A.B. Wong

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Titolo

Il cibo cinese è medicina, ma può la medicina Cinese essere cibo? Una nuova visione della medicina Cinese e il suo ruolo nel sistema sanitario di oggi

KEY WORDS

Centrist Medicine model, Body Constitutions Classification, Food-medicine relationship

PAROLE CHIAVE

Modello Medicina Centrista, classificazione della costituzione del corpo, relazione cibo-medicina

Zigen Pharmaceutical Limited, Hong Kong SAR

Address for correspondence: Albert B. Wong, Ph.D. Zigen Pharmaceutical Limited, Suite 1806 Sunbeam Commercial Bldg 469-471 Nathan Road, Yau Ma Tei, Kowloon, Hong Kong SAR E-mail: abwwong@zigen.hk

Chinese food is medicine but can Chinese medicine be food? A new view on Chinese medicine and its role in today's healthcare

Summary

In this article, the author attempts to use a new graphic model (a *Centrist Medicine* model) to represent the basic tenets of Chinese medicine on health vs. ailment. With this model, the relationship among food, functional food and medicine is illustrated. The 9 Body Constitutions Classification recently proposed in China is also introduced to demonstrate the use of functional food/medicine to prevent diseases and to maintain health within the Traditional Chinese Medicine (TCM) context.

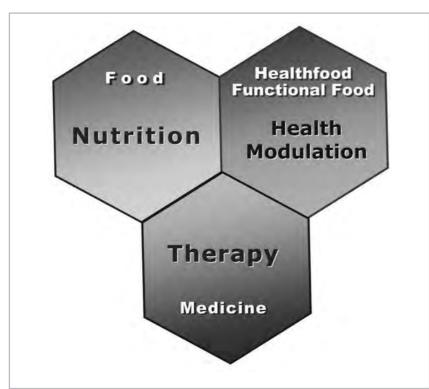
Riassunto

In questo articolo, l'autore tenta di utilizzare un nuovo modello grafico (un modello di Medicina centrista) per rappresentare i principi fondamentali della medicina Cinese ed i suoi effetti sulla salute versus malattia. Con questo modello viene illustrata la relazione tra cibo, alimenti funzionali e medicina. La classificazione della costituzione del corpo numero 9 recentemente proposta in Cina è stata anche introdotta per dimostrare l'uso di alimenti funzionali/medicinali per prevenire le malattie e per mantenere la salute nel contesto della Medicina Tradizionale Cinese (TCM).

Like many ancient cultures, Chinese Medicine, which is heavily intertwined with Chinese Culture, recognizes many species of botanicals to possess dual properties both as medicine and food. The notion that all Traditional Chinese Medicine (TCM) herbs are both food and medicine has been generally accepted for a long time. However, with continual advances in phyto-pharmacology and toxicology, the segregation of TCM food and TCM medicines has been an on-going process (1-4).

From a modern-day stand point, the TCM herbs possessing "medicinal" properties could be further divided into therapeutic medicinal herbs and functional food. This additional separation can be represented by a tripartite diagram as shown in Figure 1 where food, functional food and medicines are represented by 3 contiguous hexagons, each showing its own "func-

Figure 1 - Food-Medicine Relationship



tionality" – nutrition, health modulation and therapy. The borders between any two hexagons represent herbs that possess dual properties of their neighboring classes while the junction of the borders represents the botanicals that possess all three "functionalities".

In 2002, the Chinese Ministry of Health published 3 lists (5) of TCM herbs that are allowed to be used both as general food and medicines, those that are allowed to be used only as healthfood and those that are prohibited to be used as healthfood (see Table 1, 2 and 3, respectively). Hence, the "myth" that all TCM herbs are naturally both medicines and food was dispelled.

