



Lord Dhanwantari

7th Issue

SHATAYU KI OR शतायु की ओर

“तस्यायुषः पुण्यतमो वेदो वेदविदां मतः ।

वक्ष्यते यन्मनुष्याणां लोकयोरुभयोर्हितम् ॥ चरक सू० १/४३

Ayurveda, the pious science of Ayu, is venerated by knowledgeable persons, it is good for humans both in this as well as in the next life.

प्रयोगः शमयेद् व्याधिं योऽन्यमन्यमुदीरयेत् ।

नासौ विशुद्धः शुद्धस्तु, शमयेद्वौ न कोपयेत् ॥ चरक नि० ८/२३

The excellence of treatment according to Ayurveda is, "Which cures the present disease, but does not produce any other that is the real treatment, but not the one which cures the present disease and simultaneously produces another one."

DHANWANTARI VATIKA, RAJ BHAWAN

UTTAR PRADESH, LUCKNOW

धन्वन्तरि वाटिका, राज भवन

उत्तर प्रदेश, लखनऊ

7th November 2007

HEALTH THROUGH AYURVEDA

MADHUMEHA (DIABETES MELLITUS)

(Its causes, prevention & management)

Man has always cherished a healthy and long life. It was noted by the earlier scientists that Panchamahabhootas i.e. Akash, Vayu, Agni, Jal and Prithivi are the basic elements of the world and their balance is necessary for the proper functioning of the Ritus throughout the year. It was also noted that all substances & products are constituted of the five Mahabhootas, may be with the predominance of one or more in any specific product. Similarly human body is also made up of these panchamahabhootas. So to keep the human body healthy, the balance of panchamahabhootas is to be maintained which can be achieved by balanced food (Ahar) and activity (Vihar). When due to any factor this balance is disturbed, the disease occurs and Madhumeha is one of these. In early times people worked very hard and used to eat more natural foods and so remained healthy, but those who did not follow this, showed signs and symptoms of Madhumeha.

In the present days with the advent of scientific appliances, people are becoming more leisure-loving, taking fast food, cold drinks, alcohol and fatty diets. The atmosphere is polluted because of industrial & vehicular smoke & gasses which are poisonous for humans. Extreme mental tension in today's competitive world is another factor which is putting various organs of human body to extreme stress. Under these conditions which are far away from the natural panchamahabhoota

atmosphere, the human organs give way and disease occurs and Madhumeha is now one of the most common diseases afflicting the human beings.

Ayurveda understands the diseases by examining the changes in the various activities of the body. In case of a person with increased frequency of micturition (Bahumutrata) and turbid urine (Avila Mutrata) is said to be suffering from Prameha. Prameha is of 20 types depending upon colour, smell and constitution of urine. Madhumeha is one of these Meha rogas and these days the modern scientists name it as Diabetes Mellitus. Charak and Sushrut the great scientists of ancient India labelled the disease as incurable.

“तदाऽसाध्या भवन्ति हि ।।” सुश्रुत. चि. ६/३०

We are living in the present days and even the modern scientists still label it to be incurable. In such a situation Ayurveda advises to prevent the disease i.e.

“स्वस्थस्य स्वस्थं रक्षणं” and if somehow the disease occurs then-

“आतुरस्य विकारप्रशमनं च ।।” So each one of us must understand the disease and do our best to prevent the disease.

What is Diabetes:-

According to Charaka it is a form of Prameha because of vitiated Vata dosha and has been considered under Ojomeha,

“चतुर्विधं मृत्युतीह वाताच्छेषेषु धातुचपकर्षितेषु ।।” च.चि. ६/११

The modern scientific developments have given us a newer insight into the disease and it is due to the inadequate availability of a hormone called, "Insulin", secreted by Islets of langerhans present in Pancreas. In turn it is a disease of metabolism marked by the lessened or the complete inability of the tissues to utilize carbohydrate and striking changes in the metabolism of fat and protein. If the blood sugar rises from the normal levels of Fasting 70 - 110 mg/dl and after meals (P.P.) up to 180 mg/dl, then it can be said that the person is suffering from Diabetes mellitus.

