

THE CONCEPT OF AGING IN AYURVEDA

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ABSTRACT: *The present study reveals that the process of aging was elaborately described in Ayurveda. In order to prology the life span and to promote longevity a separate discipline called Rasayana Tantra was also developed. The sailent feature of this discipline are described in this article.*

After birth, growth and senility ultimately leading to death are inevitable process. It is correctly stated that aging begins before birth and continues through and life at different rates, in different races for different individuals and for different tissues of the body. It involves two opposite processes that simultaneously come into operation i.e. growth and atrophy. Aging represents structural and functional changes of an organism over its entire life span.

In India the Ayurvedic school of medicine is probably the first to describe the science of life, its central theme being efforts to protect life from disease and aging. Accordingly Ayurveda puts a considerable thought on the science of Gerontology including **Rasayana Therapy**. The prolongation of life is closely linked with profound economical changes as well as with the changes of social structure. Each of these changes is studies under the special disciplines of Geriatrics and Gerontology. Ayurveda is known to consider the phenomenon of aging from entirely a new angle. It also elaborates a comprehensive clinical discipline called **Rasayana Tantra** entirely devoted to the study of aging and its prevention with the help of **Rasayana** therapy.

Rasayana Tantra is one of the eight major clinical discipline of **Astanga Ayurveda**. The term does not only refer to a drug or a therapy but to a comprehensive discipline which may of course include a therapy. It is a multiangled approach taking care of the body, the mind and the spirit, thus affording a total well being of an individual. **Rasayana** therapy i.e the rejuvenation therapy affords a comprehensive physiologic and metabolic restoration as is evident from the fundamental statement of **Caraka** i.e. **“Labhopayo hi sastanam rasadinam rasaynam”**. Ca, Ci:1.

Ayurveda has two main objectives –

- a) To maintain the health of healthy individuals.
- b) To cure the diseases of diseased persons.

Rasayana cikitsa is mainly used for maintaining the health of healthy individuals although it can be used for diseased also.

Ayurveda and other Indian traditions considered the total span of life over one hundred years. The vedic hymns proclaim an active, healthy life of hundred years – **“Jivem Saradah Satam, Pasyem Saradah Satam”** etc. **Isavasya upanised, Aitaraiya**

Brahman, Kathopanishad, vagbhatta and **caraka** describe an active life span of hundred years.

Age Classification

Chandogyopnisad emphasizes that a man enjoys 116 years of life. The total life span has been divided into three categories.

Childhood – **Balyavastha** - 24 years

Youth - **Yuvavastha** - 44 years

Old age - **Vrddhavastha** - 48 years

Susruta gives an elaborate and systematic classification of age.

I) **Balyavaya** (Childhood) - Before 16 years.

a) **Ksirapa** (milkfed)

b) **Ksirannada** (weaning)

c) **Annada** (Food)

II) **Madhyavastha**

(Middle age) = 16 – 70 years

a) **Vrddhi** - (Growth or evolution) = upto 20 years

b) **Youvana** – (Youth) = 21 – 30 years

c) **Sampurna** (Completion of the body with all the dhatus, Indriyas, strength and veerya)
= 31 – 40 years

d) **Hani** – (Involution or decline) = 41 – 70 years

III) **Vrddha vaya** (old age) = 71 – 100 years

Dhatu, Virya, Indriya, bala, Utsaha decrease day by day. Alopecia, wrinkling of whole of body, cough, breathlessness etc. occur.

Sequential Ksaya in aging

Sarangadhara presents an interesting schemes of loss of different biological factors during life as a function of aging. During the approximate hundred years of total span of life an individual loses different values in different decades of life in the following sequence.

1)	First decade of life	- Balya	- Childhood
2)	Second decade of life	- Vrddhi	- Growth
3)	Third decade of life	- Chabi	- Beauty
4)	Fourth decade of life	- Medha	- Intellect
5)	Fifth decade of life	- Tvaka	- Health of skin
6)	Sixth decade of life	- Drsti	- Vision
7)	Seventh decade of life	- Sukra	- Sex
8)	Eighth decade of life	- Vikrama	- Strength
9)	Ninth decade of life	- Buddhi	- Wisdom
10)	Tenth decade of life	- Karmendriya	- Activity

Aging and Tridosas

Vata, Pitta and **Kapha** are the three basic constituents of living human body. A balanced state of the structure and function of these three **Dosas** maintains the healthy life and their imbalance is the basis of pathology according to Ayurveda. As per fundamental principles of Ayurveda, **Kapha** is the predominant **Dosa** during childhood, **Pitta** during the adulthood and **Vata** during old age.

