

MODERN MEDICINE AND TRADITIONAL CHINESE MEDICINE

DIABETES MELLITUS

(PART TWO)

by Clinton J. Choate

There are two words in the Chinese language for diabetes: the traditional medical name 'xiao-ke' which means "wasting and thirsting", and the modern term 'tang-niao-bing' which means "sugar urine illness". Discussion of diabetes by its traditional name appears in all the earliest texts, including the *Yellow Emperor's Inner Classic* (Neijing). Traditionally, it is divided into three types: upper, middle and lower. Each type reflects the predominance of one of the three main symptoms (thirst, hunger, and excessive urination) and is intimately related to the Lung, Spleen and Kidneys respectively. Yin deficiency is usually associated with all three types. A traditional diagnosis of wasting and thirsting may include illnesses besides the modern entity of diabetes and vice-versa i.e. someone with tang-niao-bing would not necessarily have xiao-ke

For the purposes of this discussion, diabetes mellitus will be analysed according to the traditional category of xiao-ke or wasting and thirsting disease. It is believed to be related to eating fatty or sweet foods in excess, to emotional disturbances and to a constitution that is yin deficient.

According to TCM, irregular food intake in the form of over-consumption of fatty, greasy, pungent and sweet food, hot drinks and alcohol impairs the transportive and transformative functions of the Spleen and Stomach, which in turn generates internal heat. The accumulated food turns into heat that consumes fluids thereby creating thirst and hunger. In the *Simple Questions* (Su Wen) it is explained that "... fat causes interior heat while sweetness causes fullness in the middle burner. The qi therefore rises and overflows and the condition changes into that of wasting and thirsting"¹.

Long-term internal heat injures yin and consumes body fluids. When body fluids are consumed, they fail to nourish the Lung and Kidneys. The pathological changes seen in diabetes therefore always include yin deficiency and dry heat. These factors mutually influence each other: yin deficiency leads to dry heat, dry heat to yin deficiency.

Prolonged emotional disturbance may contribute to wasting and thirsting by hindering the flow of qi. Over-thinking damages the Spleen whilst anger, resentment and frustration lead to constrained Liver qi. Stagnant Liver qi transforms into fire, which then consumes the yin of the Lung and Stomach. A passage from the *Spiritual Axis* (Ling Shu) elaborates "The five inner [yin] organs are soft and weak

and prone to symptoms of wasting heat. When there is something soft and weak there must be something hard and strong. Frequent anger is hard and strong and the soft and weak are thereby easily injured"².

- When dry heat consumes Lung fluid, the 'Lung fire' gives rise to great thirst, with the consumption of large quantities of water and a dry mouth. The tongue is red with a yellow coating and the pulse floating and rapid.

- When heat is retained in the Stomach and Spleen there is excessive appetite and constant hunger. Large appetite and excessive eating, thinness and constipation characterise 'Stomach fire'. The tongue is red with a yellow coating and the pulse rapid.

- When a person is constitutionally yin deficient, overwork, prolonged stress or illness, excessive sexual activity and pregnancy can consume the essence. The result is deficiency of Kidney yin which can in turn lead to blazing of Kidney fire. 'Kidney fire' is characterized by frequent, copious urination, cloudy urine (as if containing grease), progressive weight loss, dizziness, blurred vision, sore back, ulceration or itching of the skin, and vaginal itching. The tongue is red with scanty or no coating and the pulse is fine and rapid.

All three patho-mechanisms involve the mutual exacerbation of yin deficiency and dry heat scorching Kidney yin essence and the fluids of the Lung and Stomach. Yin deficiency is primarily associated with the Kidneys, and according to the principle that detriment to yin affects yang, Kidney yang deficiency is also invariably observed in prolonged cases. Therefore xiao-ke syndrome may also occur when there is deficiency of Kidney yang.

Differentiation and treatment according to the three burners

By analysis of the patient's overall symptoms it should become apparent which organ, whether the Lung, Spleen or Kidneys, is the most yin deficient. The focus of the treatment can then be established as concentrating upon relieving deficiency heat in the upper, middle or lower burners. Although there are usually combinations of patterns seen in the diabetic, such as Lung qi and yin deficiency with phlegm and heat, for simplicity the focus will remain with the classical differentiation of yin deficiency in the three burners.

Upper Burner

For upper wasting (injury of body fluids by Lung heat) the treatment principle is to strengthen the function of the Lung, tonify yin and clear heat.

Principal clinical manifestations

- excessive thirst or desire for liquids is predominant.

Other possible manifestations are

- dry throat and mouth
- dry cough
- hoarse voice
- night sweats
- emaciation
- flushed cheeks
- tidal fevers
- red tongue with a thin, dry, yellow coating or no coating
- thready, or wiry and rapid pulse

Typical points

Feishu BL-13

Chize LU-5

Gaohuangshu BL-43

Yuji LU-10

Lianquan REN-23

Zusanli ST-36

Taixi KID-3

Explanation

Feishu BL-13 clears heat, whether excess or deficient, from the Lung and upper warmer and tonifies Lung yin. Chize LU-5 clears heat from the Lung, alleviates cough and regulates the water passages. Yuji LU-10 clears Lung heat and benefits the throat. Gaohuangshu BL-43 nourishes blood and yin, tonifies deficiency, cools heat and treats night sweating. It is said to tonify the Lung, Spleen, Stomach and Kidneys and can thus be used in any of the three patterns of disharmony, but due to its location in the upper warmer is most recommended for this pattern, especially when there is great deficiency accompanied by deficiency heat. Lianquan REN-23 stimulates the production of body fluids*. Zusanli ST-36 assists Feishu BL-13 in strengthening the Lung according to the principle of tonifying the mother (i.e. a point from the earth Stomach channel) to strengthen the child (the Lung corresponding to the metal phase). Taixi KID-3 tonifies the Kidneys, nourishes yin and helps support the Lung.

