

THERAPEUTIC EVALUATION OF RASAYANA KARMA OF CHATURTHAMALAKA RASAYANA

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ABSTRACT

Rasayana, one of the leading branches of *Ayurveda*, has many formulations to nourish body, boosts immunity and to keep the body and mind in its best equilibrium state. Anti-ageing is one of the leading outcome factors under the concept of *Rasayana*. Nowadays, monitoring the biological clock of ageing through *Rasayana* opens up new doors in the health practices. *Chaturthamalaka Rasayana* (CR) is one of the unique formulations mentioned in *Charaka Samhita* which is not yet discussed before. Classical description of CR explains the high level health benefits too. That's why on the basis of *Ayurveda* principles along with some aspects of modern science theory, we trying to evaluate the therapeutic effect of CR to explore its broad spectrum *Rasayana Karma*.

Keywords: *Rasayana, Chaturthamalaka, Karma, Dravya, Charaka*

INTRODUCTION

Nowadays, it's quite difficult to maintain stable health due to polluted environment, day to day hectic busy schedules, stress etc. It's nothing but ultimately the competition for the survival of the fittest. Everyone wants to maintain health at its supreme position in the whole journey of life. For this achievement, one should follow at least some points of the *Dincharya* (daily habits to follow), *Ritucharya* (seasonal habits to follow), *Achara Rasayana* (social rules to follow in society) along with consuming *Rasayana Kalpa* (immunity booster formulation) mentioned in *Ayurveda*. Natural remedies claim to have such wonderful boost up powers.

Rasayana claimed to contribute in revitalising the tissues and even the psyche thereby also maintaining mental health of the human being. These are stated to enhance the *Ojas* of the body i.e. vitality.¹ Thus at this level, *Ayurveda* holds a holistic approach in management of any disease by modification of diet, drug and lifestyle according to *Prakriti* of an individual provide better results. There are so many somatic diseases in which psychological symptoms have been described whereas in the description of *Manasika Roga*, somatic characters are also mentioned. In *Ayurveda*, avoidance of the causative factors is described as the first line of treatment of any disease whether it is *Sharira* or *Ma-*

nasa Roga. Some *Medhya Rasayana Dravya* described in *Ayurveda* have better effect on the mind and body which increases day to day performance and cognitive functions. Some biological effects of *Rasayana Chikitsa* result in various effects like anabolic, adaptogenic, immunomodulatory, nootropic, antioxidant, antiaging etc.

*Chaturthamalaka Rasayana*² (CR) is one of the best combinations found in *Charaka Samhita*. It is mentioned just succeeding to the *Chyavanprasha Avaleha*.³ Also CR has never been studied yet before. It's nothing but the simple combination of *Triphala* along with some other easily available *Dravya*, mentioned in Table 1.

