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RASAYANA -THE REJUVENATION THERAPY OF AYURVEDA

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ABSTRACT

Ayurveda is an ancient science of life dealing with physical, psychological as well as spiritual well being of an individual. Rasayana is one of the eight branches of classical Ayurveda, used for prevention of diseases and prolongation of a healthy life. Rasayana effect is not a single pharmacological action rather a complex phenomenon operating through a comprehensive mechanism involving the fundamental factors like Rasa-samhana, Dhatu, Agni and Srotas. Rasayana are rejuvenators, nutritional supplement, possess strong antioxidant activity and increases Ojas. Rasayana therapy enhances the qualities of Rasa, enriches it with nutrients so one can attain longevity, freedom from diseases, youthfulness, memory, intelligence; excellence

in complexion, lustre & sense organs; development of healthy physique and rejuvenation of mind and body. *Rasayana* increases the immunity thus protects a person from diseases and also prevents re-occurrence of diseases.

KEYWORDS: Rasayana, Ojas, Dhatu, Agni, Rejuvenation.

INTRODUCTION

Longevity, one of the basic instincts has been common to all living creatures. But there is no use of long life if a person is not healthy as quality of life is important for an individual. In

today's competitive world, the erroneous life style is resulting in progressive decline in both physical and mental health. Sedentary life style super added with faulty eating patterns has led to marked reduction in health of individuals, which has resulted in a high incidence of various non communicable diseases. *Ayurveda*, an ancient science of life, developed through the ages deals with physical, psychological as well as spiritual well being of an individual. It is not just the knowledge of medicine but the complete science of life.

"Swasthasya Swasthya Rakshanam" [1] means maintaining the health of a healthy person had been the prime aim of Ayurveda. In Ayurveda, emphasis has been given to preventive aspect of health considering physical, mental, and social aspects rather treating a disease. To achieve this goal, daily regimen, seasonal regimen, code of conduct of diet and social behavior are mentioned in Ayurveda. Rasayana, which is one of the unique disciplines of Ayurveda, comprises a specialized use of herbs, herbo-mineral formulations, food articles, and lifestyle along with self-discipline and social etiquette to achieve the optimum state of tissues and systems of the body so that there is the least possibility of onset of disease. Rasayana is a specialized modality influencing the fundamental aspects of body viz. Dhatu, Agni, Srotas, Ojas. A person undergoing Rasayana or rejuvenation therapy attains longevity, memory, intellect, freedom from diseases, lustre of skin, excellent potency of body, good strength and good functioning of sense organs. Looking at the multifaceted approach of Rasayana, it can be said that Rasayana therapy incorporates various forms of health promotive activities in the form of diet, lifestyle, or medicines which target at achieving homeostasis (Dhatu Samya) thus retarding the process of aging, used to prevent diseases, promotion and prolongation of healthy life and not merely treating the disease.

The amalgamation of healthy living style and use of *Rasayana* can immensely help the mankind in preventing various diseases. *Rasayana* is having a replenishing effect on all the body tissues, organs and organ systems of the body.

CLASSIFICATION OF RASAYANA

A) AS PER MODE OF ADMINISTRATION^[2]

1) *Kutipraveshika Rasayana* – It is an Indoor therapy. This is administrated by keeping the individual inside a special cottage (*Trigarbhakuti*). Before administration of *Rasayana*, his body is purified first by *Panchkarma* and then he is subjected to *Rasayana sevana*. *Shodhana* is very essential for a person who wishes to undergo *Rasayana* therapy as a preparatory procedure. *Rasayana* is more effective when it is given after *Panchakarma* therapy. The

Shodhana process detoxifies both body & mind. This helps in the initial detoxification of the body and prepares it for the *Rasayana* regime.

2) Vatatapika Rasayana — It is an outdoor therapy. This is administrated even if the individual is exposed to the wind and the sun. In today's lifestyle we can administer this variety of Rasayana without disturbing our daily routine.

