"Standardized Polyherbal Chyawanprash Formulation"

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❖ABSTRACT

Chyawanprash is a classical Ayurvedic polyherbal formulation widely used as a health supplement and rejuvenator (Rasayana). It is traditionally prepared using a combination of approximately 40–50 medicinal herbs, with Amla (Emblica officinalis) as the primary ingredient. The formulation is known for its antioxidant, immunomodulatory, anti-aging, and adaptogenic properties. Historically described in ancient Ayurvedic texts such as Charaka Samhita, Chyawanprash has gained global recognition due to its potential role in improving immunity, respiratory health, digestion, and overall vitality.

Modern scientific studies have demonstrated that regular consumption of Chyawanprash may enhance immune response, improve general health, and support respiratory functions. However, variations in formulation, quality control, and clinical validation remain challenges in its standardization. This review aims to provide a detailed overview of Chyawanprash, including its ingredients, preparation, therapeutic benefits, evaluation parameters, advantages, disadvantages, and current research perspectives.

KEYWORDS: Chyawanprash, Ayurveda, Rasayana, Immunity booster, Polyherbal formulation

❖OBJECTIVES:

The main objectives of this review article are:

- ✓ To provide comprehensive knowledge about Chyawanprash as an Ayurvedic formulation.
- ✓ To study the composition and role of various herbal ingredients used in Chyawanprash.
- ✓ To evaluate its therapeutic benefits and pharmacological actions.
- ✓ To understand the preparation method and quality control parameters.
- ✓ To assess advantages, disadvantages, and limitations of Chyawanprash.

❖INTRODUCTION:

Chyawanprash is a traditional Ayurvedic health supplement categorized under "Rasayana" drugs, which are known for promoting longevity, immunity, and vitality. It is named after the sage Chyawan, who is believed to have regained youth and strength by consuming this formulation.

It is a semi-solid herbal jam prepared by combining herbal decoctions, sugar, honey, ghee, and aromatic spices. The primary ingredient, Amla, is rich in vitamin C and acts as a potent antioxidant.

Chyawanprash has been widely used for centuries as a daily dietary supplement to improve overall health, respiratory function, digestion, and immunity. Modern formulations are commercially available and widely consumed globally.

❖INGREDIENTS USED IN CHYAWANPRASH:

1. Amla:

Amla is the main ingredient of Chyawanprash and acts as a powerful natural antioxidant. It is highly valued in Ayurveda for its rejuvenating (Rasayana) properties and supports overall health and immunity.

Fig no. 01: Amla

- Biological Name: Emblica officinalis
- Family: Phyllanthaceae
- Synonyms: Indian Gooseberry, Amalaki
- Biological Source: Dried and fresh fruits of Emblica officinalis
- Chemical Constituents: Vitamin C, tannins (emblicanin A & B), gallic acid, ellagic acid
- Uses: Antioxidant, immunity booster, anti-aging, digestive tonic

2. Ashwagandha:

Ashwagandha is a well-known adaptogenic herb used to reduce stress and improve vitality. It is widely used in Ayurvedic formulations to enhance physical and mental strength.

Fig no. 02: Ashwagandha

- Biological Name: Withania somnifera
- Family: Solanaceae
- Synonyms: Indian Ginseng, Winter Cherry
- Biological Source: Dried roots of Withania somnifera
- Chemical Constituents: Withanolides, alkaloids, sitoindosides
- Uses: Adaptogen, anti-stress, improves strength and stamina

3. Pippali:

Pippali is an important herb known for its role as a bioavailability enhancer. It improves digestion and helps in better absorption of other herbal components in Chyawanprash.

Fig no. 03: Pippali

- Biological Name: Piper longum
- Family: Piperaceae
- Synonyms: Long Pepper
- Biological Source: Dried unripe fruits of Piper longum
- Chemical Constituents: Piperine, essential oils, lignans
- Uses: Bioavailability enhancer, digestive stimulant, respiratory support.

