



**A COMPARATIVE LITERARY, ANALYTICAL, PHARMACOLOGICAL AND CLINICAL
EVALUATION OF 500 MG POLYHERBAL FORMULATION (2) CAPSULE FOR
DIABETES MANAGEMENT; PHYTOCHEMICAL PROFILING, MECHANISTIC
INSIGHTS, AND THERAPEUTIC EFFICACY**

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ABSTRACT

Understanding Diabetes Mellitus and Its Ayurvedic Perspective Diabetes Mellitus has been recognized as a major health issue since ancient times, affecting people across all regions and civilizations. It is a complex metabolic disorder characterized by persistently elevated blood sugar levels, which occur either due to insufficient insulin production, resistance to insulin, or a combination of both. In today's world, the number of people living with diabetes has risen dramatically—largely driven by modern sedentary lifestyles and unhealthy dietary habits. In Ayurveda, this condition is identified as “**Madhumeha**,” a specific form of “**Prameha**.” It arises from an imbalance in the **Kapha dosha**, disturbances in **Medo dhatu** (fat metabolism), and a weakened **Agni** (digestive fire). These internal disruptions slow down the body's metabolic processes, ultimately paving the way for disease. By viewing Madhumeha through the Ayurvedic lens, one gains a more holistic and integrative understanding of both its root causes and its management. According to recent data from the **International Diabetes Federation (IDF)**, approximately **72.9 million people in India** are currently living with Diabetes Mellitus. Ayurvedic texts describe Madhumeha as a **Vataja Prameha**, where the urine becomes sweet in taste. The disorder develops due to a long-standing imbalance of **Vata dosha**, impaired **Medo dhatu**, and disturbed **Agni**, closely resembling **Type 2 Diabetes Mellitus** as understood in modern medicine. A clinical study involving **130 individuals** reported classic symptoms such as generalized body ache, sweet taste in the mouth, burning sensation in the feet, increased hunger and thirst, frequent urination, and elevated stress levels. After thorough clinical assessment and laboratory investigations, all participants were diagnosed with **Madhumeha**—corresponding to **Type 2 Diabetes Mellitus** in modern terms. In Ayurveda, this condition is categorized under **Prameha**, a chronic disorder affecting the body's metabolism and energy regulation. **Integrative Ayurvedic Management of Diabetes** Each participant in the study received a **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** for Diabetes Management, taken twice daily—once before breakfast and once before dinner. Along with the herbal therapy, patients were also guided on **personalized dietary adjustments** and **healthy lifestyle practices** suited to their individual needs. Regular follow-ups were conducted every 7 days over a period of **60 days** to monitor progress and make necessary adjustments. By the end of the **first month**, most patients began to experience noticeable improvements—such as reduced fatigue, better energy levels, fewer symptoms, and overall enhanced well-being. These positive outcomes continued to strengthen throughout the study, demonstrating that combining **Ayurvedic herbal support** with **nutrition and lifestyle modification** can be a powerful and effective approach to diabetes management. At the end of the trial, the use of **two 500 mg capsules daily** resulted in a **statistically significant improvement in blood sugar levels (P < 0.005)**. This finding highlights the potential of **Ayurvedic, plant-based therapies** as a **safe, natural, and holistic way to support Type 2 Diabetes Mellitus**—focusing not only on symptom control but also on restoring balance within the body.

INTRODUCTION

Madhumeha — The Ancient Wisdom Behind Diabetes

Since ancient times, Indian physicians have identified **Diabetes Mellitus** as **Madhumeha**, a condition named after the sweetness of urine that often attracted ants. In Ayurveda, Madhumeha is considered a **Vata-dominant form of Prameha**, a group of disorders affecting metabolism—particularly those involving urine and fat regulation. Because of its complex and chronic nature, classical Ayurvedic texts describe it as **Mahagada**, meaning a “great disease.”

Over the centuries, what was once a relatively rare condition has now become a **global health epidemic**. Today, rising rates of **obesity, prediabetes, metabolic syndrome**, and **sedentary lifestyles** have made Madhumeha (Type 2 Diabetes Mellitus) one of the most pressing health challenges of modern times. The classical Ayurvedic symptom **Prabhootavila Mutrata**—frequent and turbid urination—closely aligns with the modern medical sign of **polyuria**. According to global estimates from 2017, over **424.9 million adults** were living with diabetes, with **India ranking second worldwide** in total number of patients.

