



**IJAYUSH**  
*International Journal of AYUSH*  
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY  
<http://internationaljournal.org.in/journal/index.php/ijayush/>

International Journal  
Panacea  
Research library  
ISSN: 2349 7025

Original Research Article

Volume 10 Issue 5

Sept-Oct 2021

## EFFECTS OF *PATHYAHARA* AND *VIHARA* IN *PRAMEHA* W.S.R. TO TYPE 2 DIABETES MELLITUS

Dr Archana Daundkar (Avhad)<sup>1\*</sup>, Dr Ganesh Avhad<sup>2</sup>

<sup>1</sup>PhD (Scholar), Dept of Kayachikitsa, College of Ayurveda, Bharati Vidyapeeth (Deemed University), Dhanakwadi Educational Campus, Satara Road, Pune, Maharashtra, India.

<sup>2</sup>Medical Practitioner /Researcher, Lotus Healthcare Clinic, 5 Bramha Chambers, 2010, Sadashiv Peth, Tilak Road, Pune, India.

\*Correspondence Author: [drarchanadaundkar@gmail.com](mailto:drarchanadaundkar@gmail.com)

### Abstract

Diabetes is a non-communicable disease which share common lifestyle related risk factors like physical inactivity & unhealthy diet. In current scenario Diabetic patients are not following proper diet & exercise; they only consume medicines, so only anti-diabetic medicine is unable to control sugar levels. Therefore *Pathyahara* and *Vihara* with antidiabetic medicines can control sugar levels in normal range along with improvement in quality of life. Present work aimed to assess the role of *Pathyahara* and *Vihara* in *Prameha* W.S.R. to type-2 diabetes mellitus. This clinical study showed decrease in intensity of symptoms, control of glyceimic parameters, and reduction in body mass index and enhancement in quality of life of the patient following *Pathyahara* and *Vihara* as compared with the patients those are not following *Pathyahara* and *Vihara*. This study suggested that *Pathyahara* and *Vihara* can play vital role in the prevention and treatment of *Prameha*.

**Keywords:** *Ayurveda, Diabetes, Prameha, Pathyahara, Vihara*

154

## Introduction

Ayurveda described polyuric diseases as *Prameha* and *Madhumeha* is one amongst them, equated to Type 2 Diabetes Mellitus. The description of the acquired form of *Prameha* referred to as *Apathyanimittaja Prameha*, which is very similar to type-2 diabetes. *Apathya Ahara* and *Vihara* play important role in the prevalence of *Madhumeha* [1-4]. WHO has declared that India will become the “Diabetes Capital of world” by the year 2025. The number of diabetic persons is expected to increase from 31 million in the year 2000 to 79 million by 2030. Previously a disease of the middle aged, elderly and urban areas (Type 2 Diabetes Mellitus) has recently escalated in all age groups and is now being seen in younger age groups including adolescents especially in high risk populations even in rural areas.

Type 2 diabetes is a largely preventable disease and intensive lifestyle interventions are not only highly effective but cost-effective too. *Pathya Ahara* and *Vihara* (Brisk walk) can play a major role in disease prevention [4-6]. Taking these facts into consideration, the present review was undertaken to bring into the limelight the role of suitable Ayurvedic dietary and lifestyle guidelines to prevent & manage diabetes in view of the available evidence based supporting data.

### Aim and Objective:

- ✓ To assess the effect of *Pathyahar & Vihara* (Brisk walking) in *Prameha* W.S.R. to Type-2 Diabetes Mellitus.

### MATERIALS:

Total 60 Patients of Type-2 diabetes were registered from OPD and special camps conducted by J.G.C.H.S. Ayurvedic Medical College, Ghataprabha, India. Patients were selected by random sampling procedure according to the classical signs, symptoms & investigations irrespective of their sex, religion, occupation and socio economic status.

### Study Design:

**Group A-** Sample size-30

Patients those were taking stable dose of antidiabetic medicines & was advised *Pathyahara* (Diet Chart) & *Vihara* (Brisk walking) & follow up was done after every 30 days for 6 months.

### **Group B-Sample Size-30**

Patients those were taking stable dose of antidiabetic medicines only & follow up was done after every 30 days for 6 months.

### **STUDY DURATION**

Total study duration was 180 days. In this follow up was done at 30<sup>th</sup> day, 60<sup>th</sup> day, 90<sup>th</sup> day, 120<sup>th</sup> day, 150<sup>th</sup> day and 180<sup>th</sup> day.