4. Guduchi:

Guduchi is a highly regarded Ayurvedic herb known for its immunomodulatory and detoxifying properties. It helps in improving resistance against infections and promotes overall wellness.

Fig no.04: Guduchi

- Biological Name: Tinospora cordifolia
- Family: Menispermaceae
- Synonyms: Giloy, Amrita
- Biological Source: Stem of Tinospora cordifolia
- Chemical Constituents: Alkaloids, glycosides, diterpenoid lactones
- Uses: Immunomodulator, anti-inflammatory, antipyretic

5. Shatavari:

Shatavari is a rejuvenating herb widely used for its nutritive and restorative properties. It supports hormonal balance and helps in maintaining overall vitality.

Fig no. 05: Shatavari

- Biological Name: Asparagus racemosus
- Family: Asparagaceae
- Synonyms: Satmuli
- Biological Source: Dried roots of Asparagus racemosus
- Chemical Constituents: Saponins (shatavarins), flavonoids, alkaloids
- Uses: Rejuvenator, hormone balancing, general tonic

6. Bala:

Bala is a strengthening herb known for improving muscle power and physical endurance. It is commonly used in Ayurvedic formulations for its nourishing properties.

Fig no.06: Bala

- Biological Name: Sida cordifolia
- Family: Malvaceae
- Synonyms: Country Mallow
- Biological Source: Roots and aerial parts of Sida cordifolia
- Chemical Constituents: Alkaloids (ephedrine), flavonoids, mucilage
- Uses: Strengthening agent, anti-inflammatory, energy booster

7. Cardamom:

Cardamom is an aromatic spice used to enhance flavor and digestion. It also provides a pleasant aroma and helps reduce gastrointestinal discomfort.

Fig no. 07: Cardamom

- Biological Name: Elettaria cardamomum
- Family: Zingiberaceae
- Synonyms: Elaichi
- Biological Source: Dried fruits (capsules) of Elettaria cardamomum
- Chemical Constituents: Volatile oils (cineole, terpinyl acetate)

- Uses: Carminative, flavoring agent, digestive

8. Cinnamon:

Cinnamon is a commonly used spice with antioxidant and antimicrobial properties. It supports digestion and contributes to the taste and preservation of Chyawanprash.

Fig no. 08: Cinnamon

- Biological Name: Cinnamomum zeylanicum
- Family: Lauraceae
- Synonyms: True Cinnamon, Dalchini
- Biological Source: Dried inner bark of Cinnamomum zeylanicum
- Chemical Constituents: Cinnamaldehyde, eugenol, tannins
- Uses: Antioxidant, antimicrobial, digestive aid

9. Clove:

Clove is a potent spice known for its antimicrobial and analgesic properties. It also acts as a natural preservative and enhances the flavor of the formulation.

Fig no. 09 : Clove

- Biological Name: Syzygium aromaticum
- Family: Myrtaceae
- Synonyms: Lavang
- Biological Source: Dried flower buds of Syzygium aromaticum
- Chemical Constituents: Eugenol, volatile oils, tannins
- Uses: Antimicrobial, analgesic, digestive

10. Honey:

Honey is a natural sweet substance that acts as a carrier and preservative in Chyawanprash. It enhances taste and helps in better absorption of herbal components.

Fig no. 10: Honey

- Biological Name: Natural product (Apis species)
- Family: —
- Synonyms: Madhu
- Biological Source: Produced by honey bees (Apis spp.)
- Chemical Constituents: Glucose, fructose, enzymes, amino acids
- Uses: Sweetener, antimicrobial, carrier (Anupana)

11. Ghee:

Ghee is a clarified butter used as a nutritive base in Chyawanprash. It helps in enhancing the bioavailability of fat-soluble active compounds.