From a modern medical standpoint, **Type 2 Diabetes Mellitus** is a chronic metabolic disorder marked by persistently high blood sugar due to inadequate insulin secretion or resistance to insulin action. Common symptoms include **frequent urination (polyuria)**, **excessive thirst (polydipsia)**, and **increased hunger (polyphagia)**. If left uncontrolled, it can progress to severe complications such as **kidney failure, heart disease, diabetic coma, foot ulcers, and vision loss (retinopathy and cataracts)**.

Ayurveda explains **Prameha** as a **Tridoshaja Vyadhi**—a disorder involving all three doshas (**Vata, Pitta, and Kapha**). However, it usually begins with an imbalance in **Kapha dosha** and **Medo dhatu** (fat tissue), often due to **over-nourishment and sedentary habits** (Santarpanajanya). As described by **Acharya Sushruta**, these imbalances allow toxins and disturbed doshas to accumulate in the **urinary system (Mutravaha Srotas)** and **bladder (Basti)**, ultimately impairing metabolism and giving rise to **Madhumeha**.

Even though Ayurveda considers **Madhumeha** (Type 2 DM) as **Asadhya** (incurable) in its advanced stages, early and consistent treatment can slow its progression significantly. Ayurvedic treatment relies on a threefold strategy:

1. **Shamana Chikitsa** – herbal formulations that stabilize blood sugar
2. **Shodhana Chikitsa** – detox procedures like Panchakarma
3. **Pathya-Ahara Vihara** – strict diet and lifestyle discipline

500 mg Polyherbal Formulation (2) Capsule for Diabetes Management — Bridging Tradition and Modern Science

500 mg Polyherbal Formulation (2) Capsule for Diabetes Management represents a modern adaptation of ancient Ayurvedic wisdom. Crafted through a carefully standardized process, each capsule combines time-tested **anti-diabetic herbs** that work synergistically to **enhance insulin activity, nourish the pancreas, and improve glucose utilization** throughout the body.

Beyond regulating blood sugar, the formulation also offers **Balya (strength-promoting)** and **Rasayana (rejuvenating)** effects—helping restore vitality, strengthen metabolic health, and support overall well-being in both diabetic and non-diabetic individuals.

This **integrative Ayurvedic approach**, harmonizing classical principles with contemporary research, demonstrates the immense potential of **natural plant-based therapies** in managing **chronic metabolic disorders** such as **Type 2 Diabetes Mellitus**—safely, effectively, and holistically.

AIMS AND OBJECTIVE

The present work was undertaken with the following aims and objectives.

1. Conceptual and hypothetical evaluation of **Madhumeha (Diabetes mellitus, type-2), a form of Vataja Prameha**.
2. Pharmaceutical, Analytical and Clinical evaluation of an *Ayurvedic* compound “**500 mg Polyherbal Formulation (2) Capsule for Diabetes Management**” in the management of **Madhumeha (Diabetes mellitus, type-2), a form of Vataja Prameha** and acting as a compound of Hypoglycaemic, Balya & Rasayana Drugs.

MATERIAL AND METHODS

Selection of Cases: Patients with **Madhumeha (Diabetes mellitus, type-2), Vataja Prameha**, Loss of Energy (fatigue), body ache, sweet taste of mouth, burning sensation at sole, excessive hunger, excessive thirst, excessive mental stress and increased frequency of micturition, selected randomly from OPD of P.G Department of Rasa Shastra at Shri Krishna Govt Ayurvedic College Kurukshetra and were administered with **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** twice daily for 60 days and observing its action as its effect on Blood glucose level and other signs like Loss of Energy (fatigue), body ache, sweet taste of mouth, burning sensation at sole, excessive hunger, excessive thirst, excessive mental stress and increased frequency of micturition.