B) AS PER SCOPE OF USE^[3]

- 1) *Kamya Rasayana- Kamya* means fulfillment of 'desire' hence *Kamya Rasayana* are those which promotes normal health, immunity and energy levels. It is of three types.
- a) *Prana Kamya Rasayana* It is used for achieving or maintaining the best quality of *Prana* (life vitality and longevity) e.g. *Amalaki, Haritaki, Guduchi* etc. are used for this purpose.
- b) *Medha Kamya Rasayana* Used for enhancing memory & intellect e.g. *Brahmi, Vacha, Mandukparni, Shankhapushapi* etc.
- c) Sri Kamya Rasayana –Promoter of complexion. e.g. Guduchi, Amalaki, Triphala, Ashwagandha etc.
- 2) Naimittika Rasayana This variety of Rasayana is used in the management of specific disease. Naimitika rasayana is not the specific medical treatment for particular diseases, but it is used as an adjuvant along with the specific management of disease. It hastens the recovery from prevailing diseases.

Naimitika Rasayana for some of specific diseases^[4]

Netra roga – Jyotishmati, Triphala, Yashtimadhu.

Hridya roga – Shalparni, Arjuna, Pushkarmula.

Twak roga – Tuvaraka, Somaraji, Bhalattaka.

Pandu – Lauha, Mandura.

Shwasa – Agastya Rasayana, Pipalli, Chyavanprasha.

Vata vyadhi – Guggulu, Bala, Nagbala.

Madhumeha – Shilajit, Amalaki.

Medo roga- Guggulu, Triphala.

Unmada – Shankhapushpi, Brahmi, Mandukparni.

Medhya Rasayana^[5] – Improve the intellect and memory.

Haritaki Rasayana^[5] – Improves strength and gives healthy life and longevity.

Chyawanprasha^[5]- Useful in Shwasa & Kasa.

Brahmi & Vacha Rasayana^[5] – Improves our memory, gives sharpness and intelligence.

Pipalli Rasayana^[5] – Used for anti aging purpose & used in treating respiratory conditions.

Shilajit Rasayana^[5]- It is useful in diabetes and impotency.

Shatavari and Ashwagandha Rasayana^[5]- Increases strength of the body.

Amalaki Rasayana^[5]- It is beneficial for brain, eyes, skin & hair.

Triphala Rasayana^[5]- It nourishes both body & mind, thereby promoting longevity of life. It is also useful in skin, eye disorders.

Bhalattaka Rasayana^[5] – Used for skin diseases.

3) *Ajasrika Rasayana* – Regular use of nutritious foods to augment health e.g. *Ksheerghritaabhyas*.

C) AS PER CONTENTS OF RASAYANA^[6]

- 1) Aushadha Rasayana Pharmacological Rasayana formulations based on drugs and herbs.
- 2) Achara Rasayana^[7] Non pharmacological modalities based on conduct and behavior.

D) ACCORDING TO MODE OF ACTION^[8]

- (1) *Samshodhana*: The drugs used for the purpose of purification of body by the processes of *Vamana*, *Virechana* etc. Thus vitiated *Doshas* enrooted out of body ultimately result in rejuvenation of body e.g. *Soma Rasayana*.
- (2) Samshamana: In this type, vitiated *Doshas* are not expelled from body but get pacified inside the body e.g. *Nagbala*, *Guduchi*, *Triphala*, *Amalaki Rasayana* etc.

INDICATIONS^[9]

Rejuvenation therapy is indicated either in young age (*Purva vaya*) or middle age (*Madhayam vaya*) person, only after proper oleation and purification of the body. Just as dyeing a dirty cloth does not make the color shine bright, rejuvenatory therapy is unsuitable/unbeneficial for person who has not undergone purificatory therapies before *Rasayana*. ^[9] The person should have *Satvik Manas* (good psychological characteristics) and should be free from *Mansik Doshas* namely- *Raja* and *Tama*. Purity of the mind should also be assured before giving *Rasayana* therapy. Therefore, the person undergoing *Rasayana* therapy should not only be fit from physical point of view but also from psychological aspect.