Fig no. 11: Ghee

- Biological Name: Clarified butter (from Bos indicus milk)
- Family: —
- Synonyms: Ghrita
- Biological Source: Milk fat obtained from cow milk
- Chemical Constituents: Saturated fats, vitamins (A, D, E, K)
- Uses: Nutrient carrier, tonic, improves absorption

12. Sesame Oil:

Sesame oil is used as a base ingredient that provides stability and antioxidant protection. It also contributes to the therapeutic value of the formulation.

Fig no. 12: Sesame oil

- Biological Name: Sesamum indicum
- Family: Pedaliaceae
- Synonyms: Til oil
- Biological Source: Seeds of Sesamum indicum
- Chemical Constituents: Sesamin, sesamol, fatty acids
- Uses: Antioxidant, base oil, stabilizer

13. Sugar:

Sugar is used as a sweetening and preserving agent in Chyawanprash. It also helps in achieving the desired semi-solid consistency and provides energy.

Fig no. 13: Sugar

- Biological Name: Saccharum officinarum
- Family: Poaceae
- Synonyms: Sucrose
- Biological Source: Juice of sugarcane
- Chemical Constituents: Sucrose
- Uses: Sweetener, preservative, energy source

❖IDEAL QUALITY OF CHYAWANPRASH:

- ✓ Dark brown to black semi-solid paste
- ✓ Pleasant aroma and sweet-sour taste
- ✓ Free from microbial contamination
- ✓ Standard consistency (jam-like)
- ✓ Proper balance of ingredients
- ✓ High antioxidant activity
- ✓ Should comply with Ayurvedic pharmacopoeial standards

❖ADVANTAGES:

- ✓ Natural and herbal formulation
- ✓ Boosts immunity
- ✓ Improves digestion and metabolism
- ✓ Enhances respiratory health
- ✓ Acts as antioxidant and anti-aging agent
- ✓ Suitable for long-term use

❖DISADVANTAGES:

✓ High sugar content (not suitable for diabetics)
✓ Variation in quality between brands
✓ Limited high-quality clinical evidence
✓ Possible mild side effects (bloating, gastric discomfort in some individuals)
✓ Risk of adulteration in commercial products

❖BENEFITS:

✓ Enhances immunity and resistance to infections
✓ Improves lung function and respiratory health
✓ Increases energy and stamina
✓ Supports brain function and memory
✓ Promotes healthy skin and delays aging
✓ Improves digestion and nutrient absorption

Scientific studies indicate improved overall health and immunity with regular consumption.

❖ EXPERIMENTAL PROCEDURE (Preparation Method):

✓ Step 1: Preparation of Decoction
Herbs are boiled in water to obtain a concentrated extract.
✓ Step 2: Preparation of Amla Pulp
Amla fruits are boiled, deseeded, and converted into pulp.
✓ Step 3: Frying
Amla pulp is fried in ghee and sesame oil.
✓ Step 4: Mixing
Herbal decoction is mixed with fried pulp.
✓ Step 5: Addition of Sugar Syrup
Sugar syrup is added and cooked to desired consistency.
✓ Step 6: Final Addition
Honey and aromatic spices are added after cooling.
✓ Step 7: Storage
Stored in airtight containers.

❖EVALUATION OF CHYAWANPRASH:

✓ Organoleptic properties (color, taste, odor)
✓ Physicochemical tests (pH, moisture content)
✓ Microbial analysis
✓ Total antioxidant activity
✓ Vitamin C content
✓ Stability studies

❖SUMMARY:

Chyawanprash is a classical Ayurvedic formulation with significant health-promoting properties. It contains a complex mixture of herbal ingredients that provide antioxidant, immunomodulatory, and rejuvenating effects. Despite its widespread use and traditional importance, more scientific validation is required to standardize its

formulation and confirm its clinical efficacy.

❖CONCLUSION:

Chyawanprash remains one of the most widely used Ayurvedic formulations due to its multiple health benefits. It plays a crucial role in preventive healthcare by improving immunity and overall well-being. However, standardization, quality control, and clinical validation are essential for its global acceptance as a scientifically proven nutraceutical.

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