# CHINESE HERBAL PROTOCOLS FOR TREATING PAIN

Andrew Gaeddert, Herbalist

t is important to realize that Chinese medicine is an empirical science, which has a history of several thousand years. Many traditional Chinese medicine terms do not easily translate into Western medicine terms. Nevertheless, an attempt will be made to explain these terms. I have elected to discuss formulas and treatment strategies which are effective in my own clinical practice.

In Chinese Medicine, pain is considered to arise from the invasion of any of a combination of the following pathogenic factors: Wind, Cold, Heat, and Dampness. These factors are able to "invade" because of an internal weakness (1). An African proverb that aptly describes this is, "If there is no enemy within, the enemy outside can do us no harm." After penetrating the body, often through the pores, the accumulated pathogen(s) block(s) the circulation of Qi and Blood in the channels, causing pain. The final stage is when the Organs are invaded. If unresolved, chronic pain, soreness and swelling, numbness, deformity of the joints, and limited movement are the results (2).

Depending on the pathogen(s) that invade(s), different syndrome patterns emerge. But the two factors that are common to all these patterns are pain and limited movement. In Chinese, the collective term given to these patterns is bi, meaning blockage of the channels and collaterals. Biomedically, bi (pronounced "bee") syndromes can correspond to diseases such as rheumatoid and osteoarthritis, bursitis, neuralgia, systemic lupus erythematosus, gout, and sequelae of traumatic injuries, among

others (2). The various bi patterns and their respective systems are described below.

Hot bi. Heat can be generated by infection or by emotional factors such as stress, repression, or perfectionism, which over time can cause Liver Qi stagnation and transformation into Heat. Heat in the body can also be the result of invasion of Wind Damp-Heat. The chief symptoms of Hot bi are fever, which may or may not by accompanied by chills, thirst and dry mouth, irritability, and painful, red and swollen joints that are hot to the touch. The tongue is red with a yellow coating, and the pulse is rapid and slippery, reflecting Dampness. Gentiana mac. (Qin Jaio), Red Peony (Chi Shao), Loranthes (Sang Ji Sheng), are used to treat hot bi (3).

Cold bi. Cold causes congealing and contraction. When the body is affected by Cold, the circulation of Qi and Blood slow, and if unresolved, this leads to obstruction of the channels and collaterals. Cold bi is characterized by such symptoms as stiffness, or stabbing or shooting pain that is fixed in one site. The pain improves with movement and warmth. Other symptoms may include lack of perspiration and copious, clear urine. The tongue may be pale with a thin white coating, and the pulse can be slow, or irregular if the pain is intense. Herbs to treat Cold bi are Angelica (Du Huo), Acanthopanax (Wu Jia Pi), and Chaenomelis (Mu Gua) (3).

**Damp bi.** Pain caused by Dampness is fixed, deep, and dull. Swelling at the site of pain is often present, and deformity, particularly of the joints, often results in protracted conditions. Frequently there is a generalized presence of Phlegm. The symptoms can be aggravated by humid, rainy or foggy weather or by living in damp buildings. The tongue is often wet and the coating white, sticky

c/o: Health Concerns 8001 Capwell Drive Oakland, CA 94621 510-639-0280; Fax: 510-639-9140



and thick. The pulse is soggy or slippery. Poria (Fu Ling), Red Atractylodes (Cang Zhu), and Stephania (Fang Ji) are herbs used to treat Damp bi (3).

Wind bi. Movement and change characterize wind. Thus, pain due to Wind tends to arise suddenly and move from one area of the body to another; the sensation of pain can also change. During the early stage, the signs are often those of an exterior syndrome pattern with aversion to wind, fever, a thin white tongue coating, and a floating and moderate pulse. Wind is treated with Cinnamon Twig (Gui Zhi), Siler (Fang Feng), Notopterygium (Qiang Huo), Angelica (Bai Zhi), and Asarum (Xi Xin). Herbs addressing poor circulation include Cordyalis (Yan Huo So), Frankincense (Ru Xiang), Myrrh (Mo Yao) (3).

