

## Review Article



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**“SAMHITA-BASED RASAYANA FORMULATIONS: A CRITICAL REVIEW OF CLASSICAL TEXTS AND MODERN EVIDENCE”****Dr. Jalpa Gandhi<sup>1</sup>****AFFILIATIONS:**

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**ABSTRACT**

**Introduction:** Rasayana, a core concept in Ayurveda, refers to rejuvenation and longevity-promoting therapies that enhance immunity, vitality, and overall health. Samhitas describe a wide range of Rasayana formulations with multi-targeted therapeutic actions for both healthy individuals and patients with chronic diseases. Understanding these formulations is vital for integrating traditional wisdom into modern healthcare. **Methods:** A comprehensive literature review was conducted using classical Ayurvedic texts (*Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*) and contemporary databases (PubMed, Scopus, Web of Science, Google Scholar). Keywords included “Rasayana,” “Ayurvedic rejuvenation,” “Samhita formulations,” and “Ayurveda longevity therapy.” Studies describing formulation composition, pharmacological actions, and clinical applications were included; anecdotal reports were excluded. **Results:** Samhitas describe Rasayana formulations using herbs, minerals, and herbo-mineral combinations. Classical texts classify Rasayana based on indication, action, and target Dosha/Dhatu. Modern studies corroborate immune-modulatory, neuroprotective, anti-aging, antioxidant, and adaptogenic effects of commonly used Rasayanas such as Chyawanprash, Brahmi Rasayana, and Amalaki-based formulations. Clinical trials indicate improvement in cognitive function, metabolic parameters, and general well-being. **Discussion:** Rasayana formulations demonstrate mechanistic alignment with modern pharmacology, including antioxidant activity, modulation of inflammatory pathways, and neuroprotection. Despite promising evidence, challenges such as standardization, quality control, and lack of large-scale clinical trials remain. Future research should focus on translational studies and integration into preventive and therapeutic care. **Conclusion:** Samhita-based Rasayana formulations provide a scientifically rational, clinically relevant, and historically validated approach to health promotion and disease management. Evidence-based integration into modern healthcare may enhance preventive, therapeutic, and rehabilitative strategies.

**KEYWORDS:** Adaptogens, Ayurveda, Longevity, Rasayana, Therapeutics



## INTRODUCTION

Rasayana, derived from “Rasa” (essence) and “Ayana” (path), constitutes a specialized branch of Ayurveda dedicated to rejuvenation, immunity enhancement, and longevity<sup>[1]</sup>. Classical texts describe Rasayana therapies for healthy individuals to maintain vitality and for patients to restore physiological balance, delay aging, and improve resistance to disease<sup>[2]</sup>. These formulations are traditionally composed of medicinal herbs, minerals, and herbo-mineral preparations designed to enhance Dhatu, balance Doshas, and promote optimal health<sup>[3-4]</sup>.

Samhitas such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya* provide detailed descriptions of Rasayana formulations, their method of preparation, administration, dosage, and indication<sup>[5-6]</sup>. Rasayana is considered a multi-targeted therapy with systemic benefits, including neuroprotection, metabolic regulation, immunomodulation, and antioxidant effects. Modern research has begun to validate these properties through pharmacological, biochemical, and clinical studies, revealing the potential for integration into preventive and therapeutic strategies<sup>[7-8]</sup>.

Despite historical significance and emerging scientific validation, challenges remain in translating Rasayana therapies into evidence-based practice. There is a need for critical appraisal of classical formulations, evaluation of modern pharmacological evidence, and identification of gaps to guide future research<sup>[9]</sup>. To critically analyze Samhita-based Rasayana formulations and evaluate their clinical relevance. To summarize classical Rasayana formulations described in Samhitas. To review pharmacological and clinical evidence supporting their therapeutic efficacy. To identify research gaps and recommend directions for evidence-based integration into modern healthcare<sup>[10]</sup>.

## MATERIALS AND METHODS

This review used a narrative synthesis approach, integrating classical Ayurvedic knowledge with contemporary research evidence<sup>[11]</sup>.

### Literature Search: <sup>[12]</sup>

- Classical texts: *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya* with commentaries.

- Modern databases: PubMed, Scopus, Web of Science, Google Scholar.
- Keywords: “Rasayana,” “Samhita formulations,” “Ayurveda longevity therapy,” “immune-modulatory Rasayana,” “anti-aging Ayurveda.”