To make use of this tripartite view in the context of the TCM theory, the construction of a new graphical model could be helpful. The essential tenet of TCM is the maintenance or restoring of the balance among a number of opposing health-affecting components such as *yin*, *yang*, *dryness*, *wetness* etc. and the replenishment of deficient components such as *qi*. Using this simple concept, one can summarize the essential tenet of TCM as to seek the center point of all these health components in order to maintain health's balance. This Centritropic (centerseeking) tendency to balance health can be represented by 3 concentric cylinders as in Figure 2 where the central axis represents a fully healthy state, an intermediate cylinder represents a "sub-health 亞健康" state and the outer cylinder represents a diseased state. A spindle-shaped model (or Centrist Model) is chosen to reflect the dynamic balancing of the state of health where the thickness of the axis could be construed as to represent the "healthiness" of a person. Any endogenous or exogenous vector could upset the balance or aggravate the imbalance, leading a person's state of health moving toward the periphery. .

When a person is enjoying good health, TCM advocates the selection of proper nutritive food and functional food to sustain this state of good health (in conjunction with other supportive measures such as acupuncture, exercise and meditation etc.) In TCM, the term used for this care is called Life-nurturing 養生. When a person is in a sub-health state, such as persistent migraine, fatigue, hypertension, hyperglycemia, etc. TCM advocates the use of functional food to restore the health to its balanced center through the modulation of the various health components.

Flos Caryophylli 丁香	Fructus Anisi Stellati 八角茴香	Semen Canavaliae 刀豆	Fructus Foeniculi 小茴香	Herba Cirsii 小薊	Rhizoma Dioscoreae 山藥	Fructus Crataegi 山楂	Herba Portulacae 馬齒莧
Zaocys 烏梢蛇	Fructus Mume 鳥梅	Fructus Chaenomelis 木瓜	Fructus Cannabis 火麻仁	Citrus aurantium 'Daidai' 代代花	Rhizoma polygonati Odorati 玉竹	Radix et rhizoma glycyrrhizae 甘草	Radix Angelicae Dahuricae 白芷
Semen Ginkgo 白果	Semen Lablab Album 白扁豆	Flos Lablab Album 白扁豆花	Arillus Longan 龍眼肉(桂 圓)	Semen Cassiae 決明子	Bulbus Lìlíi 百合	Semen Myristicae 肉豆図	Cortex Cinnamomi 肉桂
Fructus Phyllanthi 余甘子	Fructus Citri Sarcodactylis 佛手	Semen Armeniacae Amarum 杏仁(甜、苦)	Fructus Hippophae 沙棘	Concha Ostreae 牡蠣	Semen Euryales 友實	Pericarpium Zanthoxyli. 花椒	Semen Phaseoli 赤小豆
Colla Corii Asini 阿膠	Endothelium Corneum Gigeriae Galli 雞內金	Fructus Hordei Germinatus 麥芽	Thallus Laminariae Thallus Eckloniae 昆布	Fructus jujubae 棗(大棗、 酸棗 fructus Ziziphi Spinosae, 黑棗)	Fructus Momordicae 羅漢果	Semen Pruni 郁李仁	Flos Lonicerae japonicae 金銀花
Fructus Canarii 青果	Herba Houttuyniae 魚腥草	Rhizoma Zingiberis 姜(生薑。幹 薑)	Semen Hoveniae 枳椇子	Fructus Lycii 枸杞子	Fructus Gardeniae 梔子	Fructus Amomi 砂仁	Semen Sterculiae Lychnophorae 膨大海
Poria 茯苓	Fructus Citri 香棚	Herba Moslae 香薷	Semen Persicae 桃仁	Folium Mori 桑葉	Fructus Mori 桑椹	Exocarpium Citri Rubrum 橘紅	Radix Platycodonis 桔梗
Fructus Alpinae Oxyphyllae 益智仁	Folium Nelumbinis 荷葉	Semen Raphani 萊菔子	Semen Nelumbinis 蓮子	Rhizoma Alpiniae Officinarum 高良重	Herba Lophateri 淡竹葉	Semen Sojae Preparatum 淡豆豉	Flos Chrysanthēmi 菊花
Herba eichorii Radix eichorii 菊苣	Semen Brassicae Junceae 黃芥子	Rhizoma Polygonati 黃精	Folium Perillae 紫蘇	Fructus Perillae 紫蘇籽	Radix Puerariae Lobatae 葛根	Semen Sesami Nigrum 黑芝麻	Fructus Piperis 黑胡椒
Flos Sophorae 槐米	Flos Sophorae 槐花	Herba Taraxaci 蒲公英	Mcl 蜂蜜	Semen Torreyae 榧子	Semen Ziziphi Spinosae 酸康仁	Rhizoma Imperatae 鮮白茅根	Rhizoma Phragmitis 鮮蘆根
Agkistrodon halys 蝮蛇	Pericarpium Citri Reticulatae 橋皮	Herba Menthae 薄荷	Semen Coicis 薏苡仁	Bulbus Allii Macrostemonis 薤白	Fructus Rubi 複盆子	Herba Pogostemonis 藿香	