In the western clinic, practitioners can either make up individualized prescriptions of Chinese herbs or select prepared formulas that combine herbs in these various categories of pain. It is common to have patients who suffer from a combination of Wind, Cold, Damp, or Heat, based on the symptom pattern exhibited by the patient. The herbalist using Chinese Medicine will ask questions to see how the pain is manifested; for example, does the pain improve with cold or warmth? Also, what is the state of the overall vitality of the individual? For example, a football player injured on the field would typically get an injury formula, such as Qi Li San, which largely contains herbs which improve the blood circulation. But a senior citizen living in a cold climate would more typically get a formula similar to Dr. Fung's Arthritis Formula. This formula contains herbs which address Wind (aches and pains that come and go), Cold (heat reduces the pain sensation), Dampness (swelling), as well as tonic herbs, such as Ginseng, which will increase her vitality. As heat usually accompanies injury (the joints are hot to touch), a liniment which has a cooling function, such as White Flower Oil may be selected, whereas for the senior citizen a warm penetrating topical such as Red Tiger Balm will be recommended.

#### HISTORICAL FORMULAS

Qi Li San is used for bruising, swelling and pain that accompany traumatic injury. Traumatic injury

causes stagnation of blood, which produces swelling and pain. The chief herb in this formula, Calamus, is also known as Dragon's Blood. It has pain relieving and anti-hemorrhagic properties, as injury to the blood vessels may cause bleeding (3). Other herbs in this formula include Frankincense and Myrrh, which have been used by herbalists all around the world for the alleviation of pain (author's observation). Safflower flower is clinically useful for treating musculoskeletal trauma; and Cordyalis has strong analgesic properties (4). Typically, this formula is used for several weeks following trauma or accident. At this point, treatment is usually discontinued, unless the patient is still weak, in which case, a tonic formula is usually added. Ancient formulas contain mercury and musk, but formulas manufactured in the U.S. do not contain these prohibited ingredients. Formulas are available in liguid or tablet form with Bromelain and other enzymes. Qi Li San contains: Dragon's Blood (Xue Jie), Carthamus (Hong Hua), Tienchi (San Qi), Myrrh (Mo Yao), Catechu (Er Cha), Frankincense (Ru Xiang), Corydalis (Yan Hu Suo), Borneol (Bing Pian) (3).

Fantastically Effective Pill for Invigorating the Collaterals (Channel Flow) is a formula for pain in various locations in the body and can treat rheumatic pain, dysmenorrhea, and internal ulcers. This formula contains Dang Gui, which is used in Chinese medicine to nourish the blood, as well as treat blood circulation (3). Salvia (Dan Shen) improves circulation, and removes ulcerations (4). Channel Flow, a modern variation, contains, Corydalis (Yan Hu Suo), Angelica (Bai Zhi), Peony (Bai Shao), Cinnamon twig (Gui Zhi), Tang-kuei (Dang Gui), Salvia (Dan Shen), Myrrh (Mo Yao), Frankincense, (Ru Xiang), Licorice (Gan Cao) (5).

Qiang Huo Sheng Shi Tang is traditionally indicated for headache, and a sensation of heaviness. Traditionally this formula is used for people who live in damp environments. This formula contains Wind dispelling herbs such as Angelica pub (Chiang Huo), Siler (Fang feng) and Angelica Sinensis (Bai Zhi). Modern research has shown that these herbs have vasodilating and peripheral nerve analgesic properties (6). Other herbs in this traditional formula include Chrysanthemum, Scute, and Vitex, to relieve pressure

in the eyes (3). It also contains Ligusticum (Chuan Xiang), a bloodcirculating herb commonly found in headache formulas (6). This formula contains Chrysanthemum (Ju Hua) Chiang-huo (Qiang Huo), Ophiopogon (Mai Men Dong), Angelica (Bai Zhi), Ligusticum (Chuan Xiong), Siler (Fang Feng), Western Scute, Scute (Huang Qin), Tang-kuei (Dang Gui), Ginger (Gan Jiang), Asarum (Xi Xin), Raw Rehmannia (Sheng Di Huang), Vitex (Man Jing Zi), Kao-pen (Gao Ben), Licorice (Gan Cao). A modern version, Head-Q, also contains the western herb Feverfew (6).

