

Concept and Significance of Use of Spices as per *Ayurveda*

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ABSTRACT

Introduction- Ayurveda is one of the oldest systems of medicine. The first and foremost aim of this sacred science is preservation of health. The most important factor for attainment of health is nutritious and balanced diet. The components of diet, rules of dietetics, role of particular diet in different diseases, seasonal diet regimen is widely described in classical texts of ayurveda. It emphasises not only on the material quality of food but also on the selection of food, its processing and cooking etc. There are eight factors which determine the utility of various types of food and *karana* or *samskara* (method of processing) is one of them. One of the important aspects of dietetics is adding proper spices or condiment to food while cooking. *Pippali* (Pepper), *shunthi* (DryGinger) *hing* (*Asafoetida*), *jiraka* (Cumin) are some examples of commonly used adjuvants.

Aim and Objective -To explore and analyse the concept of use of spices in Ayurveda.

Materials and Method-Review of classical texts of *ayurveda* regarding the concerned matter was done followed by scientific analysis.

Result and Conclusion -Spices enhance the taste and flavour of the food and aids in digestive secretions. In addition to this, they are rich in nutrients, have medicinal qualities and possess antioxidant properties. Thus, they help in maintenance of health and have disease curing properties also.

Keywords – Ayurveda, cooking, food, spices.

1. INTRODUCTION

Food, sleep and observance of *brahmacharya* (control of senses and spiritual bliss conducive to the knowledge of *brahman*) are recognized as three essential things for the smooth running of life. [1] Among the three *upasthambas* (sub-pillars), *ahara* (food) is considered as the best sustainers of life. Food has been praised as God in ancient Indian texts. One of the important aspects of food is method of cooking which has been mentioned as *sanskara* or method of processing. Method

of processing includes a variety of processes like purification, polishing, preservation etc. All these processing make transformation in original qualities.

The process of cooking is very important. It makes the food palatable, easily chewable digestible and absorbable. Cooking of food in India include oils, condiment (substances used to give a special flavour to food), spices (pungent and aromatic substances) and salt. In addition to qualities of herbs and spices enhancing the taste & flavour of the food and aiding

digestive secretions, they have medicinal properties as well. Adjuvants enhance the appetite, taste and digestion of food.

2. AIMS AND OBJECTIVES- To explore and analyse the concept of use of spices in Ayurveda.

3. MATERIALS AND METHOD
Review of classical texts of *ayurveda* regarding the concerned matter was done followed by scientific analysis.

4. REVIEW OF CLASSICS

Acharya Charaka has classified the food articles according to the taste, potency, outcome of digestion (*vipaka*) and specific action (*prabhava*) of the various articles of diet and on the basis of their origin. Adjuvant of food e.g. various oils, condiments, spices and salt are mentioned in *aharopyogivarga*. Adjuvants are unlimited in number. [2] *Acharya Sushruta* has mentioned the adjuvants in *shakavarga* (group of vegetables). They are pungent, hot, relishing, alleviate *vata* and *kapha* and are used in various ways in processing the food. Some of the important and commonly used adjuvants nowadays are listed below.