Kapha is the principal humor responsible for growth and development while **Pitta** is responsible for the vigour and vitality of youth. **Vayu** according to its fundamental properties precipitates atrophy and involution i.e **Kasaya** and **Sosa** of **dhatu**s which is responsible for most of the manifestations of aging. As a function of aging, with advancing age **Kapha** gets gradually depleted and **Vata** increases spontaneously. It is postulated that the following could approximate Dosis set 0 up in aging.

Dosa	Balaya vastha (Child hood)	Madhya vastha (Middle age)	Vrddha vastha (Old age)
Vata	+	+	+++
Pitta	++	+++	++
Kapha	+++	++	+

Aging and Saptadhatu

There is a tendency of gradual rise of all **Dhatu**s, **Indriyas** and the **Ojas** upto the age of 16 years which is followed by the phase of maturity which continues upto the age of

70 years according to **Susruta**. This is followed by the gradual decline or involution of all the **Dhatu**s, **Indriyas** and **Ojas**. In early age **Kapha** predominates and accordingly the **Dhatu**s also remain well formed and nourished. In old age **Vata**

predominates which precipitates the **Sosana** and **Ksaya** of different **Dhatu**s.

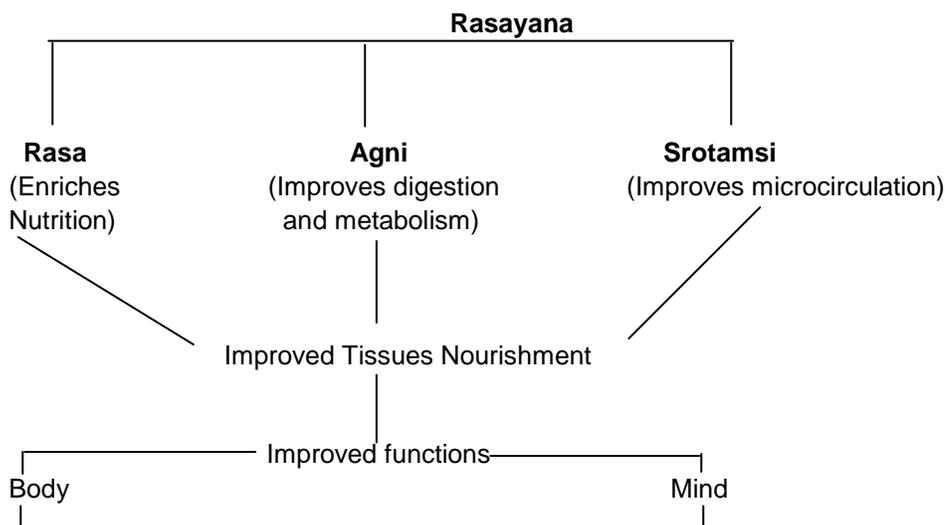
Aging and Agni

Thirteen types of **Agnis** described in Ayurveda represents the digestive and metabolic fire in the body which consists of the digestive juices and different kinds of hormones, enzymes and co-enzymes participating in the metabolism. Digestive capacity and the metabolic rate are highest in young adults which is also the period of increased activity of **Pitta**. The optimum activity of **Agni** maintains the vigour and vitality of an individual and also keep up the growth and development of the body. With the advancing age on one hand the Vata increases which induces involuntary changes while on the other hand the depleted **Agni** leads to decreases in the vigour and vitality with decay and a trophy due to defective metabolism.

The Concept or Rasayana Therapy

Rasayana stands as an answer to solve the problem of healthful longevity including

Mode of Action of Rasayana



mental development and resistance against disease. **Susruta** defines **Rasayana** as a measure which prolongs longevity, develops positive health and improves mental faculties and provides resistance and immunity against diseases. It is a specialized type of treatment influencing the fundamental aspect of the body viz. **Dhatu**s, **Agni** and **Srotamsi** and helps in the prevention of aging.

Definition of Rasayana

The word **Rasayana** consists of two words viz (1) **Rasa** and (2) **Ayana**. The word **Rasa** refers to the **Rasa Dhatu**s in the context of **Rasadi Sapta Dhatu**s and to the pharmacodynamic properties of a drug in the context of **Rasa Guna** etc. **Ayana** means flow i.e. the measures by which one is capable of getting the nourishing **Rasa**. Thus **Rasayana** is that process by which all the body tissues are nourished. Consequently **Rasayana** helps in regeneration, revival and revitalization of **Dhatu**s.