Shu Jing Huo Xue Tang is traditionally used for muscle aches, joint pain, neuropathy, sciatica, gout, radiating pain in the leg, and numbness in the lower extremities. It contains Dan Gui, Ligusticum (Chuan Xiong), Siler (Fang Feng), and Angelica (Bai Zhi). This formula also contains diuretic herbs such as Red Atractylodes (Bai Zhu), Poria (Fu Ling), and Stephania (Fang Ji) (6). It also contains Clematis (Wei Ling Xian) and Licorice (Gan Cao), which is known in Chinese medicine as "the great harmonizer" and is prized for its detoxicant effects as well (4). Taken in modern dosage or in pill form, Licorice will not raise high blood pressure (author's observation). Shu Jing Huo Xue Tang contains Red Peony (Chi Shao), Achyranthes (Niu Xi), Tang-kuei (Dang Gui), Chiang-huo (Qiang Huo), Ligusticum (Chuan Xiong), Clematis (Wei Ling Xian), Rehmannia (Shu Di Huang), Ginger (Gan Jiang), Persica (Tao Ren), Angelica (Bai Zhi), Atractylodes (Bai Zhu), Licorice (Gan Cao), Poria (Fu Ling), Siler (Fang Feng), Citrus (Chen Pi), Stephania (Fang Ji), Gentiana (Long Dan Cao) (6).

Sea cucumber traditionally is used as a general tonic that addresses joint pain, lumbago, impotence and spermatorrhea, as well as dryness of the intestines (3). At the University of Queensland, in Australia, rheumatologist Ron A. Hazelton, MD, conducted a six month placebocontrolled, double-blind trial of Sea cucumber with seaweed on 34 patients with rheumatoid arthritis. The 18 patients who received Sea cucumber experienced significant improvement of symptoms, whereas the 16 who received the placebo experienced little or no improvement. Those who took the formula had an increase in grip strength, a decrease in morning stiffness, normal blood laboratory readings, along with less deterioration as compared to the placebo group. No adverse side effects were noted (5).

Da Huo Luo Dan is used to treat numbness of the limbs caused by stroke, rheumatism, or poor circulation (as well as spastic or flaccid paralysis) (7). It is also effective with palsy (7). It is important not to use this formula too early in cerebral hemorrhage cases (7). A modern version contains Clematis (Wei Ling Xian), Aquilaria (Chen Xiang), Ginseng (Ren Shen), Frankincense (Ru Xiang), Siler (Fang Feng), Coptis (Huang Lian), Saussurea (Mu Xiang), Blue Citrus (Qing Pi), Ho-shou-wu (He Shou Wu), Cloves (Ding Xiang), Rehmannia (Shu Di Huang), Gentiana (Qin Jiao), Lindera (Wu Yao), Achyranthes (Niu Xi), Chianghuo (Qiang Huo), Loranthus (Sang Ji Sheng), Tang-kuei (Dang Gui), Borneol (Bing Pian), Gastrodia (Tian Ma), Asarum (Xi Xin), Cinnamon Bark (Rou Gui) (5).

# MODERN FORMULAS

Shanghai Spasm Formula is a modification of Shao Yao Gan Cao Tang (Peony and Licorice formula). This formula is for muscle spasms, particularly due to injuries such as whiplash affecting the upper body (10). It may also be used for muscle cramps, restless leg syndrome, carpal tunnel syndrome (especially when combined with Qi Li San) (author's observation). This formula contains, Peony (Bai Shao), Pueraria (Ge Gan), Clematis (Wei Ling Xian), Milletia (Ji Xue Teng), Licorice (Gan Cao), Calcium Aspartate 100 mg, Magnesium Aspartate 50 mg. (5).