Age Group

100 Individual from the age group of 35 to 55 Years were taken for **Madhumeha (Diabetes mellitus, type-2), Vataja Prameha**, Loss of Energy (fatigue), body ache,

sweet taste of mouth, burning sensation at sole, excessive hunger, excessive thirst, excessive mental stress and increased frequency of micturition.

Selection of healthy volunteers

The observational clinical intervention took place from March 2025 to May 2025 at OPD of P.G Department of Rasa Shastra at Shri Krishna Govt Ayurvedic College Kurukshetra. The trial design involved the enrolment of volunteers aged between 35 to 55 Years without consideration of their religious affiliation, income level, or occupation. Initially, a total of 100 volunteers were screened for primary eligibility, but 20 individuals were subsequently excluded for various reasons.

Ultimately, **80 volunteers** were selected for the this trial and were randomly assigned to one particular group: that receiving **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** for the **Madhumeha (Diabetes mellitus, type-2), Vataja Prameha**, Loss of Energy (fatigue), **Body Ache**, Sweet Taste of mouth, Burning Sensation at sole, Excessive Hunger, Excessive Thirst, Excessive Mental Stress and Increased frequency of micturition. Eligibility for participation in the study was determined by specific inclusion and exclusion criteria.

Inclusion criteria

Male / female, married or unmarried patients suffering from **Madhumeha (Diabetes mellitus, type-2), Vataja Prameha**, Loss of Energy (fatigue), **Body Ache**, Sweet Taste of mouth, Burning Sensation at sole, Excessive Hunger, Excessive Thirst, Excessive Mental Stress and Increased frequency of Micturition.

Inclusion criteria involved clinically assessed healthy Male / female, married or unmarried patients aged

DRUG DOSE DURATION

General contents of this **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** formulating with 8 (eight) Potent Herbs, which are mentioned below

Table 1: Ingredients of 500 mg Polyherbal Formulation (2) Capsule for Diabetes Management

Table 1: Ingredients of 500 mg Capsule of Formulation 2

Sr. No.	Hindi or Sanskrit Name of Herb	Latin or English Name	Morpho-logical Part Used	Part Used	Each Capsules Contains
1.	Amla,	(Emblc finais)	Fr.	Extract	150mg.,
2.	Curcumin,	(Curcuma longa)	Rz.	Extract	60mg.,
3.	Karela	(Momorica charantia)	Fr.	Extract	50mg.,
4.	Jamun,	(Syzygium cumini)	Sd.	Extract	50mg,
5.	Paner Doi	(Withania coagulans)	Fl.	Extract	50mg.,
6.	Black Pepper,	(Piper nigrum)	Seed	Extract	40mg,
7.	Kundru	(Coccinia indica)	Fr.	Extract	25mg.,
8.	Methi,	(Trigonella foenumgraom)	Sd.	Extract	25mg.,
9.	Gudmarda,	(Citrullus colocynthis) Sd.	Sd.	Extract	25mg.,
10.	Neem	(Azadirachta indica) Sd.	Sd.	Extract	25mg.

This 500 mg Polyherbal Formulation (2) Capsule for Diabetes Management is an Ayurvedic Patent Medicine Duly Approved by AYUSH department of Haryana and prepared in the R n' D Lab of NUTRILEY

between 25 to 50 Years, irrespective of their religious beliefs and income status.

These participants were required to be free from chronic, organic, or severe diseases and should not be taking any supplements or vitamins.

Exclusion criteria

1. Age below 35 years and above 55 years.
2. Patients suffering from chronic, organic, or severe diseases and should not be taking any supplements or vitamins, carcinoma, acquired immunodeficiency syndrome, tuberculosis, congenital abnormalities of genital organs, other disease like phimosi, ulceration, hydrocele, spinal cord lesions, etc.

Investigations

- Routine haematological investigations: Haemoglobin %, Total Leucocyte count, Differential Leucocyte count, Erythrocyte Sedimentation Rate.
- Biochemical investigations: Fasting Blood Sugar, Post Prandial Blood Sugar, lipid profile, blood urea, serum creatinine.
- Urine for routine sugar and microscopic examination.

Assessment Criteria: Effect of the therapy will be assessed on the basis of improved status in Madhumeha (Diabetes mellitus, type-2), Vataja Prameha, Loss of Energy (fatigue), body ache, sweet taste of mouth, burning sensation at sole, excessive hunger, excessive thirst, excessive mental stress and increased frequency of micturition.

