

Formulation and Preparation of Treatment Diabetic-Disease Herbal Churna

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ABSTRACT

Herbal tablets, derived from natural plant-based ingredients, have gained significant attention as alternative remedies in modern healthcare. The growing interest in these products is driven by consumers seeking natural, non-synthetic options for managing various health conditions. This review paper provides a comprehensive overview of herbal tablets, focusing on their formulation, therapeutic efficacy, safety, and the challenges associated with their use. Medicinal herbs have several active substances with pharmacological and prophylactic properties that can be used in the treatment of hypertension. This review presents an overview of some medicinal plants that have been shown to have hypotensive or antihypertensive properties. Traditional Medicines derived from medicinal plants are used by about 60% of the world's population. This review focuses on Indian Herbal drugs and plants used in the treatment of diabetes, especially in India. Traditional Medicines derived from medicinal plants are used by about 60% of the world's population. This review focuses on Indian Herbal drugs and plants used in the treatment of diabetes, especially in India. **Objectives:** Chronic cough is a frequent condition worldwide that significantly impairs quality of life. Herbal medicine (HM) has been used to treat chronic cough due to the limited effectiveness of conventional medications. This study aimed to summarize and determine the effects of HM on patients with chronic cough.

Keywords: inhibits Antioxidants, Anti-inflammatory, Antimicrobials, Antidiabetic, Anti-tumor, Anticancer, Antiglycemic

INTRODUCTION

Diabetic: -

In the last few years there has been an exponential growth in the field of herbal medicine and these drugs are gaining popularity both in developing and developed countries because of their natural origin and less side effects. Many traditional medicines in use are derived from medicinal plants, minerals and organic matter [1]. A number of medicinal plants, traditionally used for over 1000 years named rasayana are present in herbal preparations of Indian traditional health care systems [2]. In Indian systems of medicine most practitioners formulate and dispense their own recipes.

Ingredients: -

Neem Leaves: -



Azadirachta indica, commonly known as neem, margosa, nimtree or Indian lilac, is a tree in the mahogany family Meliaceae. It is one of the two species in the genus *Azadirachta*. Neem leaves are considered beneficial for diabetes as they contain compounds that may help lower blood sugar levels, improve insulin sensitivity, and manage symptoms, but they should complement, not replace, prescribed medication and lifestyle changes. Studies show neem extracts can reduce fasting glucose and HbA1c, while

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Ayurvedic traditions have long used neem for its potential anti-diabetic properties, though more large-scale research is ongoing.

Properties: -

Antimicrobial & Antifungal: Effective against various pathogens, including fungus causing dandruff (*malassezia*) and bacteria responsible for acne and plaque. **Anti-inflammatory & Anti-arthritic:** Contains compounds like quercetin and catechin, which reduce pain and swelling, making them useful for treating joint issues and skin allergies.

Immunity Booster: Enhances the body's natural defense mechanisms and helps combat infections.

Antioxidant: High content of antioxidants helps neutralize free radicals, reducing oxidative stress.

Blood Purifier: Traditionally used to detoxify the body and improve skin health.

Dermatological Agent: Treats skin diseases such as eczema, psoriasis, and scabies.

Digestive & Gastroprotective: Supports liver function, aids digestion, and can help treat stomach ulcers.

Insecticidal & Larvicidal: Known for controlling pests and killing

Benefits: -

Oral Health: Inhibits tooth plaque and gingivitis.

Anti-diabetic: May help lower blood sugar levels.

Neurological Health: Contains compounds with potential anti-Parkinson and anti-depressant effects.

Indian Tinospora: -



Indian Tinospora, most notably *Tinospora cordifolia* (also known as Guduchi or Giloy), is an ancient medicinal plant used in the Indian System of Medicines to treat various ailments like fever, jaundice, diabetes, skin disorders, and to boost immunity. Known for its antioxidant, anti-inflammatory, and immunomodulatory properties, it is available in various forms and is generally considered safe but may interact with blood sugar levels, making it important to consult a healthcare provider before use, especially if you have an autoimmune disease or are undergoing surgery.