Who suffers from this disease:-

Charak the great physician in ancient India noted that the persons who take excessive rest in bed, sleep during the day, regularly take curd, meat, juices of animal meat, milk, new grains (less than a year old), drinks (recently distilled alcohol) and products of jaggery and all other such eatables, which increase KAPHA in the body, are prone to Madhumeha (diabetes mellitus).

“आस्थ्यासुखं स्वप्नसुखं दधीनि ग्राम्यौदकानूपरसाः पयांसि ।

नवान्नपानं गुडवैकृतं च प्रमेहेहेतुः कफकृच्च सर्वम् ।।” चरक चि. ६/४

Further these persons who are taking excessive food, oily food, sour food excessive

salt, excessive sleep, sedentary habits, new grains, avoid exercise, are under stress, not performing seasonal cleaning procedures like vaman & virechan, their shleshma and pitta dosha increases; meda increases i.e. there is excessive collection of fat in the body and then body weight increases.

“गुरुस्निग्धाम्ललवणान्यतिमात्रं समश्नताम् ।
नवमन्त्रं च पानं निद्रामास्यासुखानि च ॥
त्यक्तव्यायामचित्तानां संशोधनमकुर्वताम् ।
शैलष्मा पित्तं च मेदश्च मांसं चातिप्रवर्धते ॥”

तैरावृतगतिर्वायुरोज आदाय गच्छति ।

यदा वसितं तदा कृच्छ्रो मधुमेहः प्रवर्तते । चरक.सू. १७/७८-८०

The studies done by the present day medical scientists have confirmed that following factors are responsible for causing diabetes.

- (1) **Diet** is a major factor responsible for causing diabetes. Eating too much of carbohydrates, fats, proteins are all harmful to the body. Our body in general needs a balanced diet to produce energy for performing vital functions. Too much of food hampers the pancreas from performing its function of insulin secretion. Hence with insufficient insulin secretion, the blood sugar level rises, leading to diabetes mellitus. Normally people are in the habit of eating foods rich in refined carbohydrates, like biscuits, bread, cakes, chocolate, ice creams, pudding etc. So the incidence of diabetes is increased in such persons.
- (2) **Obesity** is also one of the major factors causing diabetes, excessive body weight as compared to height of the individual, serves as a predisposing factor for diabetes mellitus.
- (3) Nowadays, the life styles of people have changed drastically. They no longer believe in **physical work or exercise**, instead prefer a comfortable life, spending long hours sitting on chair. It has been noted that, less active a person, the greater is the risk of developing diabetes.
- (4) **Age** is the commonest predisposing factor for diabetes. It has been observed that as one grows older, particularly above 45 years of age, the chances to develop diabetes are increased.
It is chiefly because of old age, that the person becomes less active, tends to gain weight, leading to pancreatic dysfunction.
- (5) **Emotional Stress** also lead to diabetes. Nowadays, people live highly stressed life, all the time busy in daily exertive routine works. Pancreatic insufficiency is due to irregular and chaotic life style which deeply influences the metabolism of the body. Even grief, anxiety, worry, death of any close person etc, may alter the blood sugar level and lead to the disease.
- (6) People who **smoke** frequently are highly susceptible to develop diabetes.

Rare causes of diabetes mellitus-

i- **Certain medicines** like steroids ii- **Pregnancy** (gestational diabetes)

What doesn't cause diabetes:-

It is important to be aware of the different myths that over the years have arisen about the causes of diabetes-

Myth 1- Diabetes Mellitus is influenced only on the overall sugar intake

- ♦ Eating sweets or the wrong kind of food does not cause diabetes. However, it may cause obesity and this is associated with people developing diabetes.

Myth 2- Diabetes Mellitus is contagious-

- ♦ Diabetes is not contagious- someone with diabetes cannot pass it on to any one else.

Myth 3- Diabetes Mellitus can be cured with a diet-

- ♦ This is another huge misconception. No diet can cure Diabetes Mellitus. The most a diet can do is to keep the blood sugar level in a healthy state.