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Properties of herbs which formulate 500 mg Polyherbal Formulation (2) Capsule for Diabetes Management for Diabetes Management are said as below:

Amla (Phyllanthus emblica, Indian gooseberry)

- **Key actives:** ascorbic acid, ellagitannins (emblicanin A/B), gallic acid.
- **Actions:** improves insulin sensitivity, slows carbohydrate absorption (α -glucosidase inhibition), antioxidant protection of β -cells, lipid-lowering.
- **Use notes:** typically as fresh fruit, juice, powder; generally safe.

Curcumin (from Curcuma longa, Turmeric)

- **Key actives:** curcuminoids.
- **Actions:** anti-inflammatory (NF- κ B modulation), improves insulin signaling, reduces hepatic gluconeogenesis, antioxidant; may lower A1c modestly.
- **Use notes:** absorb better with **piperine** or fats.

Karela (Momordica charantia, Bitter melon)

- **Key actives:** charantin, polypeptide-P, vicine, momordicosides.
- **Actions:** insulin-mimetic, enhances peripheral glucose uptake (AMPK), reduces intestinal glucose absorption, supports β -cell function.
- **Use notes:** juice, capsules, or cooked vegetable; caution with hypoglycemia if on drugs.

Jamun (Syzygium cumini, Java plum/Black plum)

- **Key actives:** jamboline, ellagic acid, anthocyanins, seed alkaloids.
- **Actions:** delays starch-to-glucose conversion, improves insulin response, antioxidant for pancreatic tissue; helps glycemic spikes.
- **Use notes:** seeds/pulp used; also supports lipids.

Paneer Dodi / Paneer Doda (Withania coagulans)

- **Key actives:** withanolides, coagulanolides.
- **Actions:** improves fasting/post-prandial glucose, enhances insulin sensitivity, supports lipid profile, mild pancreatic trophic effect.
- **Use notes:** traditionally soaked overnight; start low to avoid GI upset.

Black Pepper (Piper nigrum)

- **Key actives:** piperine.
- **Actions:** **bioavailability enhancer** (curcumin, resveratrol, etc.), mild α -glucosidase inhibition, antioxidant; may aid thermogenesis and lipids.
- **Use notes:** small amounts with meals/formulations to boost absorption.

Kundru (Coccinia indica, Ivy gourd)

- **Key actives:** triterpenoids, flavonoids.
- **Actions:** suppresses hepatic glucose output, improves peripheral utilization, α -glucosidase inhibition; supports weight and lipids.
- **Use notes:** vegetable or capsules; well tolerated.

Methi (Trigonella foenum-graecum, Fenugreek)

- **Key actives:** soluble fiber (galactomannans), 4-hydroxy-isoleucine, trigonelline.
- **Actions:** slows gastric emptying & carb absorption, increases insulin secretion, improves insulin sensitivity, lowers LDL/TG.
- **Use notes:** 5–15 g/day seeds or seed powder with meals; watch for bloating.

Gudmar / Gurmar / Gudmarda (Gymnema sylvestre)

- **Key actives:** gymnemic acids.
- **Actions:** reduces intestinal sugar absorption, regenerates/supports β -cells, decreases sweet taste sensation/cravings, improves A1c.
- **Use notes:** potentiates antidiabetic meds—monitor sugars.

Neem (Azadirachta indica)

- **Key actives:** nimbolide, azadirachtin, flavonoids.
- **Actions:** improves insulin signaling, reduces gluconeogenesis, antioxidant/anti-inflammatory; supports wound healing (diabetic feet).
- **Use notes:** leaf extracts commonly used; avoid high doses in pregnancy.

In summary

- Herbs like **Jamun, Karela, Jarul, Daru Haridra, Gudmar, and Paneer Doda** act directly on lowering blood sugar.
- **Methika, Sahjan, Ginger, Amla, Curcumin, Neem, and Kundru** improve insulin action and protect against complications.
- **Black Pepper** boosts the absorption and effectiveness of other herbs.