### **INCLUSION CRITERIA:**

- ✓ Age of patients in between 25 and 60 years (Male/Female)
- ✓ Patients having Fasting blood glucose ( 126 mg/dl-163 mg/dl )
- ✓ Patients having Post Prandial blood glucose (140 mg/dl-180 mg/dl)
- ✓ Patients having HbA1c Levels between 6.5%-7.5%
- ✓ Patients with diagnostic features of *Prameha* W.S.R. to Type-2 DM

### **EXCLUSION CRITERIA:**

- ✓ Patients with known type-1 or Gestational DM.
- ✓ Patients on Insulin or steroids.
- ✓ Patients with other systemic disorders like CVD, HIV, Hepatitis, Tuberculosis and Malignancy etc. and other complications of D.M will be excluded from the study.

### **Grading of Assessment Parameters**

The grading of assessment parameters was done as shown in **Table 1** while suggested diet chart (*Pathyahara*) depicted in **Table 2** for controlling symptoms of diabetes.

**Table 1: Grading of assessment parameters:**

Assessment Criteria	Grading Score			
	G1	G2	G3	G4
<b><i>Kshudhadikya</i></b>	Normal timely manifestation/can control hunger	Slightly increased/can control hunger up to 1 hour	Excessive hunger /cannot withstand hunger	Feels hungry even after consuming food
<b><i>Prabhuta mutrata</i></b>	3-5 times/ day; rarely at night	5-7 times/day and 1-2 times at night	7-9 times/ day and 3-4 times at night	More than 10 times/day, more than 4 times at night
<b><i>Dourbalya</i></b>	No weakness	Feels tiredness after strenuous work	Moderately feels tiredness even after mild work	Always associated with tiredness
<b><i>Trishna adikya</i></b>	Normal timely manifestation/can control thirst	Slightly increase/ can control thirst up to 1 hour	Excessive thirst/ cannot withstand thirst	Feels thirsty even after consuming water
<b><i>Atisweda</i></b>	Sweating after heavy work or fast movement or in hot season	Sweating after moderate work & movement	Profuse sweating after little work & movement	Excessive sweating at rest or in cold season

**Table 2: Model Diet Chart**

<b>Day Schedule</b>	<b>Diet contents</b>	<b>Calories</b>
<b>Early morning (5-6 AM)</b>	Herbal / Green Tea  Amalaki juice/ Aloe vera juice/ Green vegetable juice Methi ( Fenugreek seeds) Powder 5 g with warm water.	50 Cal
<b>Breakfast (8-9AM)</b>	1 cup sugarless tea with milk-60 cal  1 Small Bowl- Dalia/Wheat Flakes/Oats/Egg white/ Sprout bhel/ pohe/Upma/  1 Wheat Roti with vegetable-180 cal	200-300 cal
<b>Fruits (11-12 AM)</b>	Amla/Orange/Apple/Pears/Plum/Peach/ Pomegranate	60 cal
<b>Lunch (1-2 PM)</b>	1 bowl dal (Mudga/Arahar+Mudga/Masura)-150 cal  1 bowl green leafy vegetable-200 cal  Rice (Brown/Unpolished rice)-Small amount-50 cal  2-3 Roti (Wheat 1 part+Oats/ jawar ½ part)- 150-200 cal  Salad (Cucumber+Onion+Tomato etc)- 20 cal  Buttermilk/Lemon water ½ Glass  Post Lunch Daytime sleep contraindicated	500-600 cal

<p><b>Small meal (4-5PM)</b></p>	<p>1 cup sugarless tea with milk 50 cal Biscuits ragi/ Arrowroot- 2 biscuits-50 cal/ Fruit-60 cal Sprout bhel</p>	<p>150-250 cal</p>
<p><b>Dinner (7-8 PM)</b></p>	<p>It should be consuming like lunch but half in quantity</p>	<p>300-400 cal</p>
<p><b>Milk (9.30-10 PM)</b></p>	<p>150 ml Cow milk</p>	<p>100 cal</p>

**FOODS TO BE TAKEN (PATHYAHARA):**

✓ **Leafy vegetables:**

Fenugreek leaves, Spinach leaves, Onion leaves, Amaranth leaves and Mint leaves

✓ **Vegetables:**

Brinjal, Drumstick, Turnip, Carrot, Onion, Ladies Finger, Cucumber, Beans, Bitter gourd, Cabbage, Cauliflower, Peas, Tomato, Capsicum, Pumpkin, Radish, Turnip, Ridge gourd

✓ **Fruits:**

Guava, Papaya 2 or 3 slices, Apple 1/2, Melon, Jambu, Watermelon, Orange, Amla.