Dr. Fung's Mobility Formula (Mobility 3) is an empirical formula based on the sixty years of experience of Dr. Fung Fung, a Chinese herbalist who has been practicing in the San Francisco Bay Area for over fifteen years. He is author of Sixty Years in Search of Cures (8). This formula is for joint pain and headache that gets worse in cold, damp weather. It contains Warming herbs, Damp resolving herbs (other warming herbs) and tonics to make it suitable for long term administration. The herbs are Kirin Ginseng (Ji Ling Shen), Chiang-huo (Qiang Huo), Cinnamon Twig (Gui Zhi), Du-huo (Du Huo), Rehmannia (Shu Di), Tienchi (San Qi), Ho-shou-wu (He Shou Wu), Milletia (Ji Xue Teng), Loranthus (Sang Ji Sheng), Asarum (Xi Xin), Tang-kuei (Dang Gui), Tinospora (Shen Jin Teng),

Cistanche (Rou Cong Rong), Chaenomelis (Mu Gua), Ardisia Gigantifolia (Zou Ma Tai), and Achyranthes (Niu Xi) (8).

# TONICS USED IN THE TREATMENT OF PAIN

It is important not to underutilize tonics in the treatment of pain, as many patients in American clinics are weak from years of disease and symptoms. Patients are frequently also weak from the ingestion of western medicines, especially analgesics and antidepressants.

Gui Pi Tang (Shen-Gem) is a traditional formula for insomnia, nervousness with accompanying palpitations, fatigue, and poor appetite. Other indications may include dry skin and scanty menstruation in women, as well as memory loss. This formula is especially useful in treating long-term emotional pain, which has evolved into physical pain, such as fibromyalgia. This formula contains Ginseng (Ren Shen), Poria (Fu Ling), Amber (Hu Po), Polygala (Yuan Zhi), White Atractylodes (Bai Zhu), Longan (Long Yan Rou), Zizyphus (Suan Zao Ren), Saussurea (Mu Xiang), Astragalus (Huang Qi), Ginger (Gan Jiang), Tang-kuei (Dang Gui), Licorice (Gan Cao), Salvia (Dan Shen), Cardamon (Sha Ren) (6)

Marrow Plus is a modern formula developed by Misha Cohen and the author for lowered white and red blood cells count. This formula is useful in the treatment of chronic pain because it nourishes blood and improves blood circulation. According to Chinese medical theory if the blood is adequately nourished and flowing freely there will be no pain (1). Marrow Plus contains, Milletia (Ji Xue Teng), Lycium (Gou Ji Zi), Hoshou-wu (He Shou Wu), Tang-kuei (Dang Gui), Salvia (Dan Shen), Lotus Seed (Lian Zi), Codonopsis (Dang Shen), Citrus (Chen Pi), Astragalus (Huang Qi), Red Date Extract (Da Zao), Ligusticum (Chuan Xiong), Oryza (Gu Ya), Raw Rehmannia (Sheng Di Huang), Gelatinum (E Jiao), Cooked Rehmannia (Shu Di Huang) (5)

Backbone is another modern formula developed by the author, which treats low back pain and lower body weakness associated with weak kidneys. According to Chinese medicine the kidneys "produce marrow, control the bones, and feed the brain" (9). Marrow in this context includes the matrix found in bones, bone marrow, brain, and the spinal

cord. It is used for patients who have sensations of feeling cold, pale tongue, slow, submerged pulse, frequent urination, and pale complexion. Backbone contains Eucommia (Du Zhong), Cyathulae (Chuan Niu Xi), Psoralea (Bu Gu Zhi), Acanthopanacis (Wu Jia Pi), Cibotium (Gou Ji), Tang-kuei Tails (Dang Gui Wei), Cuscuta (Tu Si Zi), Dipsaci (Xu Duan), Cistanche (Rou Cong Rong), Carthamis (Hong Hua), Rehmannia (Shou Di Huang), Myrrh (Mo Yao), GuiBan (Gui Ban), Cornus (Wu Zhu Yu) (5).