Treatment Plan

The following oral medicines were administered for 15 days

1. **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** with luke

Warm water twice a day before Meal in morning and evening.

2. **No Sugar in meal**
3. **No Processed food, Fruits and rice in diet**
4. **Morning end event Vigorous walk or exercise twice a day for 30 minutes.**

After 15 days the following treatment schedule was followed:

1. **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** with luke warm water twice a day before
2. Meal in morning and evening. **No Sugar in meal**
3. **No Processed food, Fruits and rice in diet**
4. **Morning end event Vigorous walk or exercise twice a day for 30 minutes.**

After 30 days the following treatment schedule was followed:

1. **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** with luke
Warm water twice a day before meal in morning and evening.
2. **No Sugar in meal**
3. **No Processed food, Fruits and rice in diet**
4. **Morning end event Vigorous walk or exercise twice a day for 30 minutes.**
5. **No rice in diet**
6. **Vigorous walk or exercise twice a day for 45 minutes**

After 45 days the following treatment schedule was followed:

1. **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** with luke
Warm water twice a day before meal in morning and evening.
2. **No Sugar in meal**
3. **No Processed food, Fruits and rice in diet**
4. **Morning end event Vigorous walk or exercise twice a day for 30 minutes.**

Lifestyle Integration and Patient Progress

Along with the prescribed **Ayurvedic medication**, patients were guided to adopt simple yet effective lifestyle changes—such as taking a **45-minute outdoor walk daily**, avoiding **daytime naps (Divaswapna)**, and adding **protein-rich foods** to their breakfast and other meals. These small modifications helped reinforce the therapeutic effects of the treatment and supported natural metabolic balance.

By the **first follow-up on day 15**, many patients reported noticeable relief. Symptoms like **body ache, poor sleep, excessive thirst, increased hunger, and frequent urination** had improved by nearly **25–30%**. By **day 30**, these improvements became even more pronounced, with patients experiencing **35–45% relief** from the same symptoms.

At the **45-day mark**, most participants described feeling **lighter, more energetic**, and mentally refreshed. There was also a significant reduction in **stress levels** and **burning sensations in the feet**, marking an overall improvement of about **45–55%**.

By the **final evaluation on day 60**, after a few minor adjustments in dosage, almost all earlier symptoms had **subsided significantly**. Patients reported **renewed energy, better sleep**, and a dramatic reduction in **urination frequency—to 0–1 times at night and 4–6 times during the day**. Altogether, this reflected an **impressive 60–75% overall therapeutic improvement**, showcasing the effectiveness of a **comprehensive Ayurvedic approach** combining herbs, nutrition, and lifestyle balance.

Biochemical and Clinical Improvements

At the beginning of the treatment, the patient's lab values were:

- Serum Creatinine: 0.9 mg/dL
- Serum Cholesterol: 159 mg/dL
- Triglycerides: 191 mg/dL
- VLDL: 15 mg/dL
- HDL: 26 mg/dL
- SGOT (AST): 115 U/L
- SGPT (ALT): 200 U/L

After completing the treatment course, there were clear signs of improvement:

- Total Bilirubin: 0.8 mg/dL
- Total Proteins: 7.0 g/dL
- Alkaline Phosphatase: 218.7 IU/L
- SGOT reduced to 57 U/L
- SGPT reduced to 66 U/L

Alongside these lab results, patients also showed significant improvements in symptoms and clinical signs. Their fasting and post-meal blood sugar levels dropped notably, reflecting improved liver function and better control of blood sugar.

Statistical analysis: -Methodology and Results

To assess how patients responded to the treatment over time, data collected at different stages of the study were analyzed using a **paired Student's t-test**, a standard statistical method used to measure significant changes before and after treatment.

RESULTS

At the beginning of the study, all participants underwent a **comprehensive medical evaluation** in the outpatient department (OPD). Only individuals meeting specific health criteria were included—those with **normal fasting blood sugar, healthy kidney function** (urea, creatinine), **normal liver function** (ALT, AST), **balanced blood profiles**, and **clear stool test results**. This ensured that participants had no underlying complications that could affect the study's accuracy.