Table 1: Contents of *Chaturthamalaka Rasayana*

Sr. No.	Dravya	Rasa	Vipaka	Virya	Guna	Karma / Prabhava
1.	<i>Amalaki</i> (<i>Emblica officinalis</i> Gaertn)	<i>Pancharasa (Lavana Varjita)</i>	<i>Madhura</i>	<i>Shita</i>	<i>Guru, Ruksha</i>	<i>Rasayana</i> ⁴
2.	<i>Haritaki</i> (<i>Terminalia bellerica</i> Retz.)	<i>Pancharasa (Lavana Varjita)</i>	<i>Madhura</i>	<i>Ushna</i>	<i>Laghu, Ruksha</i>	<i>Rasayana</i> ⁵
3.	<i>Bibhitaki</i> (<i>Terminalia chebula</i> Roxb)	<i>Kashaya</i>	<i>Madhura</i>	<i>Ushna</i>	<i>Laghu, Ruksha</i>	<i>Netrya, Keshya, Vaisvryanashana</i> ⁶
4.	<i>Dadhi</i> (Curd)	<i>Amla, Kashaya</i>	<i>Amla</i>	<i>Ushna</i>	<i>Guru, Snigdha</i>	<i>Dipana, Hridya, Pushtikrita</i> ⁷
5.	<i>Madhu</i> (Honey)	<i>Madhura, Kashaya</i>	<i>Katu</i>	<i>Shita</i>	<i>Laghu, Ruksha</i>	<i>Yogavahi, Chedana, Lekhana</i>
6.	<i>Ghrita</i> (Ghee)	<i>Madhura</i>	<i>Madhura</i>	<i>Shita</i>	<i>Guru, Snigdha</i>	<i>Rasayana, Dipana, Netrya</i> ⁸
7.	<i>Tila</i> (<i>Sesamum indicum</i> Linn.)	<i>Katu, Tikta, Madhura, Kashaya</i>	<i>Katu</i>	<i>Ushna</i>	<i>Guru, Snigdha</i>	<i>Balya, Keshya, Agnivaradhaka, Medhya</i> ⁹
8.	<i>Tila Tailam</i> (Sesame oil)	<i>Madhura, Kashaya, Tikta</i>	<i>Madhura</i>	<i>Ushna</i>	<i>Guru, Snigdha</i>	<i>Bala Varnakaraka, Vrishya, Dipana</i> ¹⁰
9.	<i>Sharkara</i> (Sugar)	<i>Madhura</i>	<i>Madhura</i>	<i>Shita</i>	<i>Laghu, Snigdha</i>	<i>Brihana, Vata-Rakta Pitta-Daha Shamana, Netrya</i> ¹¹
10.	<i>Palasha</i> (<i>Butea monosperma</i> Lam. Taub.)	<i>Kashaya, Katu, Tikta,</i>	<i>Katu</i>	<i>Ushna</i>	<i>Laghu, Snigdha</i>	<i>Dipana, Vrishya, Sara, Doshaghna</i> ¹²

Triphala:

Triphala is a unique combination of *Amalaki, Haritaki and Bibhitaki*. It has a good immunomodulatory property and could be attributed to the presence of flavonoids, alkaloids, tannins, saponin, glycosides and phenolic compounds.¹³ *Triphala* extract has proved immunomodulatory activity, supporting the Th1 response more than the Th2 response. *Triphala* is safe for normal cells and might have an anti-cancer effect. Gallic acid and other phenolic compounds might be responsible for this activity.¹⁴ Also *Triphala* caused

immunosuppression in experimental induced inflammation, indicating that they may provide an alternative approach to the treatment of inflammatory and autoimmune diseases.¹⁵ *Triphala* has been reported to be a rich source of vitamin C, ellagic acid, gallic acid, chebulic acid, bellericanin, β sitosterol, ascorbic acid and flavonoids. Spectroscopic techniques including mass spectroscopy, nuclear magnetic resonance and infrared spectroscopy showed Gallic acid as the major component. *Triphala* also contains about 20% tannins of both condensed and hydrolysable type. Other con-