Properties: -

- 1) Inhibits Antioxidants
- 2) Anti-inflammatory

Benefits: -

- 1) Boosts immunity
- 2) Treat chronic fever
- 3) Treat diabetes
- 4) Treat eye disorder

Dry-Dates: -



Dry dates have several health benefits that might make you choose them over fresh ones. Date fruits (*Phoenix dactylifera*) are nutrient-rich and serve as a natural remedy for many ailments. These stone fruits are rich in essential vitamins, minerals, and powerful antioxidants, improving digestion, boosting cardiovascular health and energy, and may even help combat anemia. Moreover, dried dates make your skin bright. This article discusses the benefits of dry dates, their nutritional profile, how to use them for maximum benefits, and any potential side effects.

Properties: -

- 1) Antioxidants
- 2) Provide quick energy

Benefits: -

- 1) Rich iron source
- 2) Rich calcium content
- 3) Maintain healthy skin
- 4) Repairs Damaged skin cells
- 5) Energy Booster
- 6) Bone health
- 7) Full of fiber

Cinnamon: -



Common Names: cinnamon, cinnamon bark, Ceylon cinnamon, cassia cinnamon

Latin Names: *Cinnamomum verum* (also known as *Cinnamomum zeylanicum* and *Laurus cinnamomum*), *Cinnamomum aromaticum* (also known as *Cinnamomum cassia*)

Cinnamon is a spice that comes from the dried bark of various species of *Cinnamomum* trees. Ceylon cinnamon (*Cinnamomum verum*), known as “true”

cinnamon, grows primarily in Sri Lanka. Cassia cinnamon (*Cinnamomum aromaticum*), grown in areas of southeastern Asia, is the most common type sold in North America. The bark, leaves, flowers, fruits, and roots of cinnamon have a long history of use in traditional medicine and cuisine in many parts of the world, including China, India, and Persia (Iran). Cinnamon was thought to help people with inflammation, nerve pain, heart disease, cough, and other conditions. Today, cinnamon products are promoted as a dietary supplement for diabetes and

weight loss. Ceylon cinnamon is promoted for allergic rhinitis (hay fever). Cassia cinnamon is promoted for topical use (application to the skin) as a mosquito repellent.

Properties: -

- 1) Antioxidants
- 2) Anti-Inflammatory
- 3) Antimicrobial Properties
- 4) Antidiabetic
- 5) Anti-Tumor

Benefits: -

- 1) Cure headache
- 2) Treat dental problems
- 3) Good for diabetics' patient
- 4) Cure swelling and pain
- 5) Lower risk of heart disease
- 6) Fighting infection
- 7) Regulating blood sugar levels.

Indian Black Berry: -



Jamun- an underutilized fruit

You can see jamun flooding in summer markets, so refreshing, and succulent to see. Commonly known as Java plum or Indian blackberry, Naavar Pazhamit goes by the botanical name *Syzygiumcumini*, *Eugenia jambolana*, and *Myrtus cumini* belonging to the Myrtaceae family. Several ancient ayurvedic texts even mention India as Jambudweep or a “land of Jambu” as there are a vast number of jamun trees growing in our nation.

Range of health benefits of Jamun

Magic fruit for diabetes

An anti-diabetic ingredient present in seeds of jamun, called jamboline and jamboline plays a pivotal role in reducing the rate of sugar release in the bloodstream. It converts starch into energy and reduces the symptoms of diabetes such as frequent urination and thirsting.

Properties: -

- 1) Anti-inflammation
- 2) Antimicrobial

- 3) Antioxidants
- 4) Anticancer
- 5) Antiglycemic

Benefits: -

- 1) Help fight to cancer
- 2) Boosts brain health
- 3) Support digestion
- 4) Promote heart health
- 5) Weight loss
- 6) Lower blood pressure
- 7) Reduce DNA Damage help protect against aging and cancer.