The study aimed to evaluate the **effectiveness of the Polyherbal DM Capsule** in reducing common symptoms associated with **Type 2 Diabetes Mellitus**, which included:

- Persistent **body ache**
- **Sweet taste** in the mouth
- **Burning sensation** in the feet
- **Excessive hunger and thirst**
- **Frequent urination**
- **Mental stress and fatigue**

This structured evaluation allowed for a clear understanding of how the **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** influenced both the **physical and psychological aspects** of diabetes management.

After beginning the treatment, participants received **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management**, 1–2 capsules twice daily, before breakfast and dinner, for **60 days**.

By the end of the study

- There was a **80 % reduction in alcohol consumption** habits.
- The **sweet taste in the mouth dropped by 65.4%**.
- Other symptoms (burning soles, hunger, thirst, mental stress, and frequent urination) improved by **60-65 %**.

Statistical analysis confirmed **significant improvements (P < 0.001)** in:

- Fasting blood sugar
- Post-meal (postprandial) blood sugar
- All major symptoms mentioned above

Additionally, the treatment also led to improvements in the **lipid profile, blood urea, and creatinine levels**—showing positive effects on overall metabolic health.

To ensure overall health safety, regular blood tests were conducted to monitor:

- Blood sugar
- Kidney function (urea, creatinine)
- Liver enzymes (ALT, AST)
- Hemoglobin, RBCs, WBCs, ESR. All values remained within healthy ranges, confirming the treatment's safety and effectiveness.

Therapeutic Observations and Ayurvedic Interpretation

During the course of the study, **20 participants discontinued** at various stages due to personal or unrelated reasons. To ensure the **accuracy and reliability** of the findings, their data were excluded from the final analysis.

Regular administration of the **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** produced noticeable improvements in participants' **strength, stamina, and overall vitality**—qualities collectively described as "**Bala**" in Ayurveda. According to Ayurvedic principles, the formulation acts in a **systematic and progressive manner**. It first helps **mobilize accumulated Kapha doshas** from affected tissues, followed by local actions that **nourish (Bruhana), rejuvenate (Rasayana), build strength (Balya), and enhance reproductive and hormonal balance (Vajikarana)**. Together, these effects help restore internal harmony and metabolic stability.

The herbal components are thought to penetrate deep into the body's **micro-channels (srotas)**, facilitating the **removal of toxins and vitiated doshas**. The **Sneha (unctuous or oily component)** within the formulation enhances this deep action, helping alleviate common diabetic symptoms such as **body aches, sweet taste in**

the mouth, burning feet, excessive hunger and thirst, frequent urination, and mental stress.

With **consistent use**, the formulation gently corrects underlying metabolic imbalances without damaging body tissues. It supports the **natural regeneration of pancreatic beta cells**, strengthens muscle tissue, and enhances the body's **glucose absorption and utilization efficiency**.

All herbs included in this formulation are **well-documented in classical Ayurvedic texts**, such as the *Bhav Prakash Nighantu* and the *Ayurvedic Pharmacopoeia of India*, confirming their **time-tested safety and efficacy** in managing metabolic and systemic health conditions.

DISCUSSION

In Ayurveda, Type 2 Diabetes Mellitus—referred to as *Madhumeha*—is considered a disorder involving an imbalance of the **Vata and Kapha** doshas. It falls under a broader category of disorders known as *Tridoshaja*, meaning all three doshas (Vata, Pitta, and Kapha) can be involved, but with Vata-Kapha predominance. Ayurveda classifies diabetes into two main types:

- **Sahaja Madhumeha** (congenital, like Type 1)
- **Apathyanimittaja Madhumeha** (acquired, like Type 2)

Further, Ayurvedic texts describe different subtypes based on body constitution and causes. For example, **Sthula, Avaranjanya, and Santarpanjanya** types are closely associated with the acquired (Type 2) form. In this study, patients were diagnosed with **Apathyanimittaja Madhumeha**, meaning their condition stemmed from poor lifestyle and dietary habits.