stituents identified in the fruits include lipids, sitosterol, saponins, cardiac glycoside and various carbohydrates.¹⁶ According to *Ayurveda* point of view i.e. *Guna* (property) and *Karma* (mode of action) of *Triphala*¹⁷, it is basically a *Kashaya Rasa* (astringent) *Pradhana Dravya* i.e. *Prithvi* and *Vayu Mahabhuta Pradhana*. It is *Laghu* (light) and *Dipana* (carminative) in *Guna* which acts on *Jatharagni* as well as *Dhatwagni* for *Sukshma Pachana Karma* i.e. metabolism, to produce *Prakruta Dhatu*¹⁸ (seven primitive matter). It may ultimately results in *Ojas Nirmiti* (governing the immune system) which will break the pathology and may help to maintain the strength of the body. Also in classical *Ayurveda* literature, *Triphala*¹⁹ along with *Amalaki*²⁰, *Bibhitaki* and *Haritaki*²¹ are well described for its *Rasayana Karma*. *Amalaki* is traditionally used for range of severe diseases. The antioxidant, immunomodulatory, anticancer, cytoprotective, analgesic, antimicrobial, antipyretic, antitussive and gastro protective are the important properties of *Amalaki*. Vitamin C, tannins and flavonoids present in *Amalaki* have very powerful antioxidant activities. The fruit of *Bibhitaki* had been found to contain gallic acid as an active component, along with other phytochemical compounds such as ellagic acid, ethyl gallate, chebulagic acid, β -sitosterol, lignans and flavan. Gallic acid has a wide range of biological activities, including anti-oxidant, anti-inflammatory, antimicrobial and anticancer activities. Gallic acid may contribute to the immunomodulatory activity of *T. bellerica* fruits, or may cooperate with other phytochemicals. The immunomodulatory activity of *Haritaki* may be by decreased lipid peroxidation and increased levels of antioxidant enzymes catalase and superoxide dismutase; increased melatonin secretion by pineal gland which play a role in immunomodulatory action by exerting direct and/or indirect stimulatory effect on both cellular and humoral immunity; and proliferation of lymphocytes as indicated by the increase in the number of β and T cells which release cytokines and growth factors that regulate other immune cells and secretion of antibodies in the blood. Other mechanisms such as increased levels of cytokines IL-2, IL-10 and TNF- α which play important

role in immunomodulatory actions such as T and B lymphocyte proliferation, natural killer cell activation, elevation of Th2 cells and modulation of cytokine gene expression also seem to be in operation. Also *Triphala* appears to be a very safe compound as none of its ingredients has reported any toxicity ever^{22,23,24,25,26,27}.

Tila: In *Krishna* (black variety) *Tila*, *Madhura*, *Tikta*, *Kashaya Rasa*, *Madhura Vipaka* and *Guru* (heavy), *Snigdha* (unctuous) *Guna* responsible for *Rasayana*. Presence of flavonoids & tannins in *Krishna Tila* dominates antioxidant property.²⁸

Tila Tailam: Because of qualities like *Ushna* (warm), *Tikshna* (strong), *Vyavayi* (migrate) and *Sukshma* (micro), reaches up to the microchannel levels, liquefies the morbid/viscid *Kapha* or *Dosha* for easy elimination. Because of *Snigdha* property it protects the intestinal mucosa from irritative substances. Because of *Brimhana* (increase body mass), it increases the tone and strength of the cells in whole body and intestinal mucosa particular. It decreases flatulence and increases general metabolism. *Acharya Charaka* has mentioned that *Tila Tailam* is best among the *Dravya* in pacification of *Vata*. *Tailam* alleviates *Vata*, but at the same time doesn't aggravate the *Kapha*. It promotes the strength. From therapeutic point of view another gravity of *Tila Tailam* is when treated with other drugs, it also takes the property of those drugs. One of the previous study suggest that, *Tailam* preparation was found to have an immunostimulating activity while the formulation prepared with *Ghrita* exhibited an anti-stress effect with an immunosuppressing activity.²⁹

Madhu: *Madhu* (honey) proteins inhibited the phagocytosis latex bead macrophages, the production of pro-inflammatory cytokines IL-1 β and TNF- α by human monocytic cell line in the presence of honey proteins was analysed. Honey proteins did not affect the production of IL-1 β ; however, TNF- α production was significantly suppressed. Honey glycoproteins and glycopeptides significantly interfere with molecules of the innate immune system.³⁰ *Yogavahi* (vehicle) *Guna* of *Madhu* is the most promising property which makes it more compatible with various *Ayurveda*

drugs. *Chedana* (cutting), *Lekhana* (scavenging) property of *Madhu* destroys *Avrodha* (congestion) of *Strotasa* (microchannels) and makes a path for drug to migrate up to microcirculation.