✓ **Milk products:**

Skimmed milk, Buttermilk

✓ **Pulses & Cereals:**

Whole grains like wheat, unpolished rice, Brown rice, Corns, Barley, Oats,

Ragi, Whole pulses like Beans, Legumes, Sprouts, Channa, Soya beans, Green peas, Green gram, Horse gram, Red gram.

✓ **Oil:**

Rice gram oil, Vegetable oil, Double refined oil, Mustard oil, Corn oil.

[In low quantity]

✓ **Non Vegetarian Diet:**

If needed Fish, Chicken, Egg white (occasionally)

**FOODS TO BE AVOIDED (APATHYAHARA):**

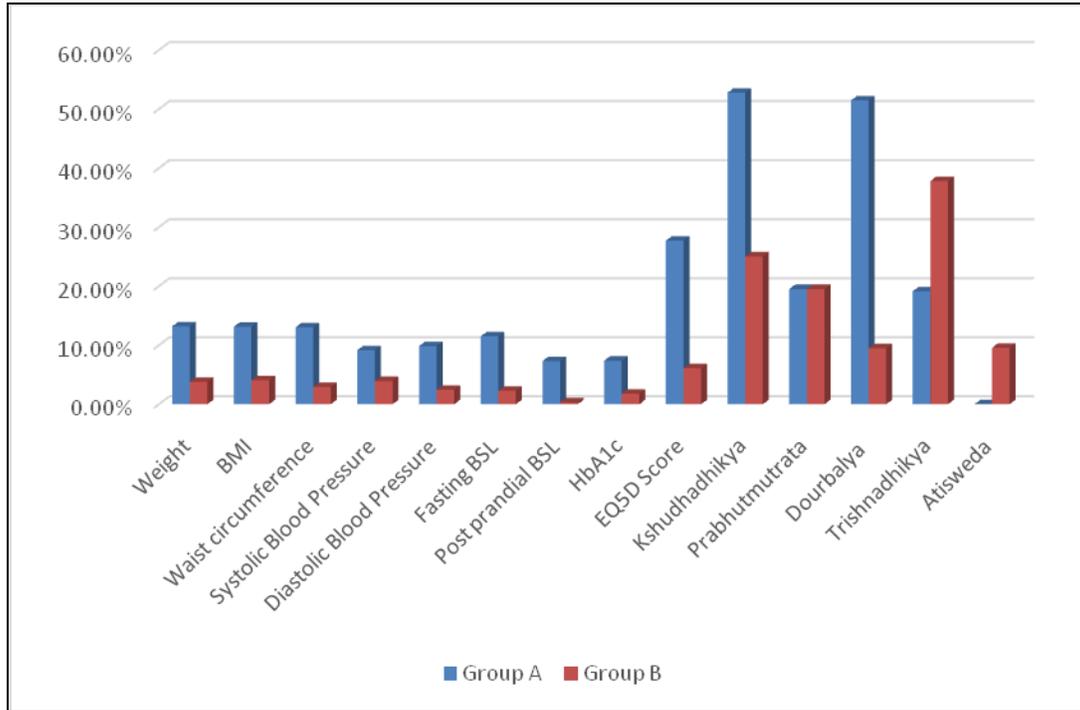
- ✓ **Sweets:** All varieties
- ✓ **Vegetables:** Beet root, Potato, Yam, Sweet potato.
- ✓ **Fruits:** Mango, Sapodilla, Banana, Dates, Pineapple, Custard Apple
- ✓ **Milk products:** Cheese, Butter, Paneer, Condensed milk.
- ✓ **Meat products:** Mutton, Beef, Pork, Liver
- ✓ **Oil products:** Dalda, Ghee, Vanaspathi, Recycled oils, Coconut oil, Palm oil.
- ✓ **Bakery Items:** Jam, Jelly, Cakes, Cool drinks, Chocolates, Cashew.
- ✓ **Cereals:** Polished rice, Maida, Sooji

**Result:**

Study observed marked improvement in disease parameters after conduction of *Pathyahara-Vihara*, patients those adopted disciplinary diet and life style acquired relief in disease symptoms as compared to the patients those have not advises *Pathyahara-Vihara*. The findings of study presented in **Table 3** and comparative results depicted in **Figure 1**.