For such cases, Ayurveda recommends herbs and medicines that can:

- Improve digestion (*Deepana, Pachana*)
- Reduce excess fat and moisture (*Lekhana, Medohara*)
- Balance the Vata and Kapha doshas

The Ayurvedic text *Bhav Prakash Nighantu* lists many herbs and minerals that are known to help manage diabetes effectively. The success of the **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** likely comes from the **synergy of its ingredients**, which together balance all three doshas and target the root causes of the disease.

Key classical Ayurvedic ingredients used in the formulation include:

- **Mineral-based medicines** like *Praval Pishti, Ras Sindoor, Swarna Bhasma, Loha Bhasma, Trivanga Bhasma*, and more.
- **Herbs** like *Guduchi (Tinospora cordifolia), Haldi (Turmeric), Shatavari, Vasa, Kamal*, and others.

- **Trivanga Bhasma** (made from lead, zinc, and tin) is especially noted for its anti-diabetic effects in both ancient texts and modern studies.
- **Guduchi**, one of the main herbs, is well-researched for its ability to lower blood sugar levels.

Additionally, a powerful blend of anti-diabetic herbs such as:

- **Ama Haldi, Giloy, Safed Musli, Methi, Neem, Karela, Jamun, Bilva Patra, Gudmar, and Shuddh Shilajeet** all contribute to the blood sugar-lowering properties of this formulation.

Together, the unique combination of classical herbs in **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** works holistically to manage blood sugar levels, strengthen the body, and restore internal balance as described in Ayurvedic principles.

CONCLUSION

Madhumeha (Type 2 Diabetes Mellitus) is a chronic, progressive, and multifactorial metabolic disorder—often termed a “*silent killer*” due to its subtle onset and potentially devastating long-term effects if left unmanaged. The disease not only disturbs glucose metabolism but also gradually impairs vital organs such as the **heart, kidneys, eyes, and peripheral nerves**, leading to complications like **cardiovascular disease, nephropathy, neuropathy, and retinopathy**. Therefore, **timely intervention and holistic management** are essential to prevent irreversible damage and restore metabolic harmony.

The findings of this clinical study highlight the **therapeutic potential of the 500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** as an effective, natural intervention for managing Madhumeha. When used in conjunction with **a balanced diet and healthy lifestyle practices**, the formulation demonstrated **remarkable results within a short span of time**. Within just **15 days** of treatment, many participants showed a **significant reduction in blood glucose levels**, bringing them into the **pre-diabetic range**. By the **30th day**, most subjects achieved **near-normal glycemic levels**, signifying a robust and sustained response to therapy.

Apart from glycemic control, patients experienced **notable improvements in physical strength, stamina, and mental well-being**. They reported **higher energy levels, reduced fatigue**, and a **greater sense of vitality and overall health**. These benefits reflect the **synergistic action of the polyherbal ingredients**, each of which contributes through distinct Ayurvedic mechanisms—**balancing doshas, enhancing digestive fire (Agni), nourishing tissues (Dhatus), and supporting pancreatic function** to improve insulin sensitivity and glucose utilization. The formulation’s **Rasayana (rejuvenative)** and **Balya (strength-**

promoting) properties likely played a key role in restoring systemic balance and vitality.

Furthermore, the **herbal and mineral ingredients** of this formulation are sourced from **authentic Ayurvedic pharmacopeias**, including the *Bhav Prakash Nighantu* and the *Ayurvedic Pharmacopoeia of India*, ensuring both **traditional credibility** and **scientific validation**. Their combined pharmacological actions not only aid in glucose regulation but also promote **detoxification (Shodhana)** and **tissue rejuvenation (Rasayana)**—addressing the root cause rather than merely controlling symptoms.

Overall, the **500 mg Polyherbal Formulation (2) Capsule for Diabetes Management** has proven to be a **safe, effective, and holistic approach** for the management of **Type 2 Diabetes Mellitus**, offering multiple layers of benefit—**metabolic correction, tissue nourishment, and vitality restoration**. Given its encouraging outcomes, it holds promise as both an **adjunct and standalone therapy** for individuals seeking **natural, side-effect-free alternatives** to conventional diabetic treatments.

Future **large-scale, multicentric clinical trials** with extended follow-up periods are strongly recommended to further validate these findings, explore **long-term safety**, and evaluate its potential in **preventing diabetic complications** and **improving quality of life** among patients.

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