Rasayana drugs and measures act at one or all of the three levels. As a result rich, good and healthy **Dhatu**s are provided in the body. This gives to a person Longevity, Immunity, Vitality, Happiness, Improved intellect etc.

- 1) Acting at all levels of **Rasa** by enriching its nutritional value of the circulating plasma, Examples – **Draksha, milk, Satavari, Salparni** etc.
- 2) Acting at the level of **Agni** i.e at the level of digestion and metabolism. This group of drugs improve the digestion, absorption and metabolism and have some anabolic effect. Examples – **Pippali, Haritaki, Citraka**, etc.

A) According to mode of administration (Carak)

- i. **Vatatapika / Sourya Marutika** (For purpose of outdoor)
- ii. **Kuti Pravesika** (For purpose of indoor)

B) According to object (Susruta)

- i. **Kamya Rasayana**
 - a. **Prana Kamya** (Promotes longevity and life span)
 - b. **Medha Kamya** (Improves mental faculties)
 - c. **Sree Kamya** (Improves luster of the body)

ii. **Naimittika Rasayan**

iii. **Ajasrika Rasayana**

C) Specific Rasayana Drugs and Specific Activities

- i. **Medhya Rasayana**
- ii. **Acara Rasayana**

- 3) Acting at the level of **Srotamsi** i.e at the microcirculatory channels carrying nutrition to the tissues. These **Rasayanas** clean and activate the micro – circulatory channels i.e. **Srotosuddhi** leading to improved tissue health and their quality. Example – **Guggulu, Pippali, Rasana** etc.

Classification of Rasayana

A comprehensive classification of **Rasayana** is the contribution of **Susruta**. Further improvement was done by **Dalhana**. Following is the most rational classification of **Rasayana** according to the textual descriptions and commentaries there upon.

a. **Buddhi Medha Vardhaka**

b. **Ayu Vardhak**

D) According to Prabhava (Effect)

i. **Samsodhana Rasayana**

ii. **Samsamana Rasayana**

Vatapika Rasayana is indicated in those patients who do not have enough resources. This therapy is used while leading normal life. **Samsodhan Karma** is not essential. Although this is a cheaper type, but it is devoid of desired complete results. Specific persons with good resources are best suited for **Kuti Pravesika Rasayana**, **Samsodhana Karma** is essential here. After **Samsodhan** patient enters into **Trigarbha Kuti**. He has to follow specific code and conduct of life with strict diet control. It is said that if **Kuti Pravesika Rasayana** is carried out as per the norms laid down, it is capable of doing 'Kaya – Kapha' i.e. complete bio – physiological transformation of man.

The **Rasayana** used in healthy persons of maintenance and promotion of positive health are called as **Kamya Rasayana**. In Ayurvedic literature emphasis has also been laid over the scope of **Rasayana** therapy in the management of specific diseases. These are known as **Naimittika Rasayanas**. It is not the specific medical treatment for a particular disease, but it should be used as an adjuvant to the specific therapy. **Ajasrika Rasayana** is used in the form of **Sattvika Ahara** consisting of **Ghrita Ksheera** etc. Constant use of such diet produces specific **Rasayana – Prabhava** in the body.

All the **Rasayana** agents have some **Medha Kara** effect and they improve mental

facilities. But some **Rasayana** drugs have specific effect at this level and hence they are known as **Medhya Rasayana**. **Medhya** means any thing which is beneficial for **Medha**, which is responsible for **Dhi** (intelligence), **Dhrti** (Retention power) and **Smrti** (Memory). **Medhya** drugs possess antistress and adaptogenic effect which has been proved by recent scientific studies.

Acara Rasayana means the social and personal conducts by which one can acquire the **Rasayana** effect. It broadly includes (1) Personal behaviour (2) Social behaviour and (3) **Sattvika Ahara**. About personal behaviour carak says that one should not take alcohol and must refrain from light types of Maithuna. One should remain quiet, maintain cleanliness of body and mind, Japa, control his senses, give up exertious exercises and **Ahamkara** (ego). About social behaviour it has been said that one should always speak truth, do not show anger, have sympathetic behaviour to others, remain conscious about the change of body and environment etc. Thus it can be said that **Acara Rasayana** is non pharmacological approach and preventive measure for physical and mental illness and to prevent aging.

There are certain **Rasayana** drugs which when used may include **Vamana, Virecana, Swedana Karma** in the body and thus body is purified. Vitiating dosas are expelled from the body. This is called **Samsodhan**

Rasayana. Example – **Soma Rasayana** etc. **Somsamana** group of **Rasayana** drugs produce **Rasayana Prabhava** in the body by producing **Dosa Samya**/ Examples are **Amalaki, Nagabala, Chyavanprasa** etc.