Myth 4- Diabetes Mellitus patients must not consume fruits and most vegetables.

This is partly true. Some fruits contain a very high sugar content, while some vegetables are rich in all kinds of carbohydrates. It is not advisable to have carbohydrate rich food such as rice, potatoes and sweet potatoes. A diabetes mellitus patient can safely have two fruits of 50 gms each in a day without any problems.

Symptoms:-

- | | |
|----------------------------|---------------------------------|
| i- Unexplained weight loss | ii- Frequent urination |
| iii- Always hungry | iv- Craving for extra liquid |
| v- Always tired | vi- Numbness & tingling of feet |
| vii- Sores that won't heal | viii- Vaginal Infection |
| ix- Sexual dysfunction | x- Overweight |
| xi- Blurred vision | |

Diabetes is a serious disorder if unmanaged. Uncontrolled diabetes can affect several important body organs & systems.

Uncontrolled diabetes may result into:-

- i- Loss/blurring of vision
- ii- Damage to kidneys
- iii- Recurring infections
- iv- Gangrene
- v- Foot problems
- vi- Sexual dysfunction
- vii- Increased risk of brain damage and heart attacks.

Complications of Diabetes :-

Complications of Diabetes are of two major types -

i- Short term complications- Diabetic Ketoacidosis, Hyperosmolar non- Ketotic coma & Hypoglycemia.

ii- Long Term Complications- Arterio Sclerosis, Diabetic nephropathy, Diabetic retinopathy, Diabetic Microangiopathy, Diabetic neuropathy, Infections, Heart Disease & stroke.

Hypoglycemia:-

Hypoglycemia is commonly seen in patients suffering from fall in blood glucose level. It may occur when excessive amount of insulin is administered, also occurs if the patient misses a meal.

The symptoms of Hypoglycemia are -

- i- Weakness
- ii- Intense hunger
- iii- Sweating
- iv- Palpitation
- v- Headache
- vi- Anxiety
- vii- Irritability
- viii- Cold skin
- ix- Diplopia
- x- High Pulse rate
- xi- Mental confusion

If the patient continues with low blood glucose level, he may go into coma. If Hypoglycemia is not treated person's death can occur.

The management of hypoglycemia in a diabetic patient is fairly simple when the diagnosis is done at an early stage. All that one may have to do is to have a meal, snack or even a beverage with some easily absorbable carbohydrates. In an emergency, one could also take some simple sugars or a drink with simple sugars.

Prevention:-

Diabetes mellitus has gained immense notoriety in the recent times, as it is fast becoming the world's largest silent killer. Despite thousands of people dying worldwide each year due to Diabetes mellitus, it is very unfortunate that no proper cure for the disease has been discovered yet. The problem with Diabetes mellitus is that it is very difficult to diagnose in the early stages. However, a person sticking to an Ayurvedic preventive strategy right from the beginning, can easily prevent this disease or control it if already suffering. Ayurveda preaches that-

"स्वस्थस्य स्वास्थ्यं रक्षणम्"

Meaning thereby that such measure should be taken so that a healthy person remains healthy and does not get affected by any disease and to achieve this goal advises-

"निदानं परिवर्जनम्"

Meaning thereby that the causative factors of the disease be avoided. According to Ayurveda routine plays a very important role in health. It is best to have a daily regimen, governing all daily actions such as the time one wakes up in the morning & the time one begins body purification & meditation.

As regards Madhumeha, Acharya Charak has advocated diet regimen, behavioral methods & exercise. He also emphasizes on mental hygiene for the prevention of Madhumeha.

Diet -

- One should reduce the calories and use of carbohydrates.
- Increase use of dietary fibers.
- Reduction in fat consumption.
- Change in Hamburger & Cola culture.
- Minimum use of alcohol.
- Use of antioxidants like Amla, Harad, Bahera, Guduchi (Giloy) etc.

Exercise -

- It is very important for a person with diabetes.
- It controls weight, blood sugar & high blood pressure.
- Aerobic exercises as walking briskly, cycling, dancing, swimming, jogging & some team sports etc. are mainly advocated for 30 minutes daily.
- As per Ayurvedic concept the people who walk regularly had less chances of being diabetic.

