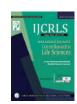


International Journal of Current Research in Life Sciences Vol. 07, No. 07, pp.2469-2474, July, 2018



RESEARCH ARTICLE

COMPREHENSIVE REVIEW OF AYURVEDIC CLASSIFICATION OF FOOD FOR BALANCED DIET PLANNING

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Received 16th May, 2018; Accepted 10th June, 2018; Published 30th July, 2018

ABSTRACT

According to Charkacharya, diet is the best sustainer of life. In present days, science of human nutrition has advanced but sometimes it become so highly technical that nutrition experts change their view about constituents of healthy diet frequently. To plan a balanced diet, proper classification of food articles is very important in order to obtain all nutrients in diet. Ayurvedic classification as per (Ayurved Scriptures) seems to be more specific. For instance, classification of food articles best to use for everyone in all season (Sada-pathyam) and food article to be avoided while planning diet (Sada-apathyam) are explained. In this paper emphasis is made upon concept of Ayurvedic classification of food article and how it fulfills nutritional requirement in diet planning to maintain physical and mental health with a view to prevent lifestyle disorder.

Key words: Food classification, Nutrition, Dietplanning, Balanced diet.

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Citation: Dr. Mrudul Y. Chitrakar and Dr. Vedvati K. Bhapkar, 2018. "Comprehensive review of ayurvedic classification of food for balanced diet planning" *International Journal of Current Research in Life Sciences*, 7, (07), 2469-2474.

INTRODUCTION

According to Charkacharya, diet is best sustainer of life among Trayopsthambas (tripods of life). (1) Food sustains the life of living beings. Complexion, clarity, good voice, longevity, geniuses, happiness, satisfaction, nourishment, strength and intellect are all conditioned by food. Professional activities leading to happiness in this world, Vedic rituals leading to abode in heaven and observance of truth, Brahmacharya leading to salvation are all based on food (2) In the simplest terms, your diet is what you eat. At the basic level diet consists of two main aspects: what you eat and how much you eat. In present days science of human nutrition has advanced beyond expectations but often it become so highly technical that nutrition experts change their opinion about constituents of healthy diet frequently. Proper nutrition iswhen one gets all the essential nutrients essential for healthy functioning of the body through the diet. To plan balanced diet or give diet therapy, proper classification of food articles in healthy and diseased person is very important. Keeping this in mind, Ayurvedic classification of food is explained more specifically in (Ayurved Scriptures) to maintain health and in treatment of disease. In classification of diet, detail explanation is given with properties of food article, best food articles amongst that group, classification of food articles

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best to use for everyone in all season (Sada-pathyam) and which food article we can avoid according effect on body and mind while planning diet (Sada-apathyam). In Ayurveda, such classification is based on the biological action of food articles and their Rasa (taste). Ayurvedic approach to food and dietetics is different from the conventional modern nutrition. Ayurveda promotes selection of fresh food, preparation of food by combining compatible foods and use of herbs and spices to enhance flavor and taste of the food. It advocates that the quality of the food also regulates emotion, mental agility and mental vigor. (3) With rise of lifestyle disorders, strategies that improve access to wholesome, fresh food and limit highly processed, convenience foods in the places that we live, work, learn, and play need to be focused. In this foresight, most important is first step classification of diet to plan it. The time tested and conventional Ayurvedic classification is suitable and acceptable in developing country like India to live healthy and reducing lifestyle diseases.

Aim and objectives

- To review Ayurvedic classification of food in Ayurveda scriptures to plan proper diet chart for an individual
- To study practical approach of Ayurvedic classification of food and food articles to plan diet in prevention andcure of disease.

MATERIALS AND METHODS

Revised Ayuevedic classification of food for planning diet and documented in study under following sections

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Types of diet and Forms of diet

- 1. Aaharvargas (Classification of diet) according to Brihatrayi, Laghutrayi, Nighantu
- 2. Disceteness towards certain food articles while planning
 - a) Viruddhaahar (Incompatibility)
 - b) Sadapathyam-Sadaapathyam (Daily Indicated and Non indicated foods)
 - c) Bestdravya (food article) in classification of food
- 3. Conclusion
- Discussion

Types of diet

The term food includes all edible substances and based on the sources of food articles, can be divided into ⁽⁴⁾,

 Ekavidh-one type - Diet is of only one type due to similarity seen in the process and being dragged is deglutition

Sr.no.	Classification
i	Ekavidha (Singular)

Food article are of two types as per their source of origin ⁽⁵⁾

Sr.no.	Classification
i.	Vanaspatij(Vegetable products)
ii.	Pranij (Animal products)

 From the view of specific action in a healthy human being, food article can again be classified into

Sr.no.	Classification
i.	Hitahar (Wholesome)
ii.	Ahitahar (unwholesome)

- i) Wholesome food is one of the causes for growth of living being and do not affect the body and mind
- ii) **unwholesome food** for the growth of disease and adversely affect of body ^{(6),(7),(8)}
- According to potency (Virya) i,e. ultimate effect on body

Sr.no.	Classification
i.	Ushna (Hot)
ii.	Sheeta (Cold)

By their nature

Sr.no.	Classification
I	Sthavar (Immobile)
Ii	Jangam moving

• Daily indicated and not indicated food (9),(10),(11)

Sr.no.	Classification
I	Sada- pathyam (daily indicated food)
Ii	Sada- apathyam (daily contraindicated food)

are also used to denote the acceptability and adoptability of a particular food in a given context (12)

Classification according to Nature of food

Sr.no.	Classification
I	Guru (Heavy)
Ii	Laghu (light food)

- Heavy Food: By nature not easily digestible, but recommended in healthy individuals having heavy work load
- ii) **Light food**: Recommended in the individuals who are weak, indolent, unhealthy, of tender health and who are prone to luxury⁽¹³⁾
- Ayurveda has classified the food category according to Mansik Guna Prakrti (Mental constitution)

Sr.no.	Classification
I	Satwik (Immaculate)
Ii	Rajsik (Passionate)
Iii	Tamsik (Ignorant)

Diet plays an important role in keeping our mind healthy. Considering the effect of food on mind following 3 classifications have been made:

- 1. Satwik diet Ideal diet containing vegetarian, non-oily, nonspicy articles which are congenial to the body, articles which are gratifying to the body
- Rajasik diet Too spicy, hot, sour, salty that excites the mind. Rajasik food should be included in the diet with modesty.
- 3. Tamasik diet Too oily, heavy food that leads to lethargic mind Tamas or dull and sluggish it may need more energy to digest. Such food may enhance emotions like ignorance, greed and laziness. This food category must be included in the diet with caution
- A balanced diet in Ayurveda is planned in relation to the known Panchabhautic composition and Tridoshic impacts in the living body.
- · According to tridosh

Sr.no.	Classification
I	Vataj
Ii	Pittaj
Iii	Kaphaj

According to Panchmahabhutas (five elements)⁽¹⁴⁾

Sr.no.	Classification
I	Prithvi(earth)
Ii	Jala(water)
Iii	Tejas(fire)
Iv	Vayu(air)
V	Aakash(space)

All diet composed of all five mahabhutas is however based on the predominance of one of the mahabhutas (five elements).

• According to Ras (Taste) of food articles -6 types⁽¹⁵⁾

Sr.no.	Classification
I	Madhur (Sweet)
Ii	Amla(Sour)
Iii	Lavan(Saline)
Iv	Katu(Pungent)
V	Tikta(bitter)
Vi	Kashay(astringent)

The gustatory effect of initial as well as final contact of a dry as well as wet drug is known as Rasa(taste). When such an effect is not distinctly noticeable but is inferred only by its action is known as Anurasa (after taste). Rasa(Taste) plays a

major role in proper digestion, classification of food and food groups are developed according to taste. (16).

- Ultimately depending upon the combination there are 63 types of Rasa by combination of Rasas depending upon the variation of nature of substance, location and time⁽¹⁷⁾ (18) (19)
 - i) i)By combination of (Ras) types tastes-15types eg.- Mudga (green gram),Honey
 - ii) By combination of three tastes-20 types eg.-Castor oil
 - iii) By combination of four tastes- 15 types eg.- Sesame (Ch.Su.27/30)
 - iv) By combination of five tastes- 6 types eg.- Terminalia chebula afficinalis Linn
 - v) Without any combination-6 types by combination of all six rasas-1type this combination and types are enunciated because they are useful in connection with maintenance of health and cure of disease⁽²⁰⁾
- According to preparation of food articles qualities of food depends on-

Sr.no.	Classification
I	Sanyog(combinations)
Ii	Karan(method of preparation of food)

Karan (method of preparation of food) they become innumerable

• According to Gunas-20⁽²¹⁾

In view of qualities of food they can be twenty i.e.,

Sr.No.	Classification
i.	Heavy (guru)
ii.	Laghu(Light)
ii.	Shit(Cold)
V.	Ushna(Hot)
V.	Snigddha(Unctuous)
νi.	Rukksha(Dry)
ii.	Mand(Dull)
ii.	Tikshna(Sharp)
X.	Sthir(Stable)
X.	sar(Fluid)
ii.	Mrudu(Soft)
ii.	Kathin(Hard)
ii.	Pichchhil(Slimy)
V.	Vishada(clearness)
V.	Shlakshna(Smooth)
i.	Khar(Rough)
ii.	Sukshma(Subtle)
ii.	Sthul(Gross)