Table No .1 List of commonly used cooking adjuvants as per ayurveda

S. N.	Adjuvant	Botanical Name & Family	Guna & Rasa	Virya & Vipaka	Dosha Karma	Main Function	Effect on Disease
1.	Rasona [83] (Garlic)	Alliumsativam (Liliaceae)	Sngidha, tikshana, pichhala, guru, sara guna; & katu, tikta, kshaya rasa	Ushana&katu vipaka	Pacifies Vata- kapha	Rasayana(pa chana Balya, vrishya, medhya,	Jirnajwara, g ulma, hridayaroga [4]
2.	Sarso [51] (Mustard)	Brassicacampestris (Cruciferae)	Tikshna, Snigdha (oil & seed); & katu, tikta rasa	Ushna&katu vipaka	Vata kapha shamaka&pi tta vardhaka	Agni vardhakakrim ighana,	kustharoga
3.	Haridra [61] (Turmeric)	Curcumalonga(Zingiber aceae)	Ruksha&laghu, Katu,tikta rasa.	Ushana,&katu vipaka	Kaphha– pitta shamaka	Improves dehavarna ,anulomaka, pachaka,	Kushatha(ski n disorders) [7]prameha,pi nasa,
4.	Lavanga [8] (Cloves)	Syzygiumaromaticum (Myrtaceae)	Laghu,, Snigdha& Tikta, katu rasa	Sheeta,&katu vipaka	Kapha- pittashamak a	Dipana, pachana, ruchya	Trishna,char di, hikka, swasa, kasa
5.	Dalchini [9] (Cinnamo m)	Cinnamomnzeylanicu m(Lauraceae)	Laghu, Ruksha, tikshana, &katu,tikt amadhura	Ushana&katu vipaka	Vata- kapha shamaka	Dipana, Pachana, vataanuloma na	Mutrakrichc ha, udarshool, grahani
6.	Pippali [10] (Pepper)	Piperlongum (Piperaceae)	Laghu, snigdha, tikshana, &katu rasa	Anuushanaheeta &madhura vipaka	Kapha – vata Shamaka	Vrishya, rasayana dipana, vataanuloma na, pachana [11]	Swasa, kasa, hikka, gulma, pandu, jeernajwara etc.
7.	Dhanayaka [12] (Coriander)	Coriandrumsativam (Umbelliferae)	Laghu, snigdha, & kashaya, tikta, madhur, katurasa	Ushana&madhur a vipaka	Triidoshaha ra Shamaka	Dipana, pachana, rochaka, krimighna	Antardaaha, ajirnaatisara etc.
8.	Shunthi [13] (DryGinge r)	Zingiberofficinale (Zingiberaceae)	Laghu, snigdha& katu rasa	Ushna &madhur Vipaka	Vata kapha shamaka	Vrishya rochana, dipana , pachana	Swasa, [14] kasa, atishula, ana ha etc.
9.	Hing [15] (Asafoetid a)	Ferulanarhex (Umbelliferae)	Laghu, snigdha, [16] tikshan, &katu rasa	Ushana&katu vipaka	Kapha-vata shamaka	Balya pachana, ruchya	Shula, murchha, gulma,anaha ,
10.	Jiraka [17] (Cumin)	Cuminumcuminum(Um belliferae)	Laghu, ruksha &Katu rasa	Ushna&katu vipaka	Kapha – vata shamaka	Balya, rochaka, Dipana, pachana, krimighana, chakshushiya	Atisaara, gulma, Adhyamana
11.	Mishreya [18] (Fennel)	Foeniculumvulgare(Um belliferae)	Laghu snigdha, & Madhura,katu tikta rasa	Sheeta& madhur vipaka	Vata- pitta shamaka	Vrishya dipana pachana , anulomana	Kshatshirna, swasa, kasa ajeerna, adhyamaan, udarshool.

12.	<i>Jatiphala</i> ^[19] (Nutmeg)	<i>Myristicafragrans</i> (Myristicaceae)	<i>Laghu tikshna, & tikta, katu rasa</i>	<i>Ushana & katu vipaka</i>	<i>Kapha-vata Shamaka</i>	<i>Dipana, pachana, krimighana, vaatanulomaka,</i>	<i>Jiranatisara, pinasa, swasa, kasa, ajirna.</i>
13.	<i>Yavani</i> ^[20] (Ajowan)	<i>Trachyspermumammi</i> (Umbelliferae)	<i>Laghu, rukshan, tikshana, & katu, tikta rasa</i>	<i>Ushana, katu vipaka</i>	<i>Kaphavatas hamaka</i>	<i>Rochana dipana, pachana</i>	<i>Gulma, pliha roga</i>
14.	<i>Methika</i> ^[22] (Fenugreek seeds)	<i>Trigonellafoenum</i> (Papilionatae)	<i>Laghu, snigdha & katu rasa</i>	<i>Ushana & katu vipaka</i>	<i>Vata Shamaka</i>	<i>Rochana, dipana, pachana, anulomana</i>	<i>Jwara, agnimandhya</i> ^[23]
15.	<i>Ela</i> ^[24] (Cardamom)	<i>Elettariacardamomum</i> (Zingiberaceae)	<i>Laghu & ruksha & katu rasa</i>	<i>Sheeta & madhur vipaka</i> ^[25]	<i>Tridosh Shamaka</i>	<i>Balya rochana, dipana, pachana, anulomana</i>	<i>Mutrakracha, swasa, kasa, kshaya.</i> ^[25]
16.	<i>Lavana (Salt)</i> ^[26]	Common salt	<i>Snigdha & tikshana & Lavana rasa</i>	<i>Ushana & madhur vipaka</i>	<i>Vatashamaka</i>	<i>Dipana rochana, sransana (laxative)</i>	<i>Ajirna anaha gulama shula, udara roga</i>