**Table 3: Mean Percentage Improvement in Disease Parameters after Study:**

Parameter	Mean % improvement	
	Group A	Group B
Weight	13.20%	3.78%
BMI	13.14%	4.07%
Waist circumference	13.04%	2.91%
Systolic Blood Pressure	9.15%	3.92%
Diastolic Blood Pressure	9.85%	2.43%
Fasting BSL	11.5%	2.27%
Post prandial BSL	7.30%	0.31%
HbA1c	7.38%	1.77%
EQ5D Score	27.7%	6.09%
Kshudhadhikya	52.78%	25.04%
Prabhutmutrata	19.53%	19.53%
Dourbalya	51.47%	9.485%
Trishnadhikya	19.14%	37.81%
Atisweda	0.00%	9.57%
<b>Overall average improvement</b>	<b>18.23</b>	<b>9.21%</b>



**Figure 1: Comparative results after completion of study**

## Discussion

The results obtained from the above study showed that Group A which follows *Pathyahara & Vihara* showed better results than other group in terms of control of sugar level, weight control, improvement in quality of life & other co-morbidities associated with diabetes. It can also prevent further complications which may arise due to long standing diabetes. According to Ayurveda *Tikta, Kashaya* and *Katu Rasa Pradhana dravyas, Ushnaveerya, Laghu & Ruksha guna, Katu vipaka* and *Kapha vatahara* properties are selected because they are having attributes against *Madhura rasa*. The *Kashaya rasa* controls excess urination by its *Stambhana* and *Shoshaka* properties [7-9]. The *Katu, Tikta, Kashaya Rasa* and *Ushnaveerya* helps to maintains *Pachakagni, Dhatwagni* and corrects metabolism. *Laghu & Rukshana Gunas* helps for the *Shoshana* of *Bahudravashleshma* and reduction of vitiated *Meda* and *Kleda* [10-12]. These all effects of suggests diets & life style

162

(*Pathyahara & Vihara*) helps to prevent severity of diabetes and relives cardinal symptoms of disease.

## Conclusion

Sedentary lifestyle plays an important role in the development of type 2 diabetes. Exercise, dietary and lifestyle plans recommended preventing prognosis of disease. Brisk walking and *Pathyahara* play important role to manage the elevated sugar levels, decrease intensity of symptoms of diabetes, prevent future risk tendencies and enhances quality of life in Type 2 Diabetes Mellitus patients.

## References

1. Shabdakal padruma(1/20)- by raja radhakantadeva ,vol 3Choukhamba Sanskrit series, Varanasi.
2. Madhavnidan-by prof. Yadunandana Upadhyaya, Choukhamba Varanasi Edition 2012, M.N. 33/ 1; P. No.1
3. Madhavnidan- by prof. Yadunandana Upadhyaya, Choukhamba Varanasi Edition 2012, M.N. 33/1; P.No.1
4. Sushrut Samhita- By kaviraj Dr. Ambikadatta Shastri Choukhamba Sanskrit Sansthana, Edition 2012 nidansathana. 6/22- 23; P.No.55
5. Charaka Samhita byVd Harish Chandra Singh kushwaha ,Choukhambaorientale 2005 1<sup>st</sup> edition Cha. Su. 17/4; Cha Chi 6;Ch Ni 4/12-23
6. Sushrut Samhita- By Kaviraj Dr. Ambikadatta Shastri Choukhamba Sanskrit Sansthana, Edition 2012Su Ni 6; Su Chi 11, 12, 13.
7. Ashtang Hridya by Dr. Brahmanand Tripathi Choukhamba Pratishtana Edition 2007. Ash Hri. Ni. 10 ; Chi 12
8. Bhavaprakashanighantu by Pt Mishra published by Choukhamba Varanasi Edition 5<sup>th</sup>-Bha Pra Madh.Khan.chp.38;P.No.365A.San.nid.10/2,9;P.No.204,207

9. YogaratnakaraVd.LaxmipatiShastriChoukhambaorientale2008uttararda.sl  
1;P.No.63
10. Harit. Samhita. By Dr.Gyanendra Pandey published by Choukhamba Varanasi  
28/1
11. KashyapaSamhitaby Dr. P. V. Tiwari published by Choukhamba  
Varanasivedanadhyaya and chi.10/7-9.
12. Charaka Samhita by Vd Harish Chandra Singh kushwaha ,Choukhambaorientale  
2005 1<sup>st</sup> edition Chakrapanitika 35/56-58.