, stress-induced ulcers, and mental disorders. **TCM Information:** Species: *Bupleurum chinense*. Pinyin: Chai Hu. Common Name: Hare's Ear Root. Quality: Bitter, Pungent (Acrid), Cool. Meridians: Gallbladder, Liver, Pericardium, San Jiao. Actions: Treats alternating chills

and fever, clears lesser yang disorders, relieves liver qi stagnation, raises yang qi to treat prolapse, treats certain menstrual disorders.



Cinnamon

Cinnamon or mostly known as gui zhi and rou gui are twigs and bark from large tropical trees. Studies show that cinnamon reduces serum glucose, triglyceride, LDL cholesterol, and total cholesterol in people with type 2 diabetes and the findings suggest that the inclusion of cinnamon in the diet of people with Type 2 diabetes will reduce risk factors associated with diabetes and cardiovascular diseases. **TCM Information:** Species: Cinnamomum cassia. Pinyin: Gui Zhi. Common Name: Cinnamon Twig. Quality: Pungent (Acrid), Sweet, Warm. Meridians: Heart, Lung, Bladder. Actions: Induce sweating, warms and unblocks channels, unblocks yang qi of the chest, treats dysmenorrhea. Species: Cinnamomum cassia. Pinyin: Rou Gui. Common Name: Cinnamon Bark. Quality: Pungent (Acrid), Sweet, Hot. Meridians: Heart, Kidney, Liver, Spleen. Actions: Tonifies kidney yang, leads fire back to its source, disperse cold, encourages generation of qi and blood, promotes blood circulation, alleviate pain due to cold, dysmenorrhea.



Coptis Chinensis

Coptis chinensis is a rhizome that is one of the bitterest herbs used in Chinese medicine. **TCM Information:** Species: Coptis chinensis. Pinyin: Huang Lian. Common Name: Coptis Rhizome. Qualities: Bitter, Cold. Meridians: Heart, Large Intestine, Liver, Stomach. Actions: Clears heat and drains damp, drains fire (especially from heart and stomach), eliminates toxicity.



Ginger

Ginger is a herb and a spice that is used in Chinese cuisine. Commonly used to treat nausea. **TCM Information:** Species: Zingiber officinalis. Pinyin: Sheng Jiang. Common Name: Fresh Ginger Rhizome. Quality: Pungent (Acrid), Slightly warm. Meridians: Lung, Spleen, Stomach. Actions: Release the exterior, expel cold, warm the middle jiao, relieve nausea, transform phlegm, warm lung to stop coughing, treat toxicity, and moderate the toxicity of other herbs. Species: Zingiber officinalis. Pinyin: Gan Jiang. Common Name: Dried Ginger Rhizome. Quality: Pungent (Acrid), Hot. Meridians: Heart, Lung, Spleen, Stomach. Actions: Warms the spleen and stomach, restores devastated yang, warms the lung to transform thin mucus, warms and unblocks channels.



Licorice

The use of licorice is thought to help treat hepatitis, sore throat, and muscle spasms. **TCM Information:** Species: Glycyrrhiza inflata or Glycyrrhiza glabra. Pinyin: Gan Cao. Common Name: Licorice Root. Quality: Sweet, Neutral. Meridians: All 12 channels, but mainly Heart, Lung, Spleen, Stomach. Actions: Tonify spleen qi, moisten lung for dry cough, clears heat and fire toxicity, tonifies heart qi to regulate pulse, alleviates spasmodic pain, antidote for toxicity, moderates the effects of harsh herbs.



Ephedra

Ephedra is a stimulant herb. **TCM Information:** Species: Ephedra sinica or Ephedra intermedia. Pinyin: Ma Huang. Common Name: Ephedra Stem. Quality: Pungent (Acrid), Slightly Bitter, Warm. Meridians: Lung, Bladder. Actions: Induce sweating and release exterior for wind-cold invasion with no sweating, promotes urination, move lung qi for wheezing, cough or asthma.