CONTRAINDICATIONS^[10]

In Sushruta Samhita Rasayanas are contraindicated to following seven types of people⁽¹⁰⁾:

- ➤ Anatmavan (those who are not self controlled)
- ➤ Aalsi (lazy).
- ➤ Daridri (financially weak)
- Pramadi (the indigent, unwise, not listening)
- Vyasani (addicted to vices addicts)
- ➤ Papakrit (the sinful)
- ➤ Bheshajapmani (those who do not trust on medication)

Rasayana therapy should not to be used in the *Aamavastha* too. *Rasayana* therapy used in this condition not only becomes useless but may also cause distressing symptoms as well.

BENEFITS OF RASAYANA

CHARAK SAMHITA^[11]

- > Promotes longevity.
- > Improves mental and intellectual competence.
- ➤ Provides immunity against diseases resulting in positive health.
- > Delays ageing process by preserving youthfulness.
- Improvement in the complexion and luster of the skin (*Prabha* and *Kanti*).
- Enrichment in 'Swara' (voice).
- Excellence of body glow.
- > Optimization of strength of body and *Indrivas* (motor and sense organs).
- Person becomes more helpful and generous.
- > Improvement in physical and mental strength.
- Command over speech/infallibility of speech (*Vaksiddhi*).
- Attainment of humbleness and politeness (Pranati).
- ➤ Proper, accurate, balanced and premium production of all the *Sharir Dhatus* (Right from *Rasa Dhatu* to the *Shurka dhatu*).

SUSHRUTA SAMHITA^[12]

- > Sustains age and youthfulness.
- ➤ Increase in life-span.
- > Increases intellectual capacity and strength.
- Freedom from diseases (i.e. immunity is increased).
- > Cures all the ailments and problems.
- Acts as rejuvenator and general restorative treatment.

ASHTANGA HRIDAYA^[13]

It has also listed the benefits of *Rasayana* on the same lines of *Charaka Samhita* with the only exception being the "*Pranati*" is replaced by "*Vrishata*" i.e. aphrodisiac property.

SHARANGDHARA SAMHITA^[14]

Rasayanas inhibits senility and diseases. *Sharangdhara Samhita* has beautifully described the progressive aging where every individual is at risk of losing physiological attributes with every passing decade.

Decade	Loss of features	Indicated Rasayana
First (0-10yrs)	Balyavastha (childhood)	Swarna (Gold), Vacha
Second (11-20yrs)	Vriddhi (growth)	Bala (Sida cordifolia), Ashwangadha
Third (21-30yrs)	Chhavi (luster)	Amalaki (Emblica officinalis), Lauha
Fourth (31-40yrs)	Medha (intellect)	Shankhpushpi (Convolvulus pluricaulis), Jyotishmati (Celastrus paniculatus)
Fifth (41-50yrs)	Twaka (complexion)	Bhringraja, Priyala
Sixth (51-60yrs)	Drishti (vision)	Triphala, Saptamritlauha
Seventh (61-70yrs)	Shukra (reproductive power)	Ashwagandha (Withania somnifera), Aatamgupta
Eighth (71-80yrs)	Vikrama (courage)	Bala (Sida cordifolia)
Ninth (81-90yrs)	Buddhi (intelligence)	Brahmi (Herpestris monieri)
Tenth (91-100yrs)	Karma Indriya (motor organs)	Rasayana may not be effective
Eleventh (101-110yrs)	Chetas/Manas (mind)	Rasayana may not be effective
Twelfth (111-120yrs)	Jivan (cessation of life)	Rasayana may not be effective

OFFERINGS OF RASAYANA THERAPY

Rejuvenation therapy has following beneficial effects as described in classical texts:

PHYSICAL EFFECTS: Longevity, perfect health, youthful age, successful words (*vakasiddhi*), excellent lustre and complexion, optimum physical and sensory strength. [10] It balances *Tridosha*, stimulates digestion and metabolism, cures morbid sleep, drowsiness, physical and mental fatigue, laziness and weakness.