5. DISCUSSION

These adjuvants work by the virtues of *rasa* (taste) *guna* (properties), *virya* (potency), *vipaka* (final outcome of digestion) and *prabhava* (specific action). Some actions are performed by *rasa*, some by *guna*, some by *virya* and *vipaka*. The substances perform the action either locally or systematically. Apart from these actions *dravyas* (substances) have got some specific action also.

The *rasa* adds to the taste of food and have effects on the body also. *Rasa* mainly makes the food palatable thus works on appetite. Most of the adjuvants are having *katu* and *tiktarasa*. *Katurasa* performs the action of gustatory (taste buds on tongue) stimulation and also helps in salivary secretion.^[27] These salivary secretions help in taste perception, moistening of food and digestion. *Dravya* having sour taste (*amla*) and pungent taste (*katurasa*) are particularly sialagogues which increase salivary secretion.^[28] Though Bitter taste (*tiktarasa*) is not palatable but acts as an appetizer and helps in digestion also.^[29]

Most of the adjuvants are light (*laghu*) and hot (*Ushna*) in properties (*guna*); *ushna* in *virya* and *katu* in *vipaka* thus they increase fire (*agni*)^[30]

Most of the *dravyas* are *kapha vata* mitigation in action. Though *bodhakakapha* is responsible for perception of taste but when *kapha* is increased and takes the form

of *mala*, the action of *bodhakakapha* is hindered. *Amladravya* because of *parthvi* and *agniguna* stimulates the *bodhakakapha* but do not allow *avarana* of *kapha* because of *agnitva*. Vitiated *kapha* or *kapha* in excess weakens the digestive strength. Hence most of the spices are *kapha* mitigated in action. Though *vayu* helps in stimulation of fire but it should not be excess in amount. Because of *anulomanaguna*, *vata shamaka dravyas* help in dispelling the *vayu* which is produced during the process of digestion. *Ushna* and *snigdhadravaya* help in *anulomana*. Being *anuloamka* in nature they pacify *shool* also.

Most of the adjuvant are *dipana* (stimulant) (e.g. *maricha*, *hing*), and *pachana* which stimulates the digestive secretion in stomach and help in digestion. *Dipana* and *pachana* are stages of one *karma* only. In *dipana* the *agni* is not much stimulated. It only helps in increasing appetite but it cannot digest the food. But in second stage the *agni* is stimulated enough to digest the food. *Dipana* drugs will stimulate and enhance the *agni*.^[31] This *Agni* may be either *jatharagni* or *bhutagni* or *dhatwagni*. And all the adjuvants are *dipana* which enhance the digestion. *Pachana* drugs help in digestion of food. All adjuvants mentioned above possess *dipana* and *pachanakarma* thus increasing appetite, stimulating and maintaining *agni* leading to proper digestion of food.

Due to the volatile oil nature of *lavanga* and *ela* these adjuvants are very good mouth fresheners. In addition to this they add flavour to food especially during cooking non vegetarian dishes where natural odour is not pleasant.

Besides, the above actions on gastrointestinal system, these spices have some specific actions like *Rasayana* (rejuvenation), *vrishya* (aphrodisiac action) and anti-allergic, etc. They act as medicines in many diseases. They are rich in vitamins and minerals and anti-oxidants [32] ulcers properties too. But they should not be used in excess, especially by the patients of *amla pitta*. So the limited use of these in diet helps the individual to gain health. They are used as medicines in many diseases especially having *angni mandya* as pathogenesis in particular.

6. CONCLUSION

The spices mentioned in *ayurveda* do not only add flavour, colour and taste to food, but also help in increasing appetite, stimulating and maintaining digestive strength. These spices are also beneficial for our health as they are rich in various nutrients, minerals and antioxidants. Thus the proper use of adjuvants in cooking food results in total nourishment of the body.

REFERENCES

1. Agnivesha, Caraka Samhita, Sutrastahna 11/35 ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 ; 74
2. Agnivesha, Caraka Samhita: Sutrastahna; 27/ 308. ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 p.171
3. Agnivesha, Caraka Samhita: Sutrastahna; 46/ 244-245. ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 p.232
4. Banerjee SK, Maulik SK. Effect of garlic on cardiovascular disorders: a review. Nutr J. 2002;1:4-14
5. Mishra Bhava, Bhava Prakash Nighantu, Dhanyavarga; 69-71. Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p.641
6. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 197. Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p.111
7. Cinampudur V. Chandrashekar, Kannan Sundarajan, Jotheie R. EdWin, Giligar M. Gururaja, Deepak Mundkinajeddu, Amit Ag Immune –Stimulatory and anti-inflammatory activities of Curcuma longa extract and its polysaccharide fraction. Pharmacognosy Res.2013 apr – june;5(2):71-79
8. Mishra Bhava, Bhava Prakash Nighantu, Kapooradivarga; 58-59. Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 209
9. Sharma Prof .P.V. Dravya Guna Vigyana vol.II Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 250
10. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 53-57. Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 15
11. Shrinivasan K, Black Pepper and its pungent -Piperine: a review of diverse physiological effects. Critical Reviews in food science and nutrition 47(8),735-748, 2007
12. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 87-88. Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 33
13. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 45-46 .Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 12
14. Townsend EA, Siviski ME, Zhang Y, Xu C, Hoonjan B, Emala CW. Effects of ginger and its constituents on airway smooth muscle relaxation and calcium regulation calcium regulation. Am J Respir Cell Mol Biol 48:157-163, 2013
15. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 101 .Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 39

16. Sharma Prof .P.V. Dravyaguna Vigyana vol.II Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 350
17. Vaidya G. Bapalal, Nighantu Adarsa vol.I Jirakadivarga Chaukhambha Bharati Academy Varanasi,1998 (Ed) p. 667
18. Sharma Prof .P.V. Dravyaguna Vigyana vol.II Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 401
19. Mishra Bhava, Bhava Prakash Nighantu, Kapooradivarga; 54-57.Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p.206
20. Mishra Bhava, Bhava Prakash Nighantu, Haritkyadivarga; 76-77 .Commentary by Prof. K C Chunekar ed. Dr. G.S Pandey Chaukhambha Bharati Academy Varanasi,2018 (Ed) p. 24
21. Sharma Prof .P.V. Dravyaguna Vigyana vol.II Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 494
22. Sharma Prof .P.V. Dravyaguna Vigyana vol.II Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 823
23. Meghwal and Goswami,2012 M. Meghwal T.K. Goswami A Review on the Functional Properties,nutritional content, Medicinal utilization and potential application of Fenugreek J. Food Process Tecnol.,3(2012), p.9
24. Sharma Prof .P.V. Dravyaguna Vigyana vol.II Chaukhambha Bharati Academy, 1996(Ed)p. 719
25. Dr.Ojha Jharkhande and Dr.Mishr Umapati Shatpushpaadi dwityavarga 45Dhanwantri nighantuChowkhambha Surbharati Prakashan, Varanasi; 2004 ; p 105
26. Agnivesha, Caraka Samhita, Sutrastahna 1/93 ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 ; 44
27. Agnivesha, Caraka Samhita, Sutrastahna 26/42 (4) ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 ; p506
28. Agnivesha, Caraka Samhita, Sutrastahna 26/42 (2) ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 ; p 505
29. Agnivesha, Caraka Samhita, Sutrastahna 26/42 (5) ed. Jadavji Trikamaj Acharaya Chowkhambha Surbharati Prakashan, Varanasi; 2008 ; p. 507
30. Sharma Prof .P.V. Dravyaguna Vigyana vol.I Chaukhambha Bharati Academy Varanasi,1996(Ed) p.138,217,228
31. Sharma Prof .P.V. Dravyaguna Vigyana vol.I Chaukhambha Bharati Academy Varanasi,1996(Ed) p. 281
32. Slowianek M, Leszczynska J, Antioxidant properties of selected culinary spices, herba pol 2016;62 (1) :29-41

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