



## Review Article

### NON-PHARMACOLOGICAL AYURVEDA APPROACH FOR PREVENTION OF LIFE STYLE DISORDERS: A REVIEW

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#### ABSTRACT

Association of daily routine of an individual with his health goes a long way in deciding the quality of life he leads. A sedentary routine and poor diet control creates an aetiology favourable for lifestyle disorders particularly Hypertension, Type-2 diabetes mellitus, Obesity and dyslipidemia. Ayurveda texts explain various fundamental principles aimed at preventing occurrence of diseases and to promote a healthy life. Apart from conventional drug approach, non-pharmacological aspects of prevention of disease should also be advised to a patient. In this study, the three main texts of Ayurveda, i.e. Brihatryi were explored and the non-pharmacological aspects of Dinacharya, Ritucharya, Sadvritta, Ahaarvidhi, Vyayama and Rasayana were analysed. Analyses of the texts revealed that these preventive aspects, if adopted in daily routine by patients of lifestyle disorders can improve their quality of life and maintain good health.

**Keywords:** Ayurveda, Dinacharya, Ritucharya, Sadvritta

#### INTRODUCTION

Rapid urbanisation and transitional shift from traditional to modern lifestyle has led to emergence of lifestyle disorders as a global health challenge. Association of a person's way of living with his health go a long way in creating an etiology favourable for lifestyle disorders particularly Hypertension, Type-2 diabetes mellitus, Obesity, dyslipidemia, CVA to develop. Sedentary schedule and faulty dietary habits are the main cause for metabolic imbalance which leads to this group of diseases and making them one of the leading causes of death today. These are essentially the diseases of civilization. Apart from these, use of tobacco, alcohol and drugs has resulted in rapid escalation of these diseases. Though western medicine system has gained tremendous success in prevention and treatment of communicable diseases but the scenario is not so honey in relation to lifestyle disorders.

Ayurveda – the ancient system of medicine has a great potential in preventing lifestyle disorders. Ayurveda has volumes of texts available explaining many fundamental principles for promotion of health and longevity and prevention of diseases. The crucial homeostasis of the body can be maintained by trailing these principles. Scholars of Ayurveda system of medicine were much aware about the maintenance of health of healthy person which

is also the primary objective of Ayurveda, secondary being to cure the diseased individual. Lifestyle diseases are potentially preventable with changes in the diet, daily routine and environment. Some studies have been also being conducted on lifestyle interventions for management and prevention of these diseases with satisfactory results.<sup>1</sup>

#### DISCUSSION

Science of Ayurveda offers various non-pharmacological approach including dinacharya (daily regime), Ritucharya (seasonal regime), Rasayana (rejuvenation therapy), sadvritta (ideal routine) for maintenance of health and well-being. It provides appropriate solution to the problem arising out of faulty lifestyle. Proper dietary management is another important pillar in prevention of lifestyle diseases. Diet (ahaar) is one of the three pillars (Traya-upastambha) which supports the life.

#### Dinacharaya

A daily ritual of self-care is called dinacharaya. Ayurveda emphasizes on the systematic daily regimen for a healthy life. Today's modern life style can be modified by making some simple interventions described in dinacharya. The daily regimen mentioned in Ayurveda texts has been briefly stated in Table 1.

**Table 1: Daily regimen**

Regimen <sup>2-5</sup>	Description
Brahama-muhurat-jagrana	waking up just before sun-rise
Vega nissaran	eliminate the natural urges in morning
mukha netra prakshalana, gandoosh & kawala	Cleansing procedures like washing hands and (washing of face and eyes), tooth brushing using pungent, bitter and astringent twigs, mouth wash & use of snighdha dravya and tambula as mouth freshener
Anjana	application of collyrium
Nasya	Application of nasal drops with Anu taila
Dhumpana	inhalation of medicated smoke

Individual is advised to do exercise regularly, bathing, to dress up properly, use of precious stones and metals in the form of jewellery, use of shoes and umbrella while doing outdoor work.<sup>6</sup> Finally, indulgence in occupation for livelihood with moral and ethics also has a psychological bearing on one's health. These regimens seem to be petty but they play an important role in maintenance of physical as well as mental health.<sup>7</sup> Time management is the only effort required to inculcate this health schedule in daily life.

### Ritucharya

Ritucharya is the dietary and behavioural regimen for the maintenance of health in different ritu (seasons) of the year.