Sharkara: In one of the study, where *Sharkara* (sugar) was used as an experimental drug, the significantly higher anti-SRBC antibody titers in experimental groups indicated the higher humoral response suggesting the immunological properties to enhance the antibody production. This enhanced humoral response might be due to sugar cane factor.³¹ A wide range of biological effects of sugar cane have been reported such as immunostimulatory, anti-thrombosis, anti-inflammatory, vaccine adjuvant, anti-oxidant, modulation of acetylcholine release and anti-stress activities.³² *Sharkara* is *Shita* (cold) in *Guna* acts on *Rakta* and *Pitta Dosha* and minimizes *Daha* (the burning sensation). Also excess *Pitta Dosha* responsible for *Paka* (excess metabolism) which makes conversion of *Sara Bhaga* (nutritive matter) in to mala (faecal matter). Also its *Brihana guna* is useful to make the preparations nutritious and if the bitterness is more in the formulation then it makes it more palatable for ingestion. *Sharkara* has the special *Prabhava* (action) explain by *Bhavprakash Nighantu* as *Netrya* i.e. good for eye vision.

Ghruta: In one of the previous research work, when *Ghruta* (ghee) was fed, there was a significant decrease in the secretion of LTB₄, LTC₄, and LTD₄ by peritoneal macrophages activated with calcium ionophore. Ghee contains conjugated linoleic acid which has been shown to reduce the formation of inflammatory mediators such as LT, prostaglandin and ILs.³³ According to classical literature, *Ghruta* is well known for its immunity booster property i.e. *Rasayana Karma*. Its *Dipana Karma* is responsible to increase the metabolism up to microchannel. It acts on *Dhatwagni* for *Sukshma Pachana Karma* (Metabolism) to produce *Prakruta Dhatu* (seven primitive matters). Also it's good for eye vision same *Prabhava Karma* as of *Sharkara* mentioned previously. Overall its activity is useful in total anti-aging therapy (*Vaya-Sthapana*).

Dadhi: *Dadhi* (curd/yogurt) forms the richest source of 'Probiotics'. Probiotics contain living microorganisms (good bacteria), which upon ingestion exert health benefits beyond inherent general nutrition. Presently, there is growing awareness among people for the nutritional, control of ailments Nutritional supplements like Curd/yoghurt form natural healing foods. These probiotics offers beneficial and healthy micro flora to the alimentary canal through diet without any risk of adverse effects. Lactic acid bacteria (LAB) e.g. lactobacilli are one such example of advantageous microorganisms. Probiotics promote the health of the host by boosting the immune system of the body. Natural immunity is strengthened by the curd through stimulation of mucosal and systemic host immunity which is manifested through enhanced levels of immunoglobulins, activated macrophages, high levels of cytokines and natural killer (NK) cell activities in the patient. Further probiotic bacteria can trigger a cascade of immunological defence mechanism by binding to recognition receptors, such as Toll-like receptors (TLRs) expressed on the surface of epithelial cells. Moreover, they may enhance immune status of HIV patients by increasing the production of immune cells, such as CD4 + T-cells (that mediate and control the balance of pro-inflammatory and anti-inflammatory cytokines and chemokines). Hence curd may be viewed as the potential remedy while designing clinical studies for the treatment of illness like allergy, urogenital infections, HIV, Cancer, Helicobacter pylori infection, HIV, liver disease, inflammatory bowel (IBD), irritable bowel syndrome (IBS) and pancreatitis. Different probiotic strains generate diverse responses dependent on immune system of the host. Non-specific therapeutic modulation of probiotics in the host is mainly due to adherence and colonization of the gut, suppression of growth or epithelial binding/invasion by pathogenic bacteria, production of antimicrobial substances and improvement of intestinal barrier function.³⁴ According to classical literature, *Dadhi* has *Dipana property* along with, *Hridya Karma* (beneficial for heart activity). It is also responsible for overall strength of the body and mind by maintaining stability (*Pushtikrita*).