Peony

Peony comes in two varieties: bai shao (white) and chi shao (red), the root of the plant is used in both varieties. **TCM Information:** Species: *Paeonia lactiflora*. Pinyin: Bai Shao. Common Name: White Peony Root. Quality: Bitter, Sour, and Cool. Meridians: Liver, Spleen. Actions: Tonify liver blood, calms liver yang, alleviates flank/abdominal pain from liver qi stagnation or liver and spleen disharmony, preserves yin and adjusts nutritive and protective levels, regulates menses for blood deficiency problem. Species: *Paeonia lactiflora* or *Paeonia veitchii*. Pinyin: Chi Shao. Common Name: Red Peony Root. Quality: Sour, Bitter, Cool. Meridians: Liver, Spleen. Actions: Clears heat, cools blood, invigorates blood and dispels stasis to treat irregular menses, dysmenorrhoea, amenorrhoea, abdominal pain, and fixed abdominal masses.



Rehmannia

Rehmannia is a root where the dark, moist part of the herb is used. **TCM Information:** Species: *Rehmannia gluciflora*. Pinyin: Sheng Di Huang. Common Name: Chinese Foxglove Root. Qualities: Sweet, Bitter, Cold. Meridians: Heart, Kidney, Liver. Actions: Clear heat, cool blood, nourish yin, generate fluids, treats wasting and thirsting disorder. Species: *Rehmannia gluciflora*. Pinyin: Shu Di Huang. Common Name: Chinese Foxglove Root Prepared with Wine. Qualities: Sweet, Slightly warm. Meridians: Heart, Kidney, Liver. Actions: Tonify blood, tonify liver and kidney yin, treats wasting and thirsting disorder, and nourishes jing.



Rhubarb

Rhubarb is a large root and was once one of the first herbs that was imported from China. **TCM Information:** Species: *Rheum palmatum*, *Rheum ranguticum*, or *Rheum officinale*. Pinyin: Da Huang. Common Name: Rhubarb Root and Rhizome. Quality: Bitter, Cold. Meridians: Heart, Large Intestine, Liver, Stomach. Actions: Purge accumulation, cool blood, invigorate blood, and drain damp-heat.



Salvia

Salvia are the deep roots of the Chinese sage plant. **TCM Information:** Species: *Salvia miltiorrhiza*. Pinyin: Dan Shen. Common Name: Salvia Root. Qualities: Bitter, Cool. Meridians: Heart, Pericardium, Liver. Actions: Invigorate blood, tonify blood, regulate menstruation, clear heat and soothe irritability.

CERTIFIED CHINESE HERBOLOGY ONLINE COURSE - SESSION 3 – QUESTION & ANSWERS

NAME: _____

ADDRESS: _____

CITY, STATE, ZIP, PC: _____

PHONE: _____

FAX: _____

E-MAIL: _____

Please be sure to fill out the information above, complete the test and e-mail or fax it back to us at iridology@netzero.net or 530-878-1119. We will grade your question & answer session and will let you know if we have any questions or concerns. **Please use a separate sheet to do this assignment.**

1. What oil is used traditionally for joint pain as a liniment?
2. Traditional Chinese Medicine also includes some human parts. T/F
3. What is Chinese Patent Medicine?
4. What is the standard dose of herbal extracts for an average adult?
5. What is the principle behind the Age-To-Dose Dosing Guideline based on?
6. What is the principle behind Weight-To-Dose Dosing Guideline based on?
7. What would be your “recommended daily dosage” if you are 45 years old?
8. What would be your “recommended daily dosage” if you are 185 lbs?
9. What is the most common mistake people make in using medications, vitamins, herbs or diet plans?
10. What is necessary to correctly choose herbs?
11. Which herb which has potent tonification properties, can alleviate fatigue, and has been shown to enhance the immune response in some people?
12. A client's condition can be characterized by a set of symptoms together with which clinical signs?
13. How many herbs are commonly being used today?
14. Which herb helps lower LDL cholesterol?
15. Which herb helps tonify the liver and kidney yin?
16. Which herb is a stimulant?
17. Which herb is good for mental disorders?
18. Which herb calms liver yang?
19. Which herb invigorates the blood?
20. Which herb moistens the lungs for a dry cough?
21. Which herb eliminates toxicity?
22. Which herb strengthens the spleen?
23. Which herb warms the spleen and stomach?
24. Which herb is good for the immune system?
25. Which herb relieves pain?
26. Which herb improves vision?