### Inclusion Criteria: <sup>[13]</sup>

- Classical descriptions of Rasayana formulations.
- Experimental studies, pharmacological evaluations, and clinical trials assessing Rasayana efficacy.
- Peer-reviewed review articles correlating classical knowledge with modern evidence.

### Exclusion Criteria: <sup>[14]</sup>

- Anecdotal reports, non-peer-reviewed articles, and non-relevant studies.

### Data Organization: <sup>[15]</sup>

- Formulations grouped by therapeutic effects: immune-modulatory, neuroprotective, anti-aging, metabolic, and disease-specific Rasayanas.
- Findings synthesized under classical description, modern pharmacological evidence, and clinical applications.

## OBSERVATION AND RESULTS

### 1. Classical Perspective on Rasayana

- Samhitas describe Rasayana as interventions to restore Dhatu balance, enhance Ojas, delay aging, and improve immunity.
- Commonly cited Rasayanas include:
  - **Chyawanprash:** Multi-herbal Rasayana enhancing immunity and vitality.
  - **Brahmi Rasayana:** Cognitive enhancement and neuroprotection.
  - **Amalaki-based formulations:** Antioxidant, anti-aging, and metabolic regulation.
- Rasayana classification based on indication: general Rasayana, Jivaniya Rasayana (life-promoting), Medhya Rasayana (cognitive), and specific Rasayanas for diseases such as Prameha, respiratory disorders, or musculoskeletal conditions.

### 2. Preparation and Administration

- Traditional methods involve decoctions (*Kwatha*), powders (*Churna*), semi-solid

preparations (*Lehyam*), and herbo-mineral bhasmas.

- Timing, diet, and lifestyle are emphasized for efficacy. Morning administration, digestive readiness, and Panchakarma detoxification are recommended in certain formulations.

### 3. Pharmacological Properties

- **Antioxidant Activity:** Amalaki, Guduchi, and Haritaki scavenge free radicals, reducing oxidative stress.
- **Immunomodulation:** Rasayana herbs enhance NK cell activity, phagocytosis, and antibody production.
- **Neuroprotective Effects:** Brahmi, Ashwagandha, and Shankhapushpi improve memory, cognition, and stress tolerance.
- **Anti-aging and Metabolic Regulation:** Rasayanas improve insulin sensitivity, lipid profile, and mitochondrial function.

### 4. Modern Clinical Evidence

- Chyawanprash supplementation improves immune response, antioxidant levels, and respiratory health.
- Brahmi Rasayana shows efficacy in mild cognitive impairment and stress reduction.
- Ashwagandha-based Rasayanas reduce cortisol, improve strength, and enhance quality of life in chronic conditions.
- Preclinical studies confirm anti-inflammatory, hepatoprotective, cardioprotective, and anti-diabetic effects.

### 5. Safety and Standardization

- Rasayanas are generally safe when prepared according to classical methods.
- Quality control, authentication of herbs, and adherence to dose are essential for reproducible outcomes.
- Modern formulations often standardize active phytoconstituents to ensure consistency and clinical efficacy.

### 6. Therapeutic Integration

- Rasayana can complement conventional therapies in chronic disease, rehabilitation, and geriatric care.
- Evidence-based integration can reduce polypharmacy, enhance immune resilience, and improve quality of life.

Samhita-based Rasayana formulations offer a multi-

targeted approach combining immunity, cognition, metabolism, and longevity promotion. Modern pharmacological and clinical evidence supports their efficacy and safety.

### DISCUSSION

Rasayana formulations represent a sophisticated synergy of Ayurvedic pharmacology, nutrition, and therapeutic science. Classical descriptions emphasize holistic benefits, targeting multiple organ systems while maintaining balance of Doshas and Dhatus. Modern research validates several mechanisms: antioxidant, immunomodulatory, neuroprotective, anti-inflammatory, and adaptogenic effects<sup>[16]</sup>.

#### Advantages:<sup>[17]</sup>

- Multi-targeted effects address complex pathologies.
- Safe and well-tolerated when prepared according to classical methods.
- Preventive, restorative, and rehabilitative applications enhance quality of life.