In *Ayurveda*, it is counted in *Mangalya Dravya* i.e. substances which are always beneficial to body and mind when taken in a proper quantity, by following the rules of ingestion (*Sevana Vidhi*, *Pathya* and *Apathya*).

Palasha: Though, the *Palasha* (*B. monosperma*) was not directly used as an ingredient in the classical preparation of *Chaturthamalaka Rasayana*, but its *Twaka* (bark) was used in the procedure of steaming of *Amalaki*, *Haritaki* and *Bibhitaki* in the form of covering. Somehow, it might be said that, during the steaming process, there may be the possibilities of interaction between the active chemical constituents of *Palasha Twaka* and those with fresh fruits of *Amalaki*, *Haritaki* and *Bibhitaki*, may increase drug potency. It's just a probability, because previously published various research works explained the significant activities of various parts of *Palasha*. On the same way, it may be some great ideology of *Acharya Charaka* to enhance the *Rasayana Karma* (immunomodulatory activity) of *Chaturthamalaka Rasayana* by using *Palasha* due to its *Dipana*, *Vrishya* (aphrodisiac), *Sara* (property of escaping fast from one part to another), *Doshaghna* (purification of body by eliminating the unwanted material) *Karma*. One of the studies for *Radical scavenging activity* reveals that, ethyl acetate and butanol extracts of *B. monosperma* were shows significant results in radical scavenging activities using different in vitro models. Methanol extract along with its ethyl acetate and butanol fractions showed potent free radical scavenging activity. This could be due to the higher phenolic content in the extracts. However, here the experimental work was done with *Palasha* flowers, same scope would be there with *Palasha* bark also which we used during drug preparation. Studies should be conducted for more confirmations.³⁵

Another study reveals that, the *B. monosperma* extract exhibited *chemo preventive* effects on hepatic carcinogenesis and on tumour promoter induced markers and oxidative stress in male wistar rats. Pre-treatment of *B. monosperma* extract prevented oxidative stress by restoring the levels of antioxidant enzymes and also prevented toxicity. The promotion parameters

induced (ornithine decarboxylase activity and DNA synthesis) by 2-AAF administration in diet with partial hepatectomy (PH) were also significantly suppressed dose dependently by *B. monosperma*. Thereafter, the studies were done on rat liver carcinogenesis. After fourteen days of DEN (diethyl nitrosamines) treatment, dietary administration of 2-AAF with PH resulted in a 100% incidence of tumours in the animals. However, *B. monosperma* caused reduction in the number of tumours per rat and percentage of tumour bearing rats at the end of the study suggests that, *B. monosperma* extract is a potent chemo preventive agent which suppresses hepatic carcinogenesis and oxidative damage in Wistar rats. The protective activity of the plant might be due to the two major constituents, butrin and isobutrin.³⁶

The *Rasayana Dravyas*, particularly those with *Madhura Vipaka* that are advocated as 'adaptogen' in *Ayurveda*, primarily activate immune cells, leading to secretion of cytokines, which in turn act on multiple target organs. It has been found that the nervous, endocrine and immune systems are all interrelated. Immune products like various cytokines have been found to stimulate the hypothalamus-pituitary-adrenal axis and corticotrophin release factor (CRF), which ultimately enhances the production of adrenal corticotropic hormone (ACTH) resulting into increased secretion of glucocorticoids which have an overall suppressive effect on the immune system. Stress, anxiety and immunosuppression also act on the same axis and brings about changes in the immune status of the body. These *Rasayana Dravya* probably reduce stress levels by affecting antioxidant levels. So, these *Rasayana Dravya* act as potent immunomodulatory as well as antioxidants.