Yoga -

- Yoga can compliment the life style changes which are necessary to keep the symptoms under control.
- Yoga helps keeping the person in good health & well being.
- Yogic exercise generally tones & improves circulation particularly in extremities & reduces physical & mental stress.
- Asanas are beneficial in diabetics. Some important Asanas advocated are

paschimottanasana, Ardhamatsyendrasana, Mandookasana, Matsyasana, Surya namaskar, Vajrasana, Dhanurasana etc. these asanas can be done under the guidance of yoga expert.

- Nadi sodhan (Anulom-Vilom), kapal bhati, ujjai pranayam play a vital scientific & therapeutic role in diabetes.

Mental hygiene-

Ayurveda also says about mental hygiene as prevention of diabetes mellitus.

- Fear and nervousness dissipate energy and aggravate vata. Empower your will.
- Possessiveness, greed and attachment enhance kapha. Control it.
- Hate & anger create tension in the body. Control it.
- Excessive talking dissipates energy and aggravates vata. Avoid it.
- Worry is interest paid on trouble before it falls due.
- Have patience and live in true endeavour. The best will surely turn up.

Prevention of diabetes is possible to a great extent by the above mentioned Ayurvedic principles and one should take advantage of these simple, practical & cost effective measures.

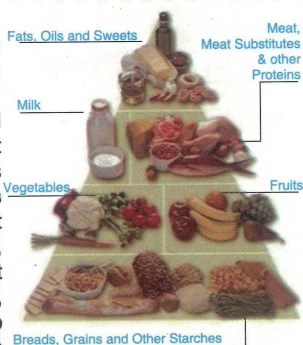
As diabetes affects nearly all the organs of the body a regular check of heart, eyes, kidneys, nerves and feet should be done every six months (twice a year).

Blood sugar should be checked regularly to assure that you are maintaining the normal range of blood sugar.

The Diabetes Food Pyramid:-

The diabetes food pyramid serves as a guide to decide as to which eatable can be decreased in the diet.

The diabetes food pyramid divides the food into six sections or groups. These groups are not similar and vary in size. The largest group includes beans, grains, starchy vegetables, pastas and lies at the bottom of the diabetes food pyramid. It means one can include more amount of grains, beans & starchy vegetables etc. in their daily diet than any other type of food. The smallest group, (that includes fats, sweets, alcohol) lies at the top of the diabetes food pyramid. It means that such food should be eaten in lesser amount by diabetics. Meanwhile, some fruits, milk, can be incorporated in diet depending upon the person's nutritional requirement, calorie needs and their life style.



Management of Madhumeha (Diabetes Mellitus):-

Three important aspects of therapy are Ahara(diet), vihar (exercise) and Ausadha (medicine).

Ahara:-

The proper diet is essential for diabetic treatment. Pathya that is dietary modification includes specific foods & drugs from natural sources, which are beneficial in therapy of diabetes. Few dietic treatments of madhumeha are-

1. Various preparation of yava (Barley), like sattu & oats, should be taken.
2. Yava (barley) should be soaked overnight with decoction of triphala (Harad, bahera, amla) and the same dried in daylight and roasted later. The flour of this roasted yava should be mixed with honey and taken with water.
3. Bengal gram (chana) is an important component of Indian diet that possesses an anti-diabetic properties. Chana with yava be floured, and the chapattis of same be consumed in lunch & dinner.
4. The patients with diabetes should eat green leafy vegetables like ghiya, tinda, torai, kheera, cabbage, lettuce, muli-patta, palak, capsicum etc. He should eat tomatoes, bitter gourd (karela) amla powder, methi powder, jambu beej powder & garlic.
5. Diabetics should eat proteins in moderation and prefer fish or soya protein and poultry to meat. High fat meat should be strictly avoided.

Vihar:-

Exercise recommendation includes yogasans (postures) and meditation. Asanas give stable sense of well being. The asanas stimulate pancreas and is favourable for the diabetic patients.