LITERATURE SURVEY: -

The primary PubMed search produced 900 citations, of which 263 met the inclusion criteria. The first published study that met our inclusion criteria was published in 1984. The secondary PubMed search for the key words “cancer survivorship” in the title or abstract resulted in 391 articles, 72 of which met the inclusion criteria and were not duplicated by the initial search. The Medline search resulted in 719 articles. Of these, 170 articles met the inclusion criteria and were not duplicated by the initial searches. An

additional 169 studies were identified in reference lists from articles that were identified in the searches conducted. The final result of the literature review was 674 articles. A positive dose response relationship between blood pressure and sodium intake in animal experiments was established. 2) In Dahl's animal experiment it was found that there were rats responding differently to the salt loading, salt-sensitive and salt-resistant strains. The complications related to asthma include disease-related complications and adverse effects of glucocorticoids, LTRA, and endotracheal intubation. The following list contains complications associated with asthma:

• Decline in lung function

- Osteoporosis
- Fracture
- Infections
- Adrenal suppression
- Hypertension
- Diabetes
- Cataract
- Peptic ulcer
- Sleep disorders
- Obstructive sleep apnea
- Mood disorders
- Cardiac arrest
- Glaucoma
- Respiratory failure or arrest
- Pneumothorax
- Aspiration

CONCLUSION: -

Conclusions and relevance: Hypertension affects approximately 116 million adults in the US and more than 1 billion adults worldwide and is a leading cause of CVD morbidity and mortality. First-line therapy for hypertension is lifestyle modification, consisting of weight loss, dietary sodium reduction and potassium supplementation, healthy dietary pattern, physical activity, and limited alcohol consumption. When drug therapy is required, first-line therapies are thiazide or thiazide like diuretics, angiotensin-converting enzyme inhibitor or angiotensin receptor blockers, and calcium channel blockers. Dry dates offer an array of health benefits. They are loaded with vitamins, minerals, and antioxidants. They can aid in digestion and improve cardiovascular, bone, and skin

health. They also boost energy as they are high in natural sugars. Being a rich source of iron, they also help manage anemia. The vitamins and minerals in dates help boost hair health too. Try including dry dates as a part of your diet in moderate amounts to reap their many benefits. *T. cordifolia* has a rich history of use in traditional systems of medicine, primarily Ayurveda, and has gained increasing attention in modern research. Ancient texts such as Charaka Samhita and Sushruta Samhita describe its use in treating various ailments, including fever, diabetes, skin disorders, digestive issues, and many more. It is also used in other traditional healing systems, such as Siddha and Unani medicine in India. Cinnamon has been used as a spice in daily life without any side effects. Several reports have dealt with the numerous properties of cinnamon in the forms of bark, essential oils, bark powder, phenolic compounds, flavonoids, and isolated components. Each of these properties plays a key role in the advancement of human health. The antioxidant and antimicrobial activities may occur through the direct action on oxidants or microbes, whereas the anti-inflammatory, anticancer, and antidiabetic activities occur indirectly via receptor-mediated mechanisms. The significant health benefits of numerous types of cinnamon have been explored. The health benefits of fruits vary based on their composition, growth, and environmental circumstances. Mulberries and blackberries are little red/purple fruits that have high levels of natural health-promoting chemicals. These fruits are rich in phytochemicals, such as anthocyanins, ellagitannins, flavonol glycosides, and phenolic acids, as well as dietary fiber. All of these are beneficial to human health and fitness. Several studies have demonstrated that the phytochemical contents of *R. fruticosus*, *R. ulmifolius*, and *M. nigra* can act as antioxidant, anti-inflammatory, neuroprotector, and antitumoral agents, and offer cardiovascular protection. However, further studies are needed to completely understand the mechanism of action of the blackberry and mulberry metabolites that trigger the biological activities outlined in this review.

REFERENCE

1. Int. J. Sci. R. Tech., 2025 2(12) A Multidisciplinary peer-reviewed Journal www.ijsrtjournal.com [ISSN: 2394-7063]



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2. Int. J. Sci. R. Tech., 2026 3(1) A Multidisciplinary peer-reviewed Journal www.ijjsrtjournal.com [ISSN: 2394-7063]

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3. J Clin Biochem Nutr. 2007 Apr 25;40(3):163–173. doi: 10.3164/jcbn.40.163. Indian Herbs and Herbal Drugs Used for the Treatment of Diabetes Manisha Modak 1, Priyanjali Dixit 1, Jayant Londhe 1, Saroj Ghaskadbi 1, Thomas Paul A Devasagayam 2, *

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