DISCUSSION

Pharmacodynamics (*Karya Karana Bhava*) of *Rasayana*:³⁷

It has been explained by *Acharya Dalhana* on the basis of *Rasa*, *Guna*, *Virya*, *Vipaka*, *Prabhava* of the *Rasayana Dravya*. When *Rasayana Dravya* of different *Rasa* are taken, they are digested by *Jathragni* followed by *Bhutagni*. During this phase normal *Vata*,

Pitta and *Kapha* are produced along with pure *Sara Bhaga* i.e. *Ahara rasa*. This qualitative *Rasa* produces pure *Rasa Dhatu*, which then continues the chain of production of other *Raktadi Dhatu* with the help of respective *Dhatwagni* upto *Oja* formation. Therefore well formed *Dhatu* keep on nourishing the body till they are taken, e.g. *Rasa* provides contentment and saturation & nourishes the blood, *Rakta* generates clarity in complexion & nourishes the *Meda*, *Meda* gives rise to unctuous material, sweat & firmness & nourishes bones, *Asthi* supports the body & nourishes *Majja*, *Majja* provides unctuous, strength, nourishes *Shukra* and fills up bones, *Shukra* provides valour, pleasure, physical strength, exhilaration and is meant for reproduction.

1. *Rasayana* may act at the level of *Rasadi Dhatu*: By improving the nutritional status of *Rasa* and in turn by improving tissue nourishment. Probably *Rasayana* drugs having *Madhura*, *Guru*, *Snigdha*, and *Shita Guna* may act at this level by promoting the nutritional value of *Poshaka Rasa*, which in turn helps in obtaining the best qualities of *Dhatu* which ultimately gives the best quality of *Oja* to strengthen the *Vyadhikshamatva* (Immunity). The *Vikara Vighata Bhava* otherwise known as *Vadhikshamatva* of the body. *Vyadhikshamatva* is interpreted as *Vyadhibala Virodhitva* (antagonistic to strength and virulence of diseases) and *Vyadhi Utpada Prativandhakatva* (the capacity to inhibit or neutralise or resist or overcome diseases causing agents) e.g. *Shatavari*, *Amalaki*, *Musali*, *Gambhari*, *Jivanti*, *Vidarikanda*, *Shalmali* etc.

2. *Rasayana* may act at the level of *Agni*: The *Rasayana* drugs possessing the *Ushna Laghu*, *Ruksha Guna* and *Katu*, *Tikta*, *Kashaya Rasa* may be acting at the level of *Agni* (digestion and metabolism) by improving the digestive capacity and by vitalizing the metabolic activities (improving *Jatharagni* and *Dhatwagni*) of the body e.g. *Haritaki*, *Bhringaraja*, *Kakamachi*, *Shalparni* etc.

3. *Rasayana* may act at the level of *Strotasa*: Similarly the drugs with *Katu*, *Tikta*, *Kashaya Rasa* *Ushna Virya*, *Katu Vipaka*, *Vishada*, *Ruksha* and *Laghu Guna* may produce the classical *Rasayana* effect at the level of *Strotasa* by improving *Sukshma Samva-*

hana and the quality of *Dipana* and *Pachana*. These drugs cause *Strotoshodhana* (cleansing of channels) and thus allow efficient blood circulation and improve tissue nourishment and there by maintains its structural integrity and functional capacity. e.g. *Ashwagandha*, *Guduchi*, *Rasona*, *Guggulu*, *Kumari* etc.

Rasayana is believed to promote the process of *Dhatuposhana* and enrich *Oja* leading to *Vyadhikshamatva*. The defence mechanism present in the body allows us to survive in the potentially hostile world of infectious agents. This constitutional order is immune system. Any change in this order can lead to diseases. After the discovery of antibiotics it was thought that the man has occupied infectious diseases. But their limitation surfaced. At that time it was relieved that rather than having war these diseases, preventive defence mechanism is better. Treating diseases with synthetic immunomodulator still looks like distant dream. The concept of strengthening of inherent defence mechanism in our body exists in *Rasayana Chikitsa*.