Various disease conditions are a result of negligence in adoption of seasonal regimen. A year is divided into two ayana (periods) - Uttarayana and Dakshinayana, depending on the direction of movement of sun. Each ayana is further divided into three ritu. Thus, a year has six ritus (seasons) namely, Shishira (winter), Vasanta (spring) and grishma (summer) of uttarayana and Varsha (monsoon), sharad (autumn) and Hemanta (late autumn) of Dakshinayana.<sup>8</sup> In Uttarayana, sun and wind are powerful and cause a debilitating effect on environment and living beings on the earth.<sup>9</sup> On the other hand, strength of a person enhances gradually in the dakshinayana. Seasonal regimen mentioned in the Ayurvedic classical texts (Table 2) help in maintaining a good health.

Table 2: Seasonal regimen

Ritu <sup>10-16</sup>	Indications regarding diet and lifestyle	Contraindication
Hemant	Diet- Milk and its preparations, cane juice and its preparations, grains like black lentil ( <i>Phaseolus radiates</i> ), flesh of marshy animals, unctuous, sour, salty food products, fats, oil, lukewarm water for drinking. Lifestyle- Use of aguru lepa ( <i>Aquilaria agallocha</i> ), abhyanga (massage with oil), jentaka sweda (hot sudation). Wear heavy and warm clothes.	Food and drinks which are liable to vitiate vata i.e laghu (light), ruksha (dry) & avoid exposure to direct winds.
Shishira	Regimen as advised in Hemant ritu	Pungent, bitter and vata provoking food and drinks
Vasanta	Easily digestible food-Yava ( <i>Hordeum vulgare</i> ), Godhuma ( <i>Triticum vulgare</i> ), honey in diet. Flesh of shashaka (rabbit). Water cooked with shunthi ( <i>zingiber officinale</i> ), vijayasara ( <i>Pterocarpus marsupium</i> ) or mustak ( <i>Cyperus rotandus</i> ) is advised. Lifestyle regimen- perform exercise, Udvartana (massage) with chandana ( <i>Santalum album</i> ), Kesara ( <i>Crocus sativus</i> ), Kavala (gargle), Dhoompana (smoking with medicated drugs), anjana (collyrium) and evacuative measures such as vama and nasya are also advised	Sleeping in day time and intake of, madhura rasa predominant food should be avoided.
Grishma	Madhura (sweet), sheeta (cold) and snigdha (unctuous) food and drink, sheet mantha along with jaggery is advised, ghee and milk along with Sali rice is advised. Staying in cool places, application of sandalwood powder, adorn with flowers and wearing light dresses are advised	Avoid amla (sour), katu (pungent) and ushana (warm) diet and alcohol. Excessive exercise and over indulgence in sexual activities should be avoided
Varsha	Old yava ( <i>Hordeum vulgare</i> ), godhuma ( <i>Triticum aestivum</i> ), Sali rice ( <i>Oryza sativa</i> ) along with the meat of arid animals and vegetables. amla, lavana and snigdha food items are advised in diet. Use of honey while preparing food is advised.	mantha and open water sources. Avoid excessive exercise and bathing in river.
Sharad	Intake of sweet, light, cold, bitter food and drinks are advised in a diet. Yava, Godhuma are prescribed. Virechana (purgation), Raktamokshana (bloodletting) procedures are advised.	Avoid curd and meat of aquatic and marshy animals avoid working in sunlight and sleeping during day time animals

### Sadvritta (Ethical regimen)

Ancient scholars have mentioned the various principles of code of conduct known as sadvritta which helps in maintain a healthy body and a peaceful mind.<sup>17</sup> The path of ethical, social, mental, moral and physical conduct induces a positive influence on the mind and body. It helps to lead a healthy and fulfilling life.<sup>18</sup> It helps in enhancing the satvik guna of mind. The following code of conduct of Sadvritta should be followed<sup>19</sup>

- Speak the truth and use pleasant words in conversation
- Do not lose self-control. Have a respectable and protective attitude towards elders, forefathers, teachers, women, children and colleagues.
- Abstain from telling lies, anger, extreme grief, jealousy and greed
- Avoid company of people with evil thoughts.
- Avoid indulgence in himsa (any activity which harm others), Asteya (stealing habits), Anyathakma (unlawful sexual activity), vyapada (intention of harming), viparyaya (finding fault with scriptures, elders, etc.)