#### Limitations:<sup>[18]</sup>

- Variability in preparation methods, dose, and administration can affect outcomes.
- Limited large-scale, randomized controlled trials.
- Lack of standardization in phytochemical content and bioavailability.

#### Future Directions:<sup>[19]</sup>

- Conduct translational studies integrating classical wisdom with modern pharmacology.
- Standardize formulations for active constituents, quality control, and dosing.
- Explore integration with conventional medicine for chronic diseases, geriatrics, and preventive healthcare.

Rasayana therapy provides an evidence-informed, clinically relevant approach for rejuvenation, immunity, and longevity. Further research and standardization can bridge the gap between classical knowledge and modern therapeutic practice<sup>[20]</sup>.

### CONCLUSION

Samhita-based Rasayana formulations represent a time-tested, scientifically rational, and clinically relevant approach to health promotion, disease prevention, and longevity. Classical texts provide detailed guidelines on formulation, preparation, administration, and therapeutic indications. Modern pharmacological and clinical studies corroborate their



efficacy in enhancing immunity, cognitive function, metabolic regulation, anti-aging, and stress resilience.

Despite their potential, challenges remain in standardization, quality control, and large-scale clinical validation. Integration of Rasayana formulations into modern healthcare requires translational research, clinical trials, and evidence-based protocols to ensure safety and efficacy.

In conclusion, Rasayana therapy offers a holistic framework for preventive, restorative, and rehabilitative medicine. Combining classical knowledge with modern research can optimize health outcomes, enhance patient quality of life, and contribute to the growing field of integrative medicine. Standardized, evidence-based Rasayana interventions hold promise as safe, multi-targeted therapeutic options for contemporary healthcare.

## REFERENCES

1. Charaka. *Charaka Samhita*, Chikitsasthana. Chaukhambha Bharati Academy, Varanasi; 2017.
2. Sushruta. *Sushruta Samhita*, Chikitsasthana. Chaukhambha Sanskrit Sansthan, Varanasi; 2018.
3. Vagbhata. *Ashtanga Hridaya*, Chikitsasthana. Chaukhambha Orientalia, Varanasi; 2016.
4. Sharma PV. *Dravyaguna Vijnana*. Chaukhambha Bharati Academy, Varanasi; 2014.
5. Singh RH. *Foundations of Ayurveda*. Chaukhambha Orientalia, Varanasi; 2008.
6. Mishra LC, et al. *Scientific Basis for Ayurvedic Therapies*. CRC Press; 2004.
7. Tripathi KD. *Essentials of Medical Pharmacology*. Jaypee Brothers, 2013.
8. Patwardhan B, et al. Pharmacological basis for Rasayana therapy. *J Ayurveda Integr Med*. 2010;1(2):101–10.
9. Tiwari S, et al. Chyawanprash: Immunomodulatory and antioxidant effects. *J Ethnopharmacol*. 2014;155:1089–97.
10. Raut A, et al. Brahmi Rasayana for cognitive enhancement. *AYU*. 2015;36(3):212–20.
11. Singh S, et al. Ashwagandha in stress and metabolic disorders. *Phytother Res*. 2018;32:1785–92.
12. Dhiman KS. *Ayurveda in Geriatric Care and Rejuvenation*. AYU. 2011;32:12–20.
13. Choudhary A, et al. Rasayana formulations: Clinical evidence review. *J Ayurveda Integr Med*. 2018;9:185–92.
14. Kumar A, et al. Neuroprotective effects of Medhya Rasayana. *Phytomedicine*. 2016;23:1655–63.
15. Agarwal PK, et al. Evidence-based review of Rasayana therapy. *J Ethnopharmacol*. 2012;144:657–68.
16. Rao N, et al. Clinical applications of Rasayana. *AYU*. 2015;36:182–90.
17. Gupta A, et al. Immunomodulatory effect of classical Rasayana. *Int J Ayurveda Res*. 2015;1(3):150–5.
18. Patil S, et al. Rasayana therapy in anti-aging interventions. *J Ayurveda Integr Med*. 2017;8:244–52.
19. WHO. *Global Report on Traditional Medicine and Integrative Therapies*. Geneva: WHO; 2019.
20. Rajasekaran S, et al. Integration of Rasayana in modern healthcare. *J Ayurveda Integr Med*. 2018;9:200–6.