Table 1 - TCM herbs allowed to be used both as food and healthfoods (87)

* The Latin names of the herb are mostly taken from the Chinese Pharmacopoeia. Please exercise due caution and re-check the translation before use

Radix ET Rhizoma Ginseng 人參	Folium Ginseng 人參葉	Fructus Herminium monorchis 人參果	Radix ET Rhizoma Notoginseng 三七	Rhizoma Smilacis Glabrae 土茯苓	Herba Cirsii Japonici 大薊	Fructus Ligustri Lucidi 女貞子	Fructus Corni 山茱萸
Radix Cyathulae 川牛膝	Bulbus Fritillariae Cirrhosae 川貝母	Rhizoma Chuanxiong 川芎	Cervus elaphus embryo 馬鹿胎	Cornu Cervi Pantotrichum. 馬鹿茸	Cervus elaphus bone 馬鹿骨	Radix et Rhizoma Salviae Miltiorrhizae 丹參	Cortex Acanthopan acis 五加皮
Fructus Schisandrae Chinensis 五味子	Rhizoma Cimicifugae 升麻	Radix Asparagi 天門冬	Rhizoma Gastrodiae 天麻	Radix Pseudostellar iae 太子麥	Radix Morindae Officinalis 巴戟天	Radix Aucklandiae 木香	Herba Equiseti Hiemalis 木賊
Fructus Arctii 牛蒡子	Radix Arctii 牛旁根	Semen Plantaginis 車前子	Herba Plantaginis 車前草	Radix Glehniae 北沙參	Bulbus Fritillariae Ussuriensis 平貝母	Radix Scrophulari ae 玄參	Radix Rehmannia e 生地黃
Radix Polygoni Multiflori 生何首烏	Rhizoma Bletillae 白及	Rhizoma Atractylodis Macrocephalae 白術	Radix Paeoniae Alba 白芍	Fructus Amorni Rotundus 白豆⊠	Concha Haliotidis 石決明	Caulis Dendrobii 石斛	Cortex Lycif 地骨皮
Radix Angelica Sinensis. 當歸	Caulis Bambusae in Taeniam. 竹茹	Flos Carthami 紅花	Radix et Rhizoma Rhodiolae Crenulatae 紅景天	Radix Panacis. Quínquefolíi 西洋參	Fructus Evodiae 吳茱萸	Radix Achyranthis Bidentatae 懷牛膝	Cortex Eucommiae 杜仲
Folium Eucommiae 杜仲葉	Semen Astragali Complanati 沙苑子	Cortex Moutan 牡丹皮	Aloe 蘆薈	Rhizoma Atractylodis 蒼術	Fructus Psoraleae 補骨脂	Fructus Chebulae 詞子	radix paeonlae rubra 赤芍
Radix Polygalae 遠志	Radix. Ophiopogonis 麥門冬	Carapax et Plastrum Testudinis. 鶴甲	Herba Eupatorii 佩蘭	Cacumen Platycladī 侧柏葉	Radix et Rhizoma Rhei 制大黃	Radix Polygoni Multiflori Praeparata Curn succo Glycines sotae 制何首烏	Radix et Rhizoma seu Caulis Acanthopan acis senticosi 刺五加
Fructus Rosa davurica Pall.刺攻果	Herba Lycopi 澤蘭	Rhizoma Alismatis 澤瀉	Flos Rosae Rugosae 玫瑰花	Flos Hibisci 玫瑰茄	Rhizoma Anemarrhe nae 知母	Folium Apocyni Veneti 羅布麻	Folium Ilicis Cornutae. 苦丁茶
Rhizoma Fagopyri Dibotryis 金蕎麥	Fructus Rosae Laevigatae 金樱子	Pericarpium Citri Reticulatae Viride 青皮	Cortex Magnoliae Officinalis 厚樸	Flos Magnoliae Officinalis。 厚樸花	Rhizoma Curcumae Longae 重黄	Fructus Aurantii 枳殻	Fructus Aurantii Immaturus 枳實