Indications

Emphasis has been put on the use of **Rasayana** in early age because it may not be of help already occurred. Rasayana can be used according to the necessity but several factors should also keep in mind. They are **Vaya, Satmya, Dhatu, Desa, Prakrti, Vyadhi, Kala, Dosa** etc. Early adult and middle age (between 3rd to 5th decades) is

the best period of **Rasayana** therapy to have maximum of anti aging effect like **Jara Nasana, Ayuskara and Vayah Sthapana**.

To get best result of **Rasayana** Therapy, one has to undergo an appropriate **Samsodhan Karma**, consume a suitable regiment of diet and has to follow a suitable code of psycho – physiological conduct.

A study discussion conducted by the C.C.R.I.M.H., New Delhi, suggested the following schedule as regarded to the consideration of Vaya (age) in **Rasayana** Therapy.

Age Grouped	Desired effect	Suitable Rasayana drugs
1 – 10	Balya	Vaca (Acorus Calamus Linn) Kasmari (Gmelina arborea Linn)
11 – 20	Vrddi	Aswagandha (Withania Somnifera (L) Dun.) Bala (Sida Cardifolia Linn.)
21 – 30	Chabi	Amalaki (Emblica officinalis Garten.)
31 – 40	Medha	Samkhapuspi (Convolvulus pluricaulis chois.) Jyotismati (Celastrus paniculatus willd)
41 – 50	Twaka	Bhringaraja (Eclipta alba Hassk.) Somaraji (Centratherum anthelminiticum kuntze)
51 – 60	Drsti	Caksusya (Cassia absus Linn.) Saptamrta Lauha
61 – 70	Sukra	Atmagupta (Mucuna Prurita Hook.) Munjataka (Orchis Latifolia Linn.)

71 – 80	Vikrama	} —	Usually
81 – 90	Buddhi		Drugs are
91 – 100	Karmendriya		not effective.

Naimittika Rasayana According to Specific Diseases

Eye diseases	- Jyotismati, Triphala, Shatavari, Yastimadhu
Heart diseases	- Salaparni
Skin diseases	- Tuvaraka, Bhallataka, Vidanga, Somaraji, Gandhaka
Granthi & Gulm	- Pippali, Bhallataka
Yaksma	- Rasona, Nagabala, Silajatu, Pippali
Pandu	- Lauha
Swasa	- Agastya Rasayana, Bhallataka
Amvata	- Amrit Bhallataka
Vata Vyadhi	- Rasona, Guggulu, Bala, Nagabala
Diabetes	- Silajatu, Amalaki, Haridra
Medo Roga	- Guggulu, Haritaki
Hypertension	- Rasona, Bala, Rasna
Hypotension	- Kupeelu

Rasayana Drugs According to Satmya

1. Rtu Satmya

- a) **Adan Kala** (Feb – July) - Seeta Veerya, Laghu – Amalaki
- b) **Visarga Kala** (Aug – Jan.) - Usna Veerya, Guru – Bhallataka

2. Desa Satmya

- | | | |
|--------------------------|----------------|----------|
| a) Sadharana Desa | - Simple drugs | } + Diet |
| b) Jangal Desa | - Snigdhosna | |
| c) Anup Desa | - Rukshosna | |

Rasayana Drugs According to Sapta Dhatu

- Rasa** - Kharjura, Draksa, Kasmari
- Rakta** - Lauha, Amalaki, Bhringarja, Palandu
- Mamsa** - Bala, Nagabala, Aswagandha, Salaparni, Mamsa
- Medha** - Guggulu, Silajatu, Amrta, Haritaki
- Asthi** - Laksa, Banslocan, Shukti, Samkha
- Majja** - Lauha, Vasa, Majja
- Sukra** - Atmagupta

Rasayana According to Prakriti

(a) Deha Prakrti

- i) **Vata Prakrti** - Bala, Nagabala, Ghrit
- ii) **Pitta Prakrti** - Amalaki, Satawari
- iii) **Kaphaja Prakrti** - Bhallataka, Guggulu, Pippali

(b) Manas Prakrti

Aswagandha, Samkhapuspi and other Medhya drugs.

The present study reveals that the process of aging was elaborately described in Ayurvedic texts in terms of the fundamental principles of Ayurveda. In order to prolong the life span and to promote healthy longevity a separate medical discipline termed as Rasayana Tantra was developed which not only described a variety of method and majors to promote longevity and to impart immunity. There is a need of revival of this ancient discipline and its scientific development.

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