PSYCHOLOGICAL EFFECTS: One can attain excellent memory, intelligence, intellect excellent retention ability (*Shrutdhara*). [15]

DIVINE EFFECTS: Attainment of *Moksha*, reversal of age, immortality, bring good fortune, prosperity, and enhanced life span.^[16]

BIOLOGICAL EFFECTS OF RASAYANA THERAPY^[17]

Few herbs have been explored for their specific biological effects on different dimensions of health.

- (a) **ANABOLIC EFFECTS:** Herbs like *Gambhari*, have shown a positive role in improving nitrogen balance and thus promoting tissue building.
- **(b) ANTISTRESS ADAPTOGENIC**: Pharmacological investigations on drugs like *Ashwagandha & Shilajita* point to this unique biological effect of *Rasayana* drugs. A drug with *Rasayana* quality can benefit the user in two distinct ways. In one hand, it can neutralize the negative effects of stress on physiology and restore homeostasis i.e. antistress effect and on the other hand, a long term administration of such drugs may enhance one's own tolerance levels and thus help the person to cope up with stress in a better way i.e. adaptogenic effect.
- (c) IMMUNOMODULATORY EFFECT: Immunity is another biological phenomenon with varied implications. It guards the body as a whole from invasion by microbes. *Rasayana* herbs like *Amalaki*, *Guduchi* etc. are continuously been explored for their effect on immune system. They work to enhance immune functions and make us firm from deep within to guard the body from various diseases.
- (d) **NOOTROPIC EFFECT**: *Medhya Rasayana* is a specific class of drugs having effect on psychological traits which enhances mental capabilities. *Brahmi, Vacha, Shankhpushpi* etc. have been investigated and proved for their effects on memory and learning abilities which testify the acclaimed effects to some extent.
- (e) ANTIOXIDANT EFFECT: Antioxidant is defined as "substances" whose presence in relativity low concentration significantly inhibits the role of oxidation of targets. Today, oxygen free radicals are implicated in a wide range of diseases starting from minor allergies to cancers. Rasayana drugs are now discovered to help the physiology in overcoming such oxidative injury by enhancing the enzymatic defense mechanisms of body. Most of Rasayana drugs exhibit the antioxidant activity. Rubia cordifolia, Strychnos nuxvomica, Moringa oleifera, Semecarpus anacardium, Mucuna pruriens, Bacopa monnieri, Nardostachys jatamansi etc. have been observed to have anti-oxidant property and can be used as a medicine to manage the free radical mediated diseases.

(f) ANTIAGEING EFFECT: Administration of *Rasayana* drugs delays process of ageing. There have been a few investigations in this direction. Available evidences indicated that *Rasayana* drugs could influence the secretion of a hormone DHEA, the deficiency of which has been implicated in the process of ageing.

RESEARCHES IN THE FIELD OF RASAYANA

- > Yashtimadhu (Glycyrrhiza Glabra) enhance the macrophage membrane function. [18]
- ➤ Guduchi (Tinospora cordifolia) inhibit the lipid peroxidation and superoxide and hydroxyl radicals in vitro. [19]
- ➤ Amalaki (Emblica officinalis) strengthen the defense mechanism against free radical damage induced during stress. [20]
- ➤ Haritaki (Terminalia Chebula) in immune-modulation studies, humoral immunity was enhanced where T-cell counts remained unaffected in the animals, but cell-mediated immune response was stimulated.^[21]
- ➤ Rasayana therapy is found most effective in Tuberculosis. It significantly decreases cough, fever, dyspnoea, haemoptysis, and increased body weight. [22]
- ➤ Vardhaman Pippali Rasayana is effective in the management of Aamavata (rheumatoid arthritis). A significant decrease in erythrocyte sedimentation rate was also noted. [22]
- ➤ Centella asiatica fresh leaf extract showed a significant result concerned with learning and memory. [22]
- ➤ Triphala Rasayana in recurrent rhinitis gave good results. [23]
- ➤ Phyllanthus emblica showed chondroprotective activity, inhibiting the activities of hyaluronidase and collagenase type 2 in vitro. [24]
- ➤ Amalaki Rasayana has effectively demonstrated increase in median life span and starvation resistance in *Drosophila melanogaster* model. [25]
- Ashwagandha is well known medicinal herb used as Rasayana, proving it potential drug in treating catecholamines, oxidative damage and physiological abnormalities. [26]
- ➤ Amalaki is told to be the best medicine as Vayasthapana. Triphala another abundantly used medicine for various purposes also possesses Rasayana effects. Triphala was found to alleviate the nephrotoxic effects of bromobenzene by increasing the activities of antioxidant enzymes and reducing the levels of lipid peroxidation and kidney functional markers. [27]
- > Triphala has also exhibited anti-inflammatory effects in rat model. [28]