Table 2 - TCM herbs allowed to be used only as healthfoods (nutraceutical) (114)

Semen Platycladi. 柏子仁	Margarita 珍珠	Herba Gynostemmati s Pentaphylli 絞股藍	Semen Trigonellae 胡蘆巴	Radix et Rhizoma Rubiae 茜草	Fructus Piperis Longi 華茨	Semen Allii Tuberosi 韭菜子	Caulis Polygoni Multiflori 首烏藤
Rhizoma Cyperi 香附	Rhizoma Drynariae 骨碎補	Radix Codonopsis 篇参	Cortex Mori 桑白皮	Ramulus Mori 桑枝	Bulbus Fritillariae Thunbergii 浙貝母	Herba Leonuri 益母草	Herba Centellae 積雪草
Herba Epimedii 淫羊藿	Semen Cuscutae 菟絲子	Flos Chrysanthem i Indici 野菊花	Folium Ginkgo 銀杏葉	Radix Astragali 黃芪	Bulbus Fritillariae Hupehensis 湖北貝母	Folium Sennae 番瀉葉	Gecko 蛤蚧
Folium Vaccinii Vitis-idaeae 越橋	Fructus Sophorae 槐實	Pollen Typhae 蒲黃	Fructus Tribuli 蒺藜	Propolis 蜂膠	Fructus Tamarindi Indicae 酸角	Herba Ecliptae 墨旱蓮	Radix et Rhizoma Rhei 熟大黃
Radix Rehmanniae Preparata. 熟地黃	Carapax Trionycis 鱉甲						

Table 2 - TCM herbs allowed to be used only as healthfoods (nutraceutical) (114)

* The Latin names of the herb are mostly taken from the Chinese Pharmacopoeia. Please exercise due caution and re-check the translation before use

When one's health deteriorates to the point of bordering on catching a disease, TCM stresses early detection so as to prevent and intervene with the onset of the disease. This approach is consistent with the modern practice of preventive medicine. The term used in TCM is *Pre-disease Treatment* 治未病. The ability to practice *pre-disease treatment* is considered the highest and most prestigious medical skill level every TCM practitioner aspires to attain. In short, it is the holy grail of TCM.

When a patient becomes sick, a TCM doctor will use 3 "*differenti-ations* 辯" to assess the situation:

- 1. Health Differentiation 辯體 (Identify the patient's body constitution)
- 2. Disease Differentiation 辯病 (Identify the ailment)
- 3. Diagnostic Differentiation 辯證 (Identify the phases of the ailment)

"Differentiations" roughly mean the collection and assessment of all the sensory detectable syndromes with the 4 TCM diagnoses (observation, hearingsmelling, query and palpation 望聞問切). After the "Differentiation" process, TCM practitioners will prescribe the proper quantities and types of herbs to be administered to the patients. Some herbs target at re-balancing the patient's health components so as to strengthen his/her stamina to combat the disease. Other herbs could be therapeutic agents to target at the pathogen(s), e.g. a virus or bacteria. Hence, TCM practitioners try to mobilize both the patients' defensive immunity as well as effective therapeutic agents to combat the ailment. The prescription is adjusted according to the progress of the disease so as to maintain the momentum toward full recovery and to ultimately restore the health balance.