Probable mode of action of drug:

A drug (*Dravya*) performs certain actions (*Karma*) in the body by virtue of its properties i.e. *Guna*, *Rasa*, *Virya*, *Vipaka* and *Prabhava* which exist in it in a state of co-inherence. The uniformity of proto-elements of the drug on one hand and the proto-elemental constituents of the body on the other hand forms the basis of the principles of *Samanya* and *Vishesha*. These principles imply that the predominant proto-elements of the drug will increase similar proto-elements in the body and the dissimilar will decrease the proto-elements. The actions of a drug are intimately related to its chemical structure in the form of preponderance of one or two proto elements in them.

In most human diseases the oxidative stress is the secondary phenomena, for e.g., activated neutrophils produce O_2^- , H_2O_2 and $HOCl$ to kill phagogens. If a large number of phagocytes become activated in a localized area they can produce tissue damage. e.g., synovial fluid in sole and knee joints of rheumatoid arthritis contain large number of activated neutrophils. Some human diseases may be caused by oxidative stress. e.g., excess radiation to biological system

causes free radical damage to protein, DNA and lipids. Neurological disorders by dietary difference of tocopherol are mediative by oxidative stress. It also produces intracellular free Ca^{2+} damage to membrane ion transporters and other specific protein and peroxidation of lipids.³⁸

Hence, to protect from damage cells produce enzymes, or by intake of free radical scavenger substances to neutralized or detoxify the free radical are known as antioxidant. Thus, the imbalance between free radical and anti-oxidant resulting diseases. In biological systems two types of antioxidants are proved useful against pathogenesis. Endogenous antioxidant and exogenous antioxidant. *Chaturthamalaka Rasayana* seems to be containing both types. The immune system has connections with a number of other organs and can directly or indirectly influence the actions of these organs. The function of the immune system is to protect our bodies against foreign invaders. It plays a pivotal role in the pathogenesis of immune deficient diseases, autoimmunity, and in allergy. *Ayurveda* says pure treatment is that which cures the disease and which also provides physical, mental as well as social health. *Rasayana* are health promoting and rejuvenating agents which by their empirical effects produce resistance against disease both physically and mentally. *Chaturthamalaka Rasayana* accelerated the recovery of the haemopoetic system by a rapid rise in total leukocytes. Both lymphocytes and neutrophils were significantly increased by *Rasayana Chikitsa*. Also, as we used the drug, cyclophosphamide, to induce neutropenia in the experimental animal models, is a drug used in cancer treatment. It may suggest that, the *Chaturthamalaka Rasayana* may be shows significant results in cancer patients, as immunity booster drug. For this purpose, more research work with clinical trials needed.

CONCLUSION

The term *Rasayana* 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, mind and spirit, thus affecting a total wellbeing of an individual. *Rasayana*

nourishes body, boosts immunity, strength, resistance, quality and quantity of *Ojas*, restore spirit, vitality and thereby attain the longevity. The benefits of *Rasayana Chikitsa* (rejuvenation therapy) are truly comprehensive, improving the overall health anyone undergoing this treatment. Apart from promoting good health, increasing concentration and memory, giving the skin a radiant glow and alleviating stress from the mind, its most important effect is creating a greater resistance to diseases. So regardless if today we are indeed living in the most stressful of times or not, *Rasayana* therapy is an extremely useful strategy for remaining healthy. Among this *Rasayana*, one may selected *Chaturthamalaka Rasayana* as a drug of choice as it was cost effective, adulteration free, easily available raw drugs and its therapeutic evaluation for *Rasayana Karma* as discussed before were enough to get all *Rasayana* benefits rather than selecting ant other costly formulations. The other pharmacological evaluation of CR will be the area of research in the future.

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Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Gajarmal Amit Ashok & Rath Sudipt: Therapeutic Evaluation Of Rasayana Karma Of Chaturthamalaka Rasayana. *International Ayurvedic Medical Journal* {online} 2019 {cited May, 2019} Available from: http://www.iamj.in/posts/images/upload/792_800.pdf