Middle Burner

For middle wasting (injury of yin by Stomach dryness) the treatment principle is to clear Stomach dryness and heat and tonify yin.

*Professor Qu Maolian, who specialised in the acupuncture treatment of diabetes before his retirement, advised applying the chicken-claw method of needling to this point. The needle is first inserted perpendicularly until deqi is obtained then partially withdrawn and redirected laterally, first in one direction and then the other. In this way the needle will stimulate the two extra points Jinjin 'Golden Liquid' and Yuye 'Jade Fluid' (both M-HN-20), located on the veins either side of the frenulum of the tongue³.

Principal clinical manifestations

- excessive appetite or propensity to hunger predominates.

Other possible manifestations include

- halitosis
- dry lips
- painful swelling or bleeding of the gums
- burning sensation in the epigastrium
- preference for cold drinks
- constipation
- red tongue with a thick yellow coating and red ulcerous tip
- rapid, full pulse

Typical points

Zusanli ST-36

Neiting ST-44

Sanyinjiao SP-6

Neiguan P-6

Zhongwan REN-12

Pishu BL-20

Weishu BL-21

Weiguanxiashu (M-BW-12)

Taixi KID-3

Explanation

Zusanli ST-36 clears Stomach dryness and benefits Stomach yin and is classically indicated for "heat in the middle warmer with propensity to hunger"⁴. Neiting ST-44 clears Stomach heat. Sanyinjiao SP-6 benefits the Stomach and tonifies yin and body fluids. Neiguan P-6 regulates the middle burner and clears heat. Zhongwan REN-12 harmonises the middle burner and tonifies the Stomach. Pishu BL-20 and Weishu BL-21 benefit the Spleen and Stomach and both were classically indicated for remaining thin despite large food intake⁵. Weiguanxiashu (M-BW-12) nowadays known as Yishu (Pancreas Shu) was first mentioned in the *Thousand Ducat Formulas* by the great 7th century physician Sun Si-miao for wasting and thirsting disorder. It is able to clear heat and generate fluid⁶. Taixi KID-3 tonifies the Kidneys and nourishes yin, and due to the central role of the Kidneys in housing the original yin is able to support the yin of the whole body.

Lower Burner

For lower wasting (exhaustion of Kidney essence and Kidney yin) the treatment principle is to strengthen the function of the Kidneys and nourish essence.

Principal clinical manifestations

- Excessive urination predominates.

Other possible manifestations include

- lower lumbar pain
- weakness of the legs
- constipation
- blurred vision
- dizziness
- malar flush, afternoon fever
- poor memory
- nocturnal emission

- red tongue with scanty coating
- thin and rapid pulse

Typical points

Guanyuan REN-4

Qihai REN-6

Taixi KID-3

Rangu KID-2

Sanyinjiao SP-6

Shenshu BL-23

Jingmen GB-25

Explanation

Guanyuan REN-4 benefits essence, tonifies and nourishes the Kidneys and benefits the Bladder. Qihai REN-6 tonifies the Kidney qi. Taixi KID-3 tonifies the Kidneys and nourishes yin. Rangu KID-2 clears deficiency heat and regulates the Kidneys. Sanyinjiao SP-6 benefits the Kidneys and nourishes yin. Shenshu BL-23 tonifies the Kidneys, nourishes yin and essence and treats excessive urination. Jingmen GB-25 (the front-mu point of the Kidney) combines with its back-shu point Shenshu BL-23 to tonify the Kidneys, benefit the water passages and control urination.

Treatment method (for all three patterns)

If possible treat as frequently as daily or every other day. Needles are retained for 30 minutes. Apply reinforcing method mainly. In cases of severe heat, apply reducing method.

Discussion

Patients commonly present with mixed patterns (i.e. symptoms of more than one burner). Treatment should be given according to the predominant clinical manifestations. Where there are clear signs of two of the excesses, e.g. thirst and excessive appetite, treat both. Furthermore additional points may be added according to clinical presentation. Flexibility in treatment is therefore necessary, for example:

- If there is thirst, a yellow dry tongue coating and an overflowing pulse, select points from yangming channel such as Quchi L.I.-11, Jiexi ST-41, Hegu L.I.-4 etc.
- If there is yin deficiency and uprising of yang, with symptoms such as low-grade fever, night sweats, malar flush, deep-red tongue body and a fine and rapid pulse, select Dazhui DU-14 and Yinxi HE-6 to clear deficiency heat.
- If night sweating is severe, add Houxi SI-3.
- Kidney deficiency can lead to qi deficiency. Alternatively heat can consume Stomach yin leading to qi deficiency. In the case of qi deficiency symptoms such as shortness of breath after exertion, spontaneous sweating, and a deep, thready pulse, apply moxibustion to Qihai REN-6 and Guanyuan REN-4.
- In the case of Kidney yang deficiency with cold limbs, lower limb oedema, copious urination, a pale tongue with white coating, and a thready, deep, and weak pulse, apply moxibustion to Mingmen DU-4 and Guanyuan REN-4.
- For increased appetite accompanied by muscle atrophy, add Pirexue (N-BW-10) [0.5 cun lateral to the lower border

of the spinous process of the sixth thoracic vertebra, corresponding to one of the Huatuojiagi (M-BW-35) points], Weishu BL-21 and Zhongwan REN-12.

Note: The following points are indicated for wasting and thirsting disorder in a variety of classical Chinese texts⁷: Yinshi ST-33, Feishu BL-13, Guanyuanshu BL-26, Xiaochangshu BL-27, Pangguangshu BL-28, Yishe BL-49, Rangu KID-2, Taixi KID-3, Yangchi SJ-4, Renzhong DU-26, Qimen LIV-14, Guanyuan REN-4, Jinjin/Yuye (M-HN-20), Weiguanxiashu (M-BW-12), Xingjian LIV-2, Duiduan DU-27, Chengqiang REN-24, Shenshu BL-23.

Note: The following combinations are indicated for wasting and thirsting disorder in a variety of classical and modern texts:

- Severe thirst of wasting and thirsting disorder: Yongquan KID-1 and Xingjian LIV-2 (*Ode of One Hundred Symptoms*)⁸.
- Wasting and thirsting disorder with great desire to drink: Rangu KID-2, Yishe BL-49 and Guanchong SJ-1 (*Classic of Supplementing Life with Acupuncture and Moxibustion*)⁹.
- Wasting and thirsting disorder with great desire to drink: Rangu KID-2, Yishe BL-49, Chengqiang REN-24 and Guanchong SJ-1 (*Thousand Ducat Formulas*)¹⁰.
- Wasting and thirsting disorder: Rangu KID-2, Chengqiang REN-24, Jinjin (M-HN-20), Yuye (M-HN-20), Renzhong DU-26, Lianquan REN-23, Quchi L.I.-11, Laogong P-8, Taichong LIV-3, Xingjian LIV-2, Shangqiu SP-5 and Yinbai SP-1 (*Great Compendium of Acupuncture and Moxibustion*)¹¹.
- Kidney deficiency wasting and thirsting disorder, absence of sweating, difficulty in moving the lumbar spine, distension of the abdomen and pain of the lateral costal region: Yishe BL-49 and Zhonglushu BL-29 (*Classic of Supplementing Life with Acupuncture and Moxibustion*)¹².
- Thirst and emaciation: Chengqiang REN-24, Shentang BL-44, Guanchong SJ-1 and Rangu KID-2 (*Prescriptions for Universal Benefit*)¹³.
- Thirst and emaciation: use up to 100 cones of moxa at Guanyuan REN-4 (*Book of Bian Que's Secrets*)¹⁴.
- Weiguanxiashu (M-BW-12), Feishu BL-13, Pishu BL-20, Shenshu BL-23, Zusanli ST-36 and Taixi KID-3. For excessive thirst add Shaoshang LU-11, Yuji LU-10 and Geshe BL-17. For increased appetite accompanied by emaciation of the muscles add Pirexue (N-BW-10), Weishu BL-21 and Zhongwan REN-12. For frequent urination add Guanyuan REN-4, Fuliou KID-7 and Shuiquan KID-5¹⁵.

Ear acupuncture

In auricular diagnosis one can identify subtle problems of the body by detecting areas of the ear which are discoloured, flaky, or have tenderness or high skin conductance. Unilateral pathology is generally represented by ear points on the same side.

The practitioner should first stimulate the appropriate local points corresponding to specific body symptoms, for example pain of the foot is treated by selecting the ear region corresponding to the foot, on the ear of the affected side if unilateral and on both ears if bilateral.

If a point is not reactive, exhibiting neither increased skin conductance nor heightened tenderness, it is usually omitted from the treatment plan. The master points are then stimulated, followed by the functional points indicated by specific treatment plans. Treat ipsilaterally or bilaterally, 5-10 points per ear, using as few needles as possible. Retain needles for 20-30 minutes, and treat once to three times a week.

Specific Treatment Plan for Diabetes Mellitus¹⁶

Master Points: Point Zero (just anterior to point Stomach), Shenmen, Endocrine Hormone (Internal Secretion).

Functional Points: Pancreas, Liver.