With China's population aging,

Rhizoma et Radix Dysosmae Versipellis 八角蓮	Flos Echinopsis 八裏麻	Semen Euphorbiae 千金子	Radix Aristolochiae 土青木香	Radix Anisodi Tangutici 山茛菪	Radix Aconiti 川烏	Radix Aristolchia e Fangchi 廣防己	Folium Coriarifa nepalensis 馬桑葉
Semen Strychni 馬錢子	Rhizoma et Radix Dysosmae Pleianthae 六角蓮	Semen Hyoscyami 天仙子	Fructus Crotonis 巴豆	Mercury 水銀	Herba Catharanthi Rosei 長春花	Radix Kansui 甘遂	Rhizoma Arisaematis 生天南星
Rhizoma Pinelliae 生半夏	Rhizoma Typhonii 生白附子	Radix Euphorbiae Ebracteolatae 生狼毒	Hydrargyrum Chloratum Compositum 白降丹	Bulbus Lycoridis Radiatae 石蒜	Caulis Aristolochiae Manshuriensis 關木通	農吉痢	Folium Nerium indicum 夾竹桃
Cinnabaris 朱砂	Pericarpium Papaveris 米殼(罌粟 殼)	Hydrargyri Oxydum Rubrum 紅升丹	Folium et Cortex Taxus 紅豆杉	Radix Illicii Henryi 紅茴香	Hydrargyri Oxydum Rubrum 紅粉	Semen Strophanthi Divaricati 羊角拗	Radix Rhododendron molle 羊躑躅
Bulbus Iphigeniae Indicae 麗江山慈姑	Radix Euphorbiae Pekinensis 京大戟	Radix Triptervgii Hupoglauci 昆明山海棠	河豚	Flos Rhododendri Mollis 鬧羊花	Lytta 青娘蟲	Radix et Herba Derridis Trifoliatae 魚藤	Folium Digitalis Purpureae 洋地黃
Flos Daturae 洋金花	Semen Pharbitidis 牽牛子	Arsenicum sablimatum 砒石(白砒、 紅砒、砒霜)	Radix Aconiti Kusnezoffii 草鳥	Cortex Periplocae Radicis 香加皮(杠柳 皮)	Herba Peganum harmala 駱駝蓬	Rhizoma Dysosmae Versipellis 鬼臼	Folium Illicit Laneceolati 莽草
Radix Aconiti Penduli 鐵棒槌	Herba Convallaria majalis 鈴蘭	Radix Aconiti Brachypodi 雪上一枝蒿	Semen et Folium Thevetia peruviana 黃花夾竹桃	Mylabris 斑蝥	Sulfur 硫磺	Realgar 雄黃	Radix Tripterygii Wilfordii 雷公藤
Herba Belladonnae 顛茄	Radix et Rhizoma Veratri 黎蘆	Venenum Bufonis 蟾酥					

Table 3 - TCM herbs forbidden to be used also as healthfoods (59)

* The Latin names of the herb are mostly taken from the Chinese Pharmacopoeia. Please exercise due caution and re-check the translation before use

Figure 2 - A Centrist Model for Chinese Medicine

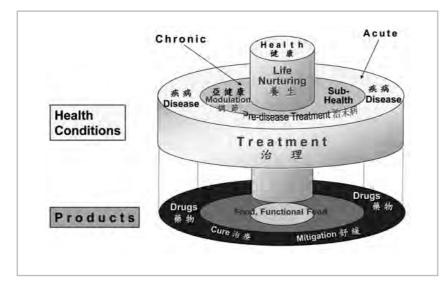


Table 4 - Nine TCM Body Constitutions Classification

- 1. Harmonious/Normal 平和 Gén. Féatures – Vigorous, Strong physique, Supple complexión Herbs – Lily flower百合, Lotus seeds避子, Honey錄蜜
- 2. Qi Deficient 氣虛
 - Gen. Features Fatigable, Short of breath, Perspirations, Low voice Herbs – Ginseng人參, Astragalus黃芪, Dioscorea opposita 山栗
- 3. Yang Deficient 陽虛