In light of newer techniques of researches some of very well-known *Rasayana* medicines are explored such as:

- > Suvarna Prashana^[29] -Improves Intellectual ability, digestive power & immunity
- ➤ *Medhya rasayana*^[30] -Increase Intellectual power
- ➤ Brahma rasayana^[31]-Gives healthy long life
- ➤ Haritaki rasayana^[32] -Increase strength and healthy long life
- > Shatavari rasayana^[33]-One remain protected from various diseases throughout the life
- > Chyavanprashavleha^[34]-Improves bodily homeostasis and prevent respiratory symptoms

MODE OF ACTION OF RASAYANA DRUGS

Rasayana effect is not a single pharmacological action but is a complex phenomenon operating through a comprehensive mechanism involving the fundamental aspects i.e. Rasa, Agni and Srotas. Unlike Shodhana and Shamana drugs Rasayana can act at a more subtler level; at the level of Dhatu, Agni and fine Srotas. These comprehensive effects are brought about with the help of varied pharmacodynamic properties of these drugs.

Different Rasayana drugs executes their beneficial pharmacological effect on the basis of Rasa, Guna, Veerya, Vipaka, Prabhava. Rasayana Dravya having Madhura Rasa and Guru, Snigdha, Sheeta properties act at the level of Rasa by promoting the nutritional value and providing nourishment to the body tissues, which in turn helps in obtaining the best quality of Dhatus. [35]

Rasayana Dravyas have fundamental effect at the level of Agni or digestion and metabolism. The Rasayana Dravyas possessing the Ushna, Laghu, Ruksha Guna and Katu, Tikta, Kashaya Rasa may be acting at the level of Agni, vitalizing the metabolism leading to an improved structural and functional pattern of Dhatus. [36] Having anabolic property; Rasayana drugs nourish each Dhatu leading to the formation of excellent essence i.e. Ojas. [37]

By virtue of their qualities like *Laghu*, *Ushna* or by *Prabhava Rasayana Dravya* possess *Deepana* and *Pachana* action through which they digest and mobilize the *Ama* present in the *Srotas* and also help in removing the obstruction in the *Srotas*. This helps in restoring the potency of the *Srotas* i.e. *Srotoshodhana* facilitating the adequate movement of *Rasa* and *Dhatus* relative to the *Srotas*. *Rasayana* drugs also promote the functions of *Srotas* which helps in ensuring optimum supply of nutrients to the cells & tissues thus improving cellular perfusion. [38]

Thus *Rasayana* therapy works at the level of *Rasa* (nutrition), *Agni* (digestion & metabolism), *Srotas* (microcirculation) enabling to procure the best qualities of different *Dhatu*.

CONCLUSION

Rasayana is not just a drug therapy but it incorporates various specialized modalities practicised in the form of rejuvenative recepies, dietary regimen, and special health promoting conduct and behavior. Scientific studies have proven the efficacious role of Rasayana remedies in the management of chronic life style related diseases and various degenerative disorders. Rasayana drugs, are very helpful to maintain healthy body and mind in today's environmental condition and life style. It has been established that the 'Rasayanas' are rejuvenators, nutritional supplements and possess strong antioxidant activity and antagonistic actions on the oxidative stressors. Rasayana is the preventive therapeutic modality described in Ayurveda which is helpful to maintain health, retard aging process and promote immune system to fight against infection. In healthy conditions, Rasayana can be understood as nutritional dynamics for rejuvenation of body and psyche.

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