# CASE STUDIES

### CASE # 1

Sharon is a forty-two year old female who developed fibromyalgia following a divorce and custody battle over her daughter, compounded by a case of flu that left her bedridden for several weeks. Physical therapy, as well as over-the-counter analgesics, brought slight relief to her chronic muscle pain. She was able to have a degree of pain relief by applying a hot water bottle to the affected muscles. In addition to weekly acupuncture she sought out herbs. Her pulse was choppy, and her tongue was purplish. Therefore, a modern version of Da Huo Luo Dan (AC-Q) and Channel Flow (Fantastically Effective Pills) were recommended, two tablets of each formula, TID. In addition, she was instructed to apply AC-Q as a soak twice per day, as well as Red Tiger Balm. AC-Q and Channel Flow were administered to strongly increase blood circulation and relieve pain. Red Tiger Balm was administered for its warming and penetrating effects. After two weeks she reported a slight improvement. As her pulse and tongue where unchanged, I suggested she increase the dosage to three of each formula, TID. As she reported this upset her stomach, I recommended two of each formula, QID. After one month of taking the herbs and soaks as directed, there was a great relief of pain. As the pulse was still choppy, and the tongue was still purplish-pink, I suggested she continue on the herbal protocol as recommended. After two more months she attempted to wean off the herbs, but felt they made such a big difference, she decided to remain on them. By this time she had discontinued the herbal soaks, but still used a hot water bottle, especially at night and for long car trips.

## CASE #2

Art is a retired carpenter who had gotten into an auto accident one year earlier. His joint and muscle pain was only partially relieved with Vicodin. Acupuncture was only mildly effective. He had many signs of heat, including ruddy skin, fast pulse, and a scarlet, dry tongue. He drank alcohol, smoked cigarettes and his joints were hot to touch. We recommended Mobility Two and Clear Heat formula, two tablets of each formula, QID. In addition we recommended White Flower Balm topically. Mobility Two was administered to increase blood circulation and reduce edema, Clear Heat was used to strongly reduce inflammation. White Flower has cooling pain relieving properties. He was counseled to try to walk daily, gradually increasing his mobility, as well as to supplement his diet with more fruits and vegetables. After two weeks he reported the herbs had made a slight improvement. At this point, we also recommended Sea-Q (a preparation which combines sea cucumber and seaweed). Sea-Q has antirheumatic effects and tonifies the kidney in terms of TCM. After a month, the patient considered his pain relief to be significant, and he was able to reduce his use of Vicodin and alcohol. As his pulse was slower and the tongue was starting to normalize, I suggested reducing the Clear Heat. He continues his protocol of Mobility Two (two tablets QID), Clear Heat (one tablet QID) and Sea-Q (two tablets BID).

#### CASE #3

Mary Lou is a sixty-six year old housewife suffering from pain following lung surgery to remove cancerous tissue, and fatigue. She was taking Tylenol with Codeine for the pain and applying a hot water bottle. Her pulse was sinking and slow, her tongue was purple pink. She had difficulty getting out of chairs and walking across the room due to fatigue. She also complained of a dry throat. Although I recommended acupuncture, she said she was afraid of needles. I recommended Astra 8 and Channel Flow, two tablets each QID, and American ginseng tea. Astra 8 was administered for fatigue and lung deficiency. Channel Flow was administered for pain, and American Ginseng tea was administered to enhance the immune system and to counter lung dryness. After two weeks she was able to reduce her dosage of Tylenol

and codeine by fifty percent, but fatigue was still severe. She was having trouble complying with four times a day dosing, so she agreed to take three tablets of each formula, with the American Ginseng tea three times per day. After one month her energy and pulse had improved. As her throat was no longer dry and because she didn't like the taste, we discontinued the tea. A gradual improvement was seen in all symptoms over the following month.