Thus, the person who behaves as per the principles of sadvritta becomes more divine and lives a good quality of life.

### Rasayana

Rasayana is the mean by which an individual gets excellence of Rasadhi dhatus.<sup>20</sup> Along with physical excellence, psychic excellence like sharp memory etc. is also endowed by this, comments Cakrapani. The word Rasayana (Rasa+Ayana) essentially refers to acquisition, movement or circulation of nutrition needed to provide nourishment to the body tissues and tissue perfusion. Such a phenomenon is essential for the promotion of the qualities of dhatus (body tissues). The improved nutritional status and the better qualities of dhatus lead to a series of secondary attributes of Rasayana such as longevity, immunity against diseases, improved mental and intellectual competence thus making body healthy. Rasayana agents need not always be pharmacological agents. Even regular diet can act as rasayana, if the dietary code is followed. Milk is one of the best rasayana agents. Rasayana agent may promote nutrition through one of the following three modes:

- By direct enrichment of the nutritional quality of Rasa (Poshaka Rasa) i.e. the nutrient plasma.
- By promoting nutrition through improving the Agnivyapara i.e. digestion and metabolism.
- By promoting the competence of Srotas i.e. the micro-circulatory channels in the body leading to better bio availability of nutrients to the tissues and improved tissue perfusion.

### Dietetic principles

Unhealthy food and faulty dietary habits give origin to various life threatening lifestyle diseases. For a good health, person should always eat balanced diet and avoid incompatible dietary regimens.<sup>21</sup> According to Ayurveda, the diet which nourishes both mental and physical built is a balanced diet. Ayurvedic science offers an entirely different approach towards food and dietetics. Ancient scholars have outlined a detailed process for ahaara and have included eight guidelines for the same known as

asta ahaara vidhi visesa ayatanani<sup>22</sup> and ahaara vidhi vidhan. The eight factors of ahaara vidhi visesa ayatanani; Prakriti (natural quality), karana (processing of substances), samyoga (combination of 2 or more food articles), Rashi (quantity of food taken and its ingredients), Desha (habitat), kala (time), upyoga samstha (dietetic rules), Upyogta (user) are responsible for wholesome and unwholesome effects of ahaara and ahaara sevana. Various other rules of dietetics are described in the classics ahaara vidhi vidhan<sup>23</sup> have been tabulated in Table 3.

**Table 3: Dietary principles**

Rule	Meaning
Ushnamashniyat	Consume warm food
Snigdhamashniyat	Diet of a person should include fats in some quantity
Matravatashniyat	Amount of diet should be according to agni and bala of the body
Jeerneashniyat	Only after the digestion of previous meal one should take another meal
Veeryavirudhamashniyat	Eat those food products which are not antagonistic in virya (potency).
Iste-dese- ishta- sarva upakarnam asniyata	Person should take food in a congenial place and circumstances
Naativilambitam-ashniyat Naatidrutam-ashniyat	Avoid eating food too slowly and too fast
Ajalpana-hasant-anmana-bhunjeet	Food should always be taken with full concentration without laughing and talking
Antamanabhisamikshya bhunjeet samyaka	One should take food after analysing one needs

Warm food tastes good and doesn't pacify Jatharagni, thus making it easy for digestion. Warm foods as well as fats have a pacifying effect on the vata dosa. Fats act as fuel to increase jatharagni. Being snigdha in nature fats improve complexion and glow of the body, enhance growth, provide nutrition and strength to the senses. They also act as store house of energy and are essential for absorption of fat soluble vitamins. Essential fatty acids are needed for growth and development, building of nerve cells and brain. Food should be consumed only when previous meal has been digested. This prevents formation of ama which is the root cause of majority of diseases. Food should be consumed in a hygienic place and with clean utensils. If food is taken in proper speed, enzymatic juices mix properly so food gets easily digested. Eating slowly promotes proper chewing of food which in turn aids in digestion of food and also prevents over eating, promotes better absorption of nutrients, better appetite regulation and better satiety.<sup>24</sup>

A wide range of precious dietetics and nutrition concepts like pathya aphyta, incompatible diets have also been described in the Ayurveda texts. Various guidelines to facilitate easy digestion of food has also been highlighted by Susruta<sup>25</sup> like sitting in a straight posture after food intake, to walk at least hundred steps slowly after having meal and lay down with left supine position and listening music or perceiving favourable shabda, sparsh, rupa, rasa, gandha also helps in easy digestion.

