

**STUDY OF AYURVEDIC DIET AND PHYSICAL EXERCISE IN THE CURE AND PREVENTION OF MADHUMEHA**Ramesh M. Bansode<sup>1</sup>, Dr. Shaikh Pasha Ibrahim\*<sup>2</sup> and Dr. S. S. Sant<sup>3</sup><sup>1</sup>Professor and Guide, Department of Kriya Sharir, Government, Ayurved College, Nanded.<sup>2</sup>P.G. Scholar, Department of Kriya Sharir, Government Ayurved College, Nanded.<sup>3</sup>Professor and HOD, Department Of Kriya Sharir, Government Ayurved College, Nanded.**\*Corresponding Author: Dr. Shaikh Pasha Ibrahim**

P.G. Scholar, Department of Kriya Sharir, Government Ayurved College, Nanded.

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**ABSTRACT**

Diabetes mellitus is becoming fastest considerable diseases in the world. India has being estimated with fastest growing population of Diabetics. Diabetes is a most common metabolic disorder in India affecting more than 30 million people with type 2 diabetes. *Ayurveda* is a holistic health care system of medicine, which is more than 5000 years old and it describes Diabetes under the heading *Prameha*. It is a metabolic disorder may result in deficiency or dysfunction of the insulin production. *Madhumeha* is considered as a subtype under the *Vatika* type of *Prameha* and it is characterized by passage of urine with sweet taste like honey along with sweetness of whole body. The preventive measures in *Ayurveda* can prevent the disease. The main causative factor is said to be sedentary lifestyle, faulty diet and food habits. *Madhumeha* can be manage conservatively with exercise, diet and internal medication.

**KEYWORDS:** Madhumeha, Prameha, Ayurveda, Vatika.**INTRODUCTION**

Diabetes mellitus or type-2 diabetes, is one of the major non-communicable and fastest growing public health problem in the world. Sedentary lifestyle and stressful in the present scenario have invited many life-style disorders among them diabetes mellitus (DM) is one of the. In *ayurveda* diabetes mellitus is referred to as *Madhumeha* or *kshudrameha*, which literally means excessive urine with sweet test like honey. The number of people suffering from diabetes all over the world is increasing progressively. Among the 20 types of *Prameha* described in *ayurveda*, *Madhumeha* caused by vitiation of *vata* dosha has many similarities to diabetes mellitus. WHO estimates that more than 346 million people worldwide have DM. This number is likely to more than double by 2030 without any intervention. according to WHO by the year 2030 India would have around 80 million diabetic patients and would contribute 20% of world's diabetic population-1.

In *ayurveda* clinical features, etiopathogenesis and prognosis of *Madhumeha* resembles with that of diabetes mellitus. *Madhumeha* comprises of two words -*madhu* means sweetness/honey and *meh* means excessive urination. The synonyms mentioned in ayurvedic texts are *Ojomeha*, *Madhumeha*, *Kshudrameha*. *Madhumeha* is one the twenty *prameha*. if these *prameha* not cured properly then they might convert into *madhumeha* and become incurable. Diet is one the major factor now

linked to wide range of diseases including diabetes. The amount and type of food consumed is a fundamental determinant of human health. The health benefits of low fat vegetarian diet such as portion of vegetables, grains, fruits and legumes (excluding animal products) is seen in people with type-2 diabetes.

It was reported that exercise has a positive role in maintaining glycemic level with increasing the insulin sensitivity and also improving cardiovascular risk factors regards to type-2DM. irrespective of weight loss engaging in physical activity has been found to be associated with improved health outcome.-2

***Samprapthi* (pathogenesis)**

*Kapha* undergoing increase by the etiological factors, reaches various *dooshyas* like *rasa* (plasma), *rakta* (blood) etc. As there is *shaithilyata* (looseness) in the body and it being fluid predominant, spreads all over the body and gets vitiated, while spreading it get mixed with *Medas* (fat adipose tissue), *mamsa* (muscle) and *kleda* (body fluids) Body fluid which got vitiated draw them to the urinary bladder and produces *prameha*, similarly the *pitta* affects them, *vata* also bring about vitiation in them and produce *prameha*. -3.

Beta cells are responsible for the secretion of insulin hormone, for proper utilization of carbohydrates in our body insulin hormone is essential. If insulin is absent

carbohydrates accumulate in bloodstream in the form of glucose, then glucose collects in urine which is in fact one of the primary characteristic.

#### Samprapti ghathaka-4

*Dosha* (humor)-*vata, pitta, kapha*

*Dushya- meda, mamsa, kledarakta, vasa, majja, lasika, rasa, and ojas*

*Srotas* (channel)-*mootravaha*)

*Strotodushti-atipravrutti*

*Agni-dhatwagni*

*Udhbhavasthana-kostha*

*Vyaktasthana-mootravahasrotas* (urinary tract)

Faulty diet, sedentary habit, lack of exercise, lying down posture, excessive physical and mental work, continuous cheerfulness.