#### CASE #4

Nelson is a seven-year-old boy with iuvenile onset rheumatoid arthritis. He walked with a pronounced limp. The main joints affected were his hip and ankle. His tongue was purplish and dry, his pulse was rapid. His joints usually felt hot except in the morning, when they were stiff, and were only improved by daily baths. He was taking Methotrexate and Prednisone. I recommended a dairyfree diet, Mobility Two and Clear Heat (two tablets of each TID) and Colostroplex (a bovine colostrom preparation, 1-2 tablets per day). Again, as in Case #2, Mobility Two was administered to increase blood circulation and reduce edema, and Clear Heat was used to reduce inflammation. Colostrum was recommended for its anti-toxin and immune strengthening properties. I also recommended White Flower oil to be applied to his bath and topically several times per day. White Flower has cooling and pain relieving effects. After two weeks there was little improvement. Nelson had stopped taking the Colostroplex, as he had gotten constipated, and had only been able to take the herbs twice per day. His family had not made the effort to find alternative forms of milk, such as soy or rice, so he was still drinking at least one glass of milk per day with his cereal. I stressed the importance of the dairy free diet, and also mentioned that he should reduce the dosage of Colostroplex to one tablet or half a tablet per day if he got constipated. I also recommended that he take three tablets of each herbal preparation formula twice per day. In one month, both Nelson and his father felt the herbs were working and he was able to reduce the level of Prednisone, under his doctor's supervision. After two months Mobility 2 was substituted for the more tonifying Mobility 3 formula, and he

will remain on the Clear Heat as long as there are Heat signs.

#### CASE #5

Marilyn is a forty-eight year old stockbroker. Her chief complaint was rheumatoid arthritis, which mainly affected her hands, wrist and forearms. She also had endometriosis, insomnia, and a history of depression. She was currently taking ibuprofen daily, and glucosamine sulfate. She had been administered cortisone injections during episodes of severe pain. Her pulse was thin, weak and slow, her tongue was pale. She was a vegetarian, so one of the things I recommended was to increase her consumption of fish, particularly salmon and mackerel as they contain the anti-inflammatory Omega 3 oils. She was counseled to go on a dairy-free diet, and try to limit amount of caffeinated beverages, including the diet sodas she was fond of. She was administered Mobility 3 and was advised to take Sea-Q. Mobility 3 is used to treat pain that worsens in cold or damp weather. Sea Q has anti-rheumatic effects and tonifies the kidney. Three weeks later she reported that she had significantly less pain and her sleep had improved. As the pulse was still weak but now faster, her formula was modified to allow more Yin nourishing ingredients. Two weeks later she complained that the pain was back, although her sleep was better. At this point, I inquired about what lifestyle and dietary changes she had made in the past two weeks. It turned out she had started to eat cheese again in a big way, eating several servings every day. When I mentioned this to her, she became defensive. I pointed out that the choice was hers, but to me there seemed a clear correlation between her eating cheese and having more pain. The following month she was pain free, except for one week. She had mentioned during a visit that she had spent many years in the Third world as a volunteer. I suggested that she get tested for parasites and yeast. I recommended continuation of a dairy-free diet. As her pulse was stronger and fast, and her tongue was pale and more moist, I suggested Mobility 2 (three tablets QID) and Marrow Plus (three tablets QID). Mobility 2 increases blood circulation and treats edema; Marrow Plus tonifies the Qi and blood and enhances immunity. The following month the lab tests revealed the

presence of abnormal yeast (Goetrichum and Hyphae yeast) as well as pollen in the stools. As a result, I recommended the Biocidin formula (a.k.a. Gentiana formula) as directed with meals, and continuing with the Mobility Two and Marrow Plus (three of each QID) and Sea-Q (two tablets BID). Biocidin is antiparasitic and anti-fungal, Sea Q has anti-rheumatic effects and tonifies the kidney in terms of TCM. After two months on this protocol, all symptoms are ninety percent improved.

(Many of the formulas listed are available commercially through Health Concerns and other organizations. For a list of suppliers, write to the above address.)

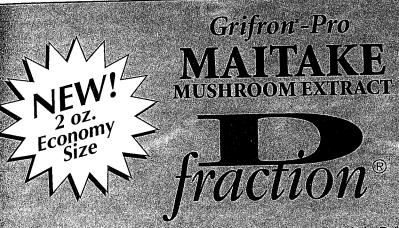
# BIOGRAPHY

Andrew Gaeddert is the author of Chinese Herbs in the Western Clinic and an upcoming book on digestive disorders. He is on the protocol team of double-blind studies with herbs.