### Vyayama (exercise)

The effort which produces stability and strength in the body is called vyayama.<sup>26</sup> Physical exercise has both preventive and curative aspect. It is described as one of the treatment line for the disorders caused by the sleshma.<sup>27</sup> Vyayama helps to maintain the equilibrium of doshas in the body which reduces the incidences of disease in the body. Daily exercise helps in physical development, increases lustre & strength of body, stimulates digestion, non-existence of idleness, firmness, lightness, cleanliness, tolerance to fatigue, exhaustion and boosts immunity.<sup>28</sup> The person who gives up exercise is prone to lifestyle diseases like diabetes mellitus and obesity.<sup>29</sup> Various studies have shown the importance of exercise in treatment of diabetic, hypertensive and obese patients.<sup>30</sup> In all seasons, vyayama should be performed by persons as ardhha bala i.e. (half of total strength).<sup>31</sup>

### CONCLUSION

From the above discussion, it can be concluded that following a healthy regimen is one of the keys for good health. The personal way of living can always be managed despite a hectic routine to lead a healthy life. The seasonal variations affect the body directly and following the guiding principles specified for different seasons help in developing better immunity. These factors can go a long way in preventing lifestyle disorders. Apart from conventional drug approach, non-pharmacological aspects of prevention of disease should also be advised to a patient. However, patient compliance is a concern for success of this approach. This thematic review can lead a way for research studies in future.

### REFERENCES

- Pappachan JM, Chacko EC, Arunagirinathan G, Sriraman R. Management of hypertension and diabetes in obesity: Non-Pharmacological Measures. 2011 March 22: International Journal of hypertension. Doi: 104061/2011/3098065.
- Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, Saroj hindi commentary, Sutra Sthana 3<sup>rd</sup> chapter, Dincharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 36.
- Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 3<sup>rd</sup> chapter, Dincharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 37-9.
- Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 3<sup>rd</sup> chapter, Dincharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 41
- Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 3<sup>rd</sup> chapter, Dincharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 42
- Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 1<sup>st</sup> chapter Matrashitiya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 130
- Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 3<sup>rd</sup> chapter, Dincharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 60

8. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 130
9. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 137
10. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 140
11. Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 4<sup>th</sup> chapter, Ritucharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 70
12. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 141
13. Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 4<sup>th</sup> chapter, Ritucharya-adhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2003. p. 70
14. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 142
15. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 143
16. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 6<sup>th</sup> chapter Tasyasheetiya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 145
17. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 8<sup>th</sup> chapter Indryeupkramniya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 181.
18. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 8<sup>th</sup> chapter Indryeupkramniya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 182.
19. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 8<sup>th</sup> chapter Indryeupkramniya - adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 183-7
20. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Chikitsa sthana 1<sup>st</sup> chapter Abhyakamlakiya Rasayanpada, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 5
21. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Nidana Sthana 6<sup>th</sup> chapter Shosha-adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 653
22. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Vimana Sthana 1<sup>st</sup> chapter Rasvimana-adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p.680
23. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Vimana Sthana 1<sup>st</sup> chapter Rasvimana-adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p.683
24. Mercola, Studies show eating more slowly benefits your health. Available from <http://articles.mercola.com/sites/articles/archive/2014/03/14/chewing-food.aspx>, Last accessed 2016, December 06.
25. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 46<sup>th</sup> chapter, Anapanavidhi-adhyay, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition; 2007. p. 222
26. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 7<sup>th</sup> chapter Navegandharniya-adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 161
27. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra Sthana 20<sup>th</sup> chapter Maharoga -adhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 405
28. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 24<sup>th</sup> chapter, Anagatabadhapratisheham-adhyay, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition; 2007. p. 107
29. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Chikitsa sthana 6<sup>th</sup> chapter Prameha Chikitsadhyay, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; 2005. p. 227
30. Tiwari Sushma, Gehlot Sangeeta and Tiwari SK, Effect of exercise on physiological variations as per Prakriti in healthy individuals and certain diseased conditions, Ph.D Thesis;2011
31. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 24<sup>th</sup> chapter, Anagatabadhapratisheham-adhyay, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition; 2007. p. 107

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