#### Types

According to *ayurveda madhumeha* has been divided into these categories:-5

*Kaphaj prameha* (further divided into 10 types)

*Pittaj prameha* (further divided into 6 types)

*Vataj prameha* (further divided into 4types)

On the basis of aetiology *ayurveda* diabetes mellitus into two types

- 1) *Sahaja* (Genetic) occurring from very beginning of young life has similarities with juvenile onset diabetes or insulin dependant diabetes.
- 2) *Apathyaj* (Acquired) due to unhealthy life style that occurs in old age and obese person has similarities with type-2 diabetes and its prevalence is more as compare to type-1diabetes.

#### Objective of Diet and Physicale Exercise in the Prevantion of Diabetes

Aim of *pathya* (diet) and physical exercise are

- 1) To improve health through balanced nutrition and exercise.
- 2) To achieve optimal blood glucose concentrations.
- 3) To achieve optimal lipid concentration.
- 4) To provide appropriate energy for normal growth and development.
- 5) To prevent, delay diabetes complications.

#### MATERIAL AND METHOD

Various *ayurveda* classics and studies published in journals related to diet (*pathya aahar*) and physical exercise to prevent *madhumeha* reviewed and analysed.

#### Diet

Role of *aahar* (diet) and exercise are important in diabetes to control blood sugar level as well as to prevent complications of this disease. In all classics *aahar dravyas* are described in detail and they cover all the food groups are -6

- 1) Cereals- *Yava* (*Hordeum vulgare*-Barley) different preparations of barley e. g. *Mantha, Odana*, etc. Wheat (*Godhooma*) can also be given. Old rice

(*poorana shali*) as one the cereals, which can be prescribed to the prediabetic patient and diabetic patient.

- 2) Pulses- *Mudaga* (Greengram) *Chanaka* (*Cicer arietinum*) *Kulattha* (*Dolichos biflorus*), *Adhaki* (*Cajanus cajan*) etc should be taken.
- 3) Vegetables - All types of bitter vegetables (*Tikta shaka*)e.g. *karela* (*Momordica chirantia*), *Patol* (*Vietnamase luffa*),*Methi* (*Trigonella foenum*), *Udumbar* (*ficus racemos*), *Rasone* (*Allium cepa*) etc. Should be given.
- 4) Fruits- *Amalki* (*phyllanthus emblic*), *Kapittha* (*Limonia acidissima*), *Tala phala* (*Borassus flabeliffer*), *Kamala* (*Nelumbo nucifera*, *Utpala* (*Nymphaea stellata*) etc. Should be given.
- 5) Seeds-*Kamala, utpala, jambu* seeds can be allowed to take.
- 6) Flesh-*Harina mamsa*, (Deer flesh) *Shashaka mamsa* (Rabbit flesh), also *kapotha, Titira* etc. birds flesh can be allowed to take
- 7) Liquor -Old wine (old *sura*) may be given.
- 8) Oils-Mustard oil (*Sarshapa taila*) is best, *Ingudi* (*Balanitis aegyptiaca*), *Ghritha* may be used in *pittaj prameha*.

#### Exercise

It is important to incorporate exercise into daily lifestyle (5day of walking for 45 minutes to maintain sugar level and induce fat loss and maintain levels.

#### Exercise plan

##### 1) Endurance activities (aerobic exercise)

Try these aerobic activities 3to5 days per week to strengthan your heart and lungs and to improve your blood circulation.

#### Walk briskly

- 1)  $\frac{3}{4}$  miles in 35 minutes (20 minutes per mile)
- 2) Miles in 20 minutes (15 minutes per mile) Join a mall walking program

#### Cycle

5miles in 30 minutes or  
4miles in 15 minutes  
Swim laps for 20 minutes  
Jump rope for15 minutes  
Play basketball  
Play a game for 30-40 minutes  
Dance fast (social dancing) for 30 minutes  
Skate for 30-40 minutes

#### Strengthen activities

Do strength activities 2to3days a week to build your muscles and bones, improve posture and balance and prevent osteoporosis.

Weight lifting  
Sit-up and Push-up  
Lifting and carrying groceries  
Climbing stairs

**DISCUSSION**

Patient with diabetes or normal subject who follows the proper diet and physical exercise regimen can easily prevent or control *madhumeha*.

The *katu tikta rasa pradhan aahar* control the vitiation of *kapha dosha* and *ushna guna pradhan aahar* control the vitiation of *vata dosha* and also control the *meda dhatu dushti* ultimately which control the progression of disease.

**CONCLUSION**

It is essential that information about maintaining and controlling weight, dietary modification, regular exercise and *yoga* is provided through different health education programs.

To conclude diabetes management through dietary intervention along with life style modification is the most effective way to prevent and reduce the risk of developing diabetes and its complications.

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