#### REFERENCES

- 1. Veith, Ilza, The Yellow Emperor's Classic of Internal Medicine, University of California Press, Berkeley, Los Angeles and London (1949).
- 2. Vangermeersch, L. and Pei-Lin, Sun, Bi-Syndromes or Rhematic Disorders Treated by Traditional Chinese Medicine, SATAS s.a., Brussels, Belgium (1994).
- Bensky, Dan & Gamble, Andrew, Chinese Herbal Medicine: Materia Medica, Eastland Press, Inc. (1986).
- 4. Chang, Hson-Mou and But, Paul Pui-Hay, Pharmacology and Applications of Chinese Materia Medica, Vols. I and II, World Scientific Publishing Co. Pte. Ltd., Philadelphia, Pennsylvania (1986).
- 5. Gaeddert, Andrew, Herbal Protocols for Treating Pain, Pt. I - Pt. III Professional Health Concerns Newsletters, Vol. 6.3 7.2, (p. 93 - 104) Health Concerns, Oakland, CA: Gaeddert, Andrew Health Concerns Clinical Manual, Health Concerns, Oakland, California (1997 Edition).
- 6. Bensky, Dan & Barolet, Randall, Chinese Herbal Medicine: Formulas & Strategies, Eastland Press, Inc., Seattle, WA (1990).

- 7. Chun-Han Zhu, Clinical Handbook of Chinese Prepared Medicines, Paradigm Publications, Brookline, Massachusetts (1989)
- 8. Fung, Dr. Fung & Fung, John, Sixty Years in Search of Cures, Get Well Foundation, Oakland, California (1994).
- 9. Maciocia, Giovanni, The Foundations of Chinese Medicine, A Comprehensive Text for Acupuncturists and Herbalists, Churchill Livingstone, Edinburgh, London, Melbourne and New York (1989).
- 10. Personal communication with Dr. Jiangfu Jiang.



A number of researchers and clinical studies have confirmed that a protein-bound polysaccharide of Maitake Mushroom (Grifola frondosa) extract, "D-fraction®" is most potent in oral administration for enhancing the immune system.

Grifron®-Pro Maitake D-fraction® is the carefully extracted optimal fraction of the polysaccharide from the authentic Maitake Mushroom and specifically designed for immune-enhancing uses. Grifron®Pro Maitake D-fraction® is the identical product used in various researches and now available in alcohol-free extract in a vegetarian glycerine base. Liquid extract; 1 oz. and 2 oz. bottle.

Ask for Grifron Pro Maitake D-fraction extract at your distributor or call 1-800-747-7418 for direct orders. This product is not available at health food stores.

. Nanba H., et al.: D-fraction Immune therapy to prevent from cancer growth and No. 1 1995: 16-18

 Kawagishi H., et al.

Isolation and characterization of a lectin from Grifola frondosa fruiting bodies Biochem Biophys Octa 1990; 1034 (2):247-52.

3. Adachi Y., et al. Physicochemical properties and antitumor activities of chemically modified derivatives Food Reviews of antitumor glucan "grifolan LE" International, 11(1), from Grifola frondosa, Chem 135-149 (1995) Pharm Bull (Tokyo) 1989:37 (7)1838-43.

4 Mizúmo T., et al: Maitake Grifola frondosa pharmacological effects.

5 Nanba H., et al. Immunostimulant activity (in vivo) Antitumor activity of orally and anti-HIV activity (in vitro) of 3 administerd "D-fraction" fro branched B-1, 6 glucan extracted from Maitake mushroom (Grifola frondosa) Int. Conf. AIDS 1992:8(3):30 (abstract Pu A6116)

6 Nanha H., et al. Maitake mushroom (Grifola frondosa), J. Naturophathic Med. 1993 (4)1:10-15





Maitake Products Inc. P.O. Box 1354 Paramus, NJ 07653