Ausadha(Medicine):-

From treatment point of view, Acharya Charak classified the diabetic patients on the basis of their body mass and strength into two categories.

- (i) Obese and strong
- (ii) Emaciated & weak

The line of treatment includes shodhana (purificatory therapy) and samana (palliative therapy).

Shodhana (Purification):-

In strong patients one should employ purificatory measures like administration of emetics, purgatives and enema. The purificatory therapies are selected, depending on the dominant dosha e.g. emetics in kaphaj, purgatives in pittaj and enema in vataj type. Depending on the intensity of dosha, mild, moderate or severe measures should be employed. In obese patients, emetics are contraindicated, but purgatives and enema may be given.

Before administering emetics & purgatives, preparatory therapy is a must, which includes snehan (oleation therapy) and Swedan (fomentation therapy).

Saman (Palliative therapy):-

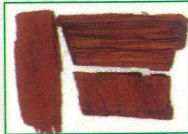
pacifying the vitiated dosha with internal medication. It includes fresh juices of herbs (swarasa), Churna (medicinal powder), medicated decoction (Kwatha), Asava (fermented decoction) etc.

HERBS COMMONLY USED FOR DIABETES

1- VIJAYASARA (Indian Kino)

Latin Name - Pterocarpus Marsupium

Parts used - wood



3- JAMUN (Jaman)

Latin name - Syzygium cumini

Parts used - seeds, leaves



5- KUNDURU (Ivy- gourd)

Latin name - Coccinia Indica

Parts used - leaves, fruit



7- NEEM (Margosa tree)

Latin name - Azadirachta Indica

Parts used - leaves, seeds



9- TEJA PATRA (Tamala tree)

Latin name - Cinnamomum tamala

Parts used - leaves



11- METHI (Fenu greek)

Latin name - Trigonella foenumgraecum

Parts used - seeds



2- GURMAR (Small Indian Ipecacuanha)

Latin name - Gymnema Sylvestre

Parts used - whole plant



4- KARELA (Bitter gourd)

Latin name - Momordia charantia

Parts used - seeds, fruits



6- BAEL (Bengal Quince)

Latin name - Aegle marmelos

Parts used - Leaves



8- HALDI (Turmeric)

Latin name - Curcuma domestica

Parts used - Rhizome



10- AMLA (Emblie Myrobalan)

Latin name - Emblica officinalis

Parts used - Fruits



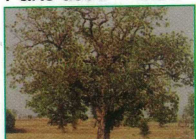
12- GILOYA (Gulancha Tinospora)

Latin name - Tinospora Cordifolia

Parts used - stem



13- MAHUWA (*Butter tree*)
 Latin name - *Madhuca Indica*
 Parts used - bark



15- KAITH (*wood apple*)
 Latin name - *Feronia limonia*
 Parts used - bark, fruits



17- SAPTA CHAKRA
 Latin name - *Salacia Chinensis*
 Parts used - root



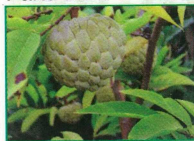
19- SADABAHAR (*Periwinkle*)
 Latin name - *Catharanthes roseus*
 Parts used - leaves, flowers



14- GOOLAR (*Cluster fig*)
 Latin name - *Ficus glomerata*
 Parts used - bark, latex, root



16- SHARIFA (*Custard apple tree*)
 Latin name - *Annona squamosa*
 Parts used - leaves



18- CHHITWAN (*Devil's tree*)
 Latin name - *Alstonia scholaris*
 Parts used - bark