Gen. Features - Cool extremities, Quiet demeanor, Lassitude Herbs - Deer Angler 屈茸, Cistanche deserticola肉德馨

- Ying Deficient 陰虚 Gen. Features – Dehydration, Irascible, Dry stool Herbs – Wolfberry枸杞子, Ophiopogon japonicus要冬, Polygonatum莨精
- 5. Wet Phlegm 痰濕
 - Gen. Features Obese, Sticky saliva. Mild temper Herbs - Job's tears薏米, Poria cocos 茯苓, Atractylodes白術
- 6. Wet Heat 濕熱
 - Gen. Features Oily face. Acne, Vaginal discharge, imtable Herbs – Gardenia 栀子, Plantago車前子, Artemisia capillaries Thunb茵陳
- 7. Blood Stasis 血瘀

Gen. Features – Dull complexion, Ecchymosis, Purplish tongue Herbs – Carthamus tinctorius 紅花, semenpersicae 桃仁, notoginseng三七

8. Suppressed Qi 氣鬱

Gen. Features - Lean, Emotional, Introvert, Pale red tongue Herbs - Rose 玫瑰花, Citrus peel 陳皮, Cyperus rotundus香附

9. Peculiar 特稟

Gen. Features – Hereditary traits, Sensitive, Allergic. Herbs – Codonopsis pilosula 業参, Astragalus黄芪, Radix Pesudostellariae太子参 the Ministry of Health is promoting aggressively preventive medicine or, in TCM terms, life-nurturing 養生 and pre-disease treatment 治未病, by first performing a proper health differentiation 辩體 of the healthy and sub-health subjects based on Body Constitution Classification principle. In 2009, the Chinese authority published a guidance document called "The TCM Classification and Determination of Body Constitutions 《中醫體質分類與判定》"(6), in which nine types of "body constitutions" are listed. The 9 body constitutions classification is shown in Table 4 (in an abridged format) together with their major features and related herbs that deliver the benefits. It was claimed that the classification was the result of a multi-year survey of close to

22,000 cases.

Body constitution classification has now been applied to the design of daily diets and the occasional consumption of decoctions to help correct the imbalances. The term "sub-health 亞健康", reflecting the imbalances, is often used to describe the state between a fully healthy state and a disease state. According to TCM, such rectification to the balanced healthy state or the maintenance of the healthy state can be achieved by taking TCM herbal food that helps "modulate" "health components" affecting the balance.

Although numerous *body constitution classification* have been proposed before (e.g. Physical Status classification system used by the American Society of Anesthesiologists (ASA)), the TCM Body Constitution Classification has the advantage of being indigenous of the Chinese culture with a large contingent of experienced TCM practitioners who can help perform the differentiation at the grass root level using herbs that are already familiar to the population.

The commercial impact of the *body constitution classification* has yet to be fully realized but it is expected to be tremendous because of the large segment of the population it will cover. In many TCM clinics, computerized questionnaires, coupled with the 4 TCM diagnoses, have already been used to assess the "body constitutions" of the patients. With this information in hand, the TCM doctors can now be more precise in administering TCM herbs and in

providing better advices to the patients. This will result in better selection of the herb that should be taken to help restore their constitutions' balances or to maintain them.

A famous saying in classical TCM text (HuangTi's Cannon of Internal Medicine 黃帝內經) regards "The best physician as one that treats the disease before its onset 上工治未病." This ancient dictum is consistent with today's emphasis on preventive medicine. In this regard, China is moving forward toward this goal steadfastly. The health authority in China hopes that the use of the body constitution classification will strengthen its quest to reduce healthcare expenditure for its 1.3 billion citizens by adhering to the TCM practices such as pre-disease treatment and life nurturing through the appropriate consumption of TCM food to achieve balances for the "body constitutions" of the population.

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