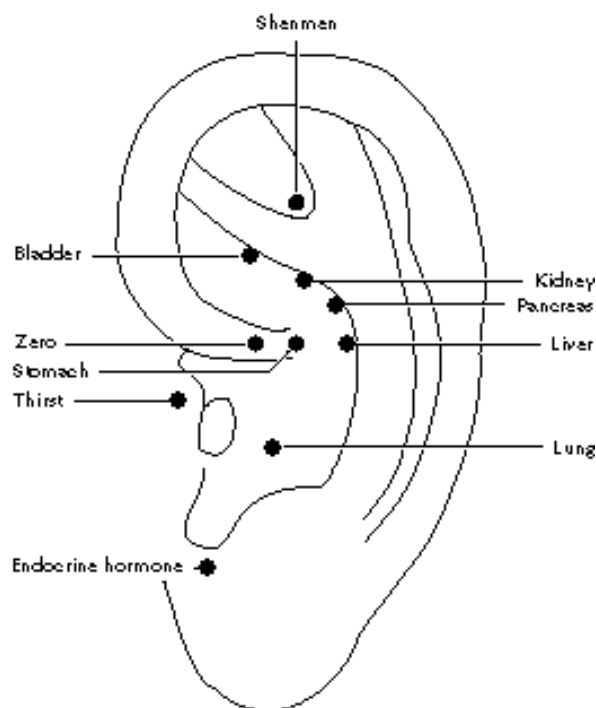
The following points may be added according to predominant symptoms¹⁷:

Thirst: Endocrine, Lung, Thirst.

Hunger: Endocrine, Stomach.

Frequent urination: Endocrine, Kidney, Bladder.

Increasing insulin: Pancreas.



Moxibustion

- dryness in the mouth: burn 100 cones at Xiaochangshu BL-27¹⁸.
- frequent urination: moxa can be burned at the tips of the little finger and toe, as well as at points along the cervical vertebrae (e.g. Dazhui DU-14)¹⁹.

Diabetic complications

The following passage on diabetic complications is derived from a valuable article on Diabetes by Nicholas Haines published in *The Journal of Chinese Medicine*, issue 43, September 1993, page 5.

Cataracts, night blindness, blindness

Patterns involved: Kidney yin deficiency, Liver blood deficiency, Liver yin deficiency and Liver yang rising.

Cataracts

Usually require surgical intervention. One can, however, slow the progression of cataract formation by selecting points according to the above differentiations.

Night-blindness

A progressive disorder with underlying Kidney yin deficiency and Liver yin/blood deficiency. It is unlikely that complete night-vision can be restored; however there should be improvement and/or a slower amount of deterioration with treatment. Tonify Kidney and Liver yin with the following points: Shenshu BL-23, Ganshu BL-18, Danshu BL-19, Qihai REN-6, Zusanli ST-36, Taixi KID-3, Taichong LIV-3.

Blindness

Often due to hemorrhage caused by a combination of Spleen qi deficiency and Liver yang rising. Loss of vision may be temporary or permanent depending on where the bleeding occurs. Even in the case of irreversible loss of vision, it is important to subdue the Liver yang and tonify the Spleen to prevent further bleeding.

- Subdue ascendant Liver yang and wind by using reducing or neutral technique at the following points: Taichong LIV-3, Xingjian LIV-2, Fengchi GB-20, Baihui DU-20, Hegu L.I.-4.
- Support the Spleen and Liver and Kidney yin using reinforcing technique at the following points: Ququan LIV-8, Taixi KID-3, Sanyinjiao SP-6, Shenshu BL-23, Ganshu BL-18.

Deafness

Patterns involved: Kidney yin deficiency. This is a progressive development and most likely irreversible. To prevent further deterioration select points with the action of tonifying the Kidneys and nourishing yin.

Oedema

Patterns involved: Spleen yang deficiency, Kidney yang deficiency. Oedema usually starts with the feet and gradually affects other parts of the body. The oedema tends to be recurrent.

- Tonify the Spleen and Kidneys using a reinforcing method and/or moxa at the following points: Pishu BL-20, Shenshu BL-23, Shuifen REN-9, Qihai REN-6, Zusanli ST-36, Taixi KID-3.

Skin infections, ulcerations and decay

Patterns involved: deficiency heat (from yin deficiency) and ying qi deficiency failing to move blood which blocks the collaterals, causing decay through stagnation and lack of nourishment. Failure of body fluids to circulate causes dampness and heat to arise by virtue of stagnation.

This is usually seen on the extremities or an area with reduced blood supply, like the hips or buttocks, and is due to poor circulation and/or an elevated level of blood sugar.

Both conditions promote an environment for infections. The areas will usually appear red and purple with yellow pus or clear yellow liquid on the surface. The "yellow pus type" is normally seen on the extremities, and the "clear yellow fluid type" occurring as sores at pressure areas like the elbows and buttocks. A small cut, abrasion or localised pressure usually initiates diabetic infections. A "yellow pus type" would be classified as a damp-heat type with poisons (du), and a "clear yellow liquid type" as a yin-deficiency ulcer.

Local needling is to be avoided. Distal points to remove stagnation in the affected channels should be employed. In addition a topical, dilute solution may be applied, made of a tincture of 100ml Huang Bai (Cortex Phellodendri) and 50ml Pu Gong Ying (Herba Taraxaci Mongolici cum Radice) to which 2g of Yunnan Bai Yao (Yunnan Province White Medicine) Powder is added.

Reduced peripheral circulation and neuropathy

Patterns involved: blood stagnation, blood deficiency, qi deficiency, yin deficiency, yang deficiency or cold stagnation. Treat according to differentiation.

Impairment of blood circulation and blockage of the collaterals by blood stasis creates poor peripheral circulation that manifests as purple or dark limbs with markedly decreased sensitivity. This complication will often be combined with skin infections and decay.

Strokes and hemiplegia

Patterns involved: long term yin deficiency and deficiency heat which condenses body fluids and leads to the formation of phlegm, or prolonged dampness condenses into phlegm, or prolonged yin deficiency leads to interior wind that carries the phlegm upwards. Phlegm blocks the channels and obstructs the Heart orifices.

Onset can present as any one or a combination of the following: severe headache, dizziness, loss of consciousness, aphasia, convulsions, facial paralysis, hemiplegia, numbness of the face and limbs, a wiry and slippery pulse and a red tongue with a greasy yellow coating.

- Clear fire and phlegm, and subdue Liver wind with the following points: Baihui DU-20, Renzhong DU-26, Fenglong ST-40, Taichong LIV-3, Yongquan KID-1, hand jing-well points.

Concluding Remarks

- Acupuncture, although proven to be clinically effective in reducing blood sugar and normalizing endocrine function, is most effective when used as part of a comprehensive treatment programme.
- Among diabetic patients, the body's resistance to disease is usually low, rendering it more susceptible to infection. Therefore careful attention must be placed on sterilisation of the needles and the puncture site.

Appendix One

The following is an acupuncture protocol for diabetes developed by Master Dong and related by Miriam Lee²⁰. Three points are used:

- Sanyinjiao SP-6 is said to regulate the original (yuan) qi which is stored in Kidneys.
- Lougu SP-7
- Shenguan (Extra) i.e. Kidney Gate, located 1.5 cun distal to Yinlingquan SP-9

According to Master Dong, these three points are so potent in normalising internal secretion imbalances they are known as the "Three Emperors". Since wasting and thirsting disorder is characterised by excess of yang and deficiency of yin, the yin earth channel (Spleen) is favoured over its yang partner (Stomach).

Discussion

When the body is out of balance it craves sweets, and excess of the sweet taste drains the Spleen. Sweet cravings are usually satisfied by candies, cookies, pastries, and soft drinks made from sugar, a refined, super-concentrated extract. Such refined sugar, with far different characteristics from more complex carbohydrates, is a potent yang substance that generates excessive heat of a false kind which leads to deficiency of yin.

Appendix Two

Three Prescriptions According to Dr. Richard Tan's Balance Method

The 'Balance Method' was developed by Dr. Tan through his clinical research on the application of "I-Jing/Bagua" theory to acupuncture. It incorporates universal concepts and applies fundamental acupuncture theory that is often overlooked in Western acupuncture training. The method basically relies on balancing the point prescription according to the relationships between the channels as found in the I-Jing/Bagua, and upon the "image" of the symptomatic body area. Traditional point functions combined with ahshi qualities are used to guide point selection, however clearing the channels remains the primary focus. Dr. Tan advocates that the way to address an imbalance of any kind, including the symptoms of the diabetic condition, lies in achieving a "global balance". An example would be to use yin channel points (-) on the Upper Right Extremity (URE) with yang channel points (+) on the Upper Left Extremity (ULE); i.e. URE (-); ULE (+); LRE (+); LLE (-). One to four extremities can be used in a given treatment. Body and head points may also be incorporated, for example balancing the upper front torso with the lower back torso. The method is most effective when fewer than 6-8 needles are used and they are placed remote to the site of pain or imbalance. Local ahshi points are used to identify the principal site and channels affected but are not directly needled.

Diabetic with a tight, wiry pulse

URE: Tongli HE-5; ULE: Waiguan SJ-5, Hegu L.I.-4; LLE: Sanyinjiao SP-6, Lougu SP-7, Yinlingquan SP-9; LRE: Zusanli ST-36.

Diabetic Impotence

ULE: Waiguan SJ-5; LLE: Sanyinjiao SP-6, Lougu SP-7, Yinlingquan SP-9; URE: Ling Ku (proximal to Hegu L.I.-4 and just distal to the intersection of the first and second metacarpal bones); LRE: Yinbao LIV-9 a1, a2, a3 (i.e. Yinbao LIV-9 and two points located one and two cun proximal to Yinbao LIV-9, together known as the "Upper San Huang" points by Master Dong).

Note: This prescription is designed to move energy up and down through the genital region.

Diabetic bilateral symmetrical peripheral neuropathy in the feet 1.5 cun insertion into bilateral Baxie (M-UE-22) and bilateral Ling Ku (see above) penetrating towards Houxi SI-3.

Note: If the patient has a burning sensation in the feet that are cold to the touch, the prognosis is poor.

CHINESE SYSTEM OF FOOD CURES

"Proper diet is the foundation for life-long good health"

Chinese nutrition differs uniquely from modern Western nutrition in that it determines the energetic and therapeutic properties of foods rather than analysing them solely according to their chemical constituents. For example Spinach is cooling, strengthens all the organs, lubricates the intestines, quenches thirst and promotes urination. One application for diabetes to strengthen the digestive organs and clear heat is to boil tea from spinach and chicken gizzards and drink 1 cup three times a day. Another is to eat spinach cooked with seaweed to help clean the blood and reduce swellings. This is beneficial when a diabetic develops itchy skin, rashes or hot skin eruptions.

Furthermore, Chinese nutrition takes into consideration such factors as the person's body type, age and vitality level, the geographical location, yearly seasonal influences and the method of preparation in determining the appropriate diet. Used both as a healing and disease prevention system, the distinct advantage of Chinese nutrition lies in its ability to adapt to the changing needs of an individual. In case of illness, rather than solely focusing on treating the particular disease, the whole person and their interrelated bio-chemical and bio-energetic systems can be addressed.

Sugar in the urine, as one of the most important symptoms of diabetes, was included in the Chinese medical classic *A Collection of Diseases*, by Wang Shou, published in 752. For the first time in Chinese medical history diabetes was listed among the eleven hundred diseases. The author recommended pork pancreas as treatment for the disease, and also recommended a special method of testing sugar in the urine: the patient was asked to pass urine on a wide, flat brick to see if ants gathered to collect the sugar.

This method of testing urine was more than ten centuries ahead of Richard Thomas Williamson (1862-1937), who invented a test for the same purpose. The Chinese author's treatment using pork pancreas was similar to modern treatment by insulin. In Chinese medicine however, thirst, weight loss, fatigue, and sugar in the urine are considered the key symptoms of diabetes. When a patient recovers from any of

these symptoms, the diabetes treatment is considered successful.

Food Remedies for Diabetes**Clinical Report**

"A Food Treatment of Diabetes"²¹.

Steam 60% wheat bran and 40% all-purpose whole wheat flour; add an adequate amount of vegetable oil, eggs and vegetables. Eat at meals to relieve diabetes.

The proportion of wheat bran was decreased as the condition improved. No drugs or nutritional supplements were given in this treatment. Among the 13 diabetes cases treated, blood sugar dropped to below 140 mg/dl in 3 cases and to 180 mg/dl in 7 cases; after treatment (lasting from 5 to 90 days), sugar in the urine changed from ++++ or +++ to negative in 10 cases; but in general, sugar in the urine changed to negative within one month along with the disappearance of neuritis associated with diabetes.

Vegetable and Grain Remedies

Bamboo Shoots: Cooling. Strengthens the Stomach, resolves mucous, promotes diuresis. Add generously to stir-fry vegetable dishes or blend bamboo shoots and celery juice, warm and drink 1-2 cups a day.

Bok Choy: Cooling. Clears heat, lubricates the intestines, quenches thirst. Steam or lightly stir-fry as a side dish or blend with cucumber as a juice.

Celery: Cooling. Tonifies the Kidneys, strengthens the Spleen and Stomach, clears heat, promotes diuresis, lowers blood pressure. Combine celery, yam and pumpkin and bake to make vegetable pie or lightly boil celery juice and drink 1-3 cups daily. Can also blend daikon radish, celery, carrot, and spinach as a juice and drink one or two cups a day.

Corn Silk: Neutral, sweet. Promotes urination, affects the Liver and Gall Bladder, lowers blood sugar. Boil corn silk with watermelon peel and small red beans in water. Drink as soup for the relief of chronic nephritis with oedema and ascites.

Millet: Cooling. Benefits the Stomach and intestines, promotes urination. Steam millet with yams and a few dates.

Mung Bean: Cold, sweet. Clears heat, quenches thirst, resolves oedema in the lower limbs. Make soup from mung beans, barley and rice. Or soak 100mg. mung beans overnight; boil in 3 cups water over low heat; drink twice a day. Or grind mung beans into powder and take 15g powder dissolved in warm water twice a day.

Mushroom (Chinese Black or Shitake): Neutral, sweet. Strengthens the Stomach, promotes healing, lowers blood pressure, counteracts cholesterol, lowers blood fat levels. Eat fresh or soak, blending with the soaking water; heat like soup and take on an empty stomach to clear toxins from the intestines. Or bake until it appears burned on the surface; eat 10g twice a day.

Pearl Barley: Cooling. Promotes diuresis, strengthens the Spleen, clears heat. Blend barley and water, boil and drink the liquid. Or cook soupy barley and eat as a porridge.

Pumpkin: Cooling. Disperses dampness, reduces fever, particularly beneficial for diabetes. Eat a slice of pumpkin everyday it is in season. For a main dish bake a pie with pumpkin, yam and potato.

Snow Peas: Cold. Strengthens the middle warmer, detoxifies, promotes diuresis, quenches thirst. Cook snow peas, blend and drink as a juice half a cup twice a day.

Soybeans: Cooling. Clears heat, detoxifies, eases urination, lubricates the Lung and intestines. Drink plain soymilk or eat tofu to relieve heat conditions. Steam tofu, cool, add sesame oil and thin julienne slices of raw squash.

Soybean Sprouts: Cooling. Promotes diuresis, clears heat, especially in the Stomach. Boil for four hours; drink tea lukewarm. Continue over a period of one month to relieve hypertension.

Spinach: Cooling. Strengthens all the organs, lubricates the intestines, quenches thirst, promotes urination. Boil tea from spinach (including the roots) and chicken gizzard; drink 1-3 cups a day.

String Bean (Green Bean): Neutral, sweet. Kidney and Spleen tonic. Boil 50g dried string beans (with the shells) in water. Drink as a soup once a day to relieve thirst and frequent urination. Or blend stringbeans, cucumber and celery as juice and drink 1 cup daily.

Sweet Potato (Yam): Neutral, sweet. Strengthens the Spleen and Stomach, tonifies qi, clears heat, detoxifies. Steam millet with yams and a few dates or cook soup with winter melon. Or mix 50g yam powder with 10g American Ginseng powder. Dissolve 15g in warm water each time; drink 3 cups a day as a therapeutic dose.

Sweet Rice (Glutinous): Warm, sweet. Used as an energy tonic. Benefits the Spleen, Stomach, and Lung. Relieves excessive urination, perspiration, and diarrhoea. Cook 50g sweet rice with 60g Job's tears (*Yi Yi Ren*, *Semen Coicis Lachryma-jobi*) and 8 red dates. Eat as a side dish at meals to provide general support.

Tomato: Slightly cooling. Promotes body fluids, quenches thirst, strengthens the Stomach, cools blood, clears heat, calms the Liver. Eat one raw tomato daily on an empty stomach.

Turnip: Cooling. Clears heat, removes dampness. Boil with tops as a side dish.

Water Chestnut: Cold, sweet. Relieves fever and indigestion; promotes urination; benefits the Lung and Stomach. Boil 5 water chestnuts in water with 1 fresh mandarin orange peel. Drink as a tea to relieve hypertension. Or peel 100g water chestnuts and chew them slowly in the morning and evening.

Winter Melon: Cooling. Clears heat, detoxifies, quenches thirst, relieves irritability, dispels dampness. Particularly effective in regulating blood sugar. Make soup from cabbage, yam, winter melon and lentils. Or drink three cups of fresh winter melon juice a day. Oral administration of 50-60 ml of the juice per dose has shown good results in clinical trials²².

Wheat Bran: Cool, sweet. Benefits the Stomach²³.

Recipes

Winter Melon Soup

6 pints (3.5 litres) vegetable broth, 3 cups chopped and peeled winter melon, 2 carrots, 2 celery stalks, 1 onion, 12 mushrooms (Chinese Black or Shitake), stems removed, 6oz (170g) tofu noodles or finely sliced baked tofu. Cook until tender (about 25 minutes) Season with 1tsp chives, 1Tbs tamari, and 1tsp peanut oil. Serves 4.

Stuffed Pumpkin

Cut the top off a small pumpkin; clean out the seeds and strings; save the lid. Fill with the following mixture: 3 cups cooked rice or barley, 1Tbs crushed, toasted sesame seeds, 2-3 sliced celery stalks, 1Tbs parsley, 1tsp thyme, 1tsp sage, half tsp rosemary, and 1Tbs tamari. Cover with pumpkin lid and bake at 350 degrees for 1 to 1.5 hrs. A fork will easily go into the pumpkin when cooked. Serves 4-6.

Azuki Bean and Squash Casserole

1cup azuki beans soaked overnight, two 6-inch pieces of kombu seaweed, 1 small butternut squash, kabuchi or other winter squash. Cover beans and kombu with water and simmer for about 1 hour, adding water as needed. Then add the cubed and peeled squash. Cook until tender (about half an hour). Stir in a pinch of sea salt or 1-2 tsp tamari. Serves 4.

Case report

Twenty-five diabetes patients were treated at the Canton College of Traditional Chinese Medicine with 250g dried bitter melon slices boiled in water each day. The changed levels of their blood sugar taken 2.5 hours after meals, and of their urine sugar taken 24 hours after meals, were both statistically significant. The same method has subsequently been applied to diabetic rats, and also resulted in a significant decrease in the level of blood sugar. The same report concludes that the effects of dried bitter melon are remarkably similar to those of insulin. It was also suggested that when 100g fresh clams are boiled in water with the dried bitter melon slices, the results should be better.

Animal Product Remedies

Abalone: Neutral, sweet, salty. Detoxifies; sharpens vision. Contraindicated for persons with a weak digestion. Boil 20-25g abalone with 250-300g fresh radish in water. Drink as a soup once every other day. Repeat 6-7 times as a treatment program. This is a time-honored recipe in Chinese folk medicine for diabetes.

Beef: Neutral, sweet. Used as a Spleen, Stomach, qi and blood tonic. Boil lean beef with yam to make soup.

Clam (freshwater): Cold, sweet, salty. Detoxifies, sharpens vision; acts on the Liver and Kidneys. Freshwater clam saliva is especially beneficial for diabetes. Boil 150g chives with 200g clams and suitable seasoning.

Milk: Cow's milk is neutral and sweet with a descending action. Used as a Lung and Stomach tonic, produces fluids and lubricates the intestines, benefits the Heart, Lung and Stomach. Contraindicated with diarrhoea or mucous discharge. Mix equal amounts of cow's and goat's milk. Drink

the milk as a substitute for tea or juice to improve physical condition and help reduce frequency of urination.

Pork: Neutral, sweet, salty. Used to lubricate dryness; benefits the Spleen, Stomach and Kidneys. Cut up 100g lean pork and boil in water with 100g Job's tears over low heat for 2 hours. Eat as a side or main dish. In the 1846 Chinese diet classic *New Collected Works of Proven Dietary Recipes*, pork pancreas was used as an ingredient in several dietary formulas to treat diabetes. One recipe called for boiling a pork, beef, or lamb pancreas in water with 200g yam; seasoning with salt and dividing into 4 parts; one part to be eaten every day for 4 days. Another instructed to cut up a pork pancreas and bake it over a low heat until dry and then to grind into powder, 3-5g to be taken in warm water at each meal. And another called for washing the pork pancreas and removing all white fat, then cutting into thin pieces, boiling over low heat in water with 20g corn silk, and seasoning with salt; one portion to be eaten daily.

Fruit Remedies

Crab Apple: Neutral, sweet and sour. Quenches thirst; astringes, benefits the Heart, Liver, and Lung. Boil 10 partially ripe fresh crab apples in an adequate amount of water until the water is reduced by half. Drink the soup and eat the fruit to quench thirst and relieve diarrhoea.

Guava: Warm, sweet. Astringent and constrictive, relieves frequent urination and diarrhoea. Crush 90g fresh guavas; squeeze out the juice and drink before meals.

Plum: Neutral, sweet, sour. Produces fluids, promotes urination and digestion, benefits the function of the Liver and Kidneys.

Strawberry: Cooling. Lubricates the Lung, promotes body fluids, strengthens the Spleen. Drink 1 small glass of fresh juice daily during the summer.

Mulberry: Slightly cold. Quenches thirst, detoxifies, tonifies the Kidneys, lubricates the Lung, relieves constipation, calms the spirit, promotes diuresis. Boil mulberries as a tea and drink half a cup at a time.

Eating Guidelines to Promote Healthy Digestion

- The dining area should be clean and pleasantly arranged, free of foul odours, and with plentiful fresh air.
- During meals and for a least one hour afterwards an upright posture of the torso should be maintained.
- Liquids should be consumed sparingly at meals. Sipping green tea during or after meals is beneficial.
- A wide variety of seasonal foods should be included in the diet, however fruit and sweet foods should be minimised.
- Three to four light meals should be eaten at regular times each day. The largest meal should be taken at mid-day and the evening meal should be consumed at least 2 hours before bedtime. When mental or physical demands are high, natural, complex carbohydrate snacks are encouraged.
- After meals some light movement, such as a stroll in the fresh air, is highly recommended. A Chinese proverb says

"100 paces after each meal will allow one to live a healthy 100 years".

Notes

- 1 *Simple Questions* (Su Wen) chapter 47.
- 2 *Spiritual Axis* (Ling Shu) chapter 46.
- 3 *Nanjing Seminars Transcript*, Qiu Mao-lian and Su Xin-ming. Journal of Chinese Medicine, 1984.
- 4 *A Manual of Acupuncture*, Peter Deadman and Mazin Al-Khafaji with Kevin Baker, Journal of Chinese Medicine Publications, 1998, p.158.
- 5 Ibid. p.279.
- 6 Ibid. p.571.
- 7 Ibid.
- 8 Ibid. p. 338.
- 9 Ibid. p.339.
- 10 Ibid. p.339.
- 11 Ibid. p.339.
- 12 Ibid. p.309.
- 13 *Acupuncture A Comprehensive Text*, O'Connor, J. and Bensky, D., Eastland Press.
- 14 Ibid.
- 15 Ibid.
- 16 Oleson, Terrence, D., Ph.D., *Auriculotherapy Manual – Chinese and Western Systems of Ear Acupuncture*, 1990, Published by Health Care Alternatives.
- 17 *Acupuncture A Comprehensive Text*, O'Connor, J. and Bensky, D., Eastland Press.
- 18 Ibid.
- 19 Ibid.
- 20 Lee, Miriam, O.M.D., *Insights of a Senior Acupuncturist*, Blue Poppy Press, 1992
- 21 Bever, B. O. and Zahand, G. R., 23. *A Food Treatment of Diabetes* (8) Ch.7, p.112.
- 22 Ibid.
- 23 Ibid.

Additional bibliography

- Kaptchuk, Ted, J., *The Web That Has No Weaver*, Conydon & Weed, 1983.
- Jianfei, Chen, *A Hemorrhological Study on the Effect of Acupuncture in Treating Diabetes Mellitus*, Journal of TCM 7(2): 95-100, 1987 3.
- Li Cheng-Yu, *Fundamentals of Chinese Medicine*, East Asian Medical Society, Paradigm Pub. 1985.
- Tan, Richard, O.M.D., L.Ac., & Rush, Stephen, L.Ac., *Twelve and Twelve in Acupuncture*, 1991; *Twenty-Four More in Acupuncture*, 1994. Published by R. Tan, San Diego, CA.
- Ni, Maoshing, *The Tao of Nutrition*, Union of Tao & Man, 1987.
- Lu, Henry C., *Chinese System of Food Cures-Prevention and Remedies*, Sterling Publishing Co. 1986.
- Qui Mao-liang, *The Treatment of Diabetes by Acupuncture*, Journal of Chinese Medicine, 15: 3-5, 1984 Diabetes/2 page 1.

The third and final part of this article, to be published in issue No. 60, May 1999, will cover the Chinese herbal medicine treatment of diabetes.