20- SWEET HERB (*Stevia*)
 Latin name - *Stevia rebandiana*
 Parts used - leaves

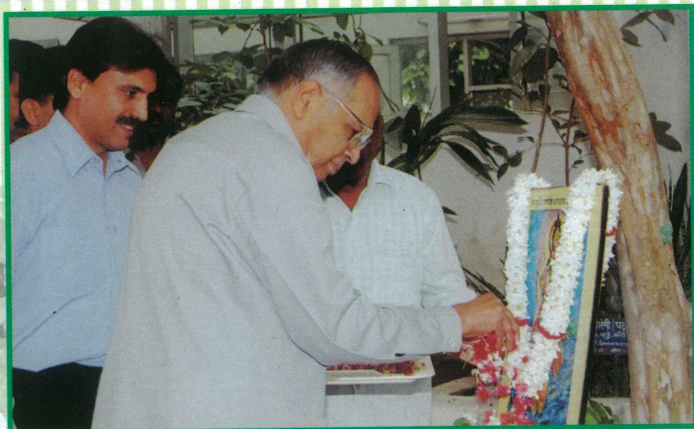


(It does not show direct anti-diabetic effect but its use as a sweetener could reduce the intake of sugars in diabetic patients. It is popularized as a calorie free herbal sweetener)

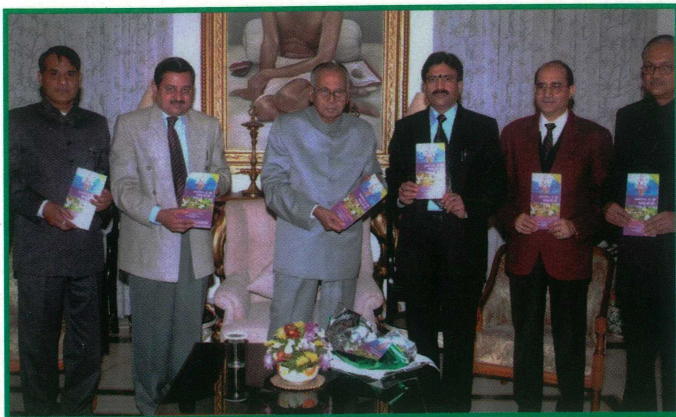
These herbs can be taken singly or in combination, in the form of churan, kwatha or swaras.

A tried, trusted and safest combination for diabetics- Gurmar leaves, Baelpatra, Tejpatra, Methi seeds, Jamun seeds, Bimbi (kundroo) leaves, Giloya (guduchi) stem, Amla fruits, Karela seeds, Neem seeds and Haldi taken in equal quantity in dried form, crushed and powdered. 5 gms of the powder should be taken two times a day, half an hour before lunch & dinner with normal tap water or the water kept in Vijaisar (Indian Kino) wood glass overnight.

*The script is the compilation from different scriptures/sources.
 The author pays his humble gratitude.*



19th October 2006 - H.E. Sri T.V. Rajeswar, Governor, Uttar Pradesh, offering flowers to Lord Dhanwantari on the occasion of Dhanwantari Jayanti.



15th February 2007 - H.E. Sri T.V. Rajeswar, Governor, Uttar Pradesh, releasing "Shatayu Ki Or" leaflet on the occasion of sixth anniversary of Dhanwantari Vatika.



31st July 2007 - Sri G.B. Pattanaik, Principal Secretary to Governor, Uttar Pradesh, planting a sapling.

Objective of Dhanwantari Vatika

The main aim of Dhanwantari Vatika established in the Governor house is to propagate the knowledge of medicinal plants among the masses. This is possible only when such types of Vatikas are established in different parts of the state and the awareness regarding the importance of these medicinal plants is spread among people, so that they can be benefited by the valuable heritage of our ancestors in the form of Ayurveda.

"Prefer Talking Sweet to Eating Sweet; the former will keep you healthy as well as others while the later may harm you."

Our Gratitude for the Co-operation of :

U. P. Agriculture Department

MAIN SCHEMES OF AGRICULTURE DEPTT. U.P. :-

- State Medicinal Plant Board has been established to promote cultivation of medicinal plants.
- Kisan Hiith yojna for reclamation of Usar, Barren and water logged lands of farmers.
- National food security mission to enhance wheat, rice and pulse productivity.
- Scheme for soil health improvement.
- 25-30% Cost subsidy on certified seed.
- 25% Cost subsidy on agriculture implement distribution.
- 50% Cost subsidy on plant protection instrument distribution.
- Farmers Training at various level.

For further information Contact local officers of Agriculture Deptt. or Kindly Call on free helpline no. 1551 or visit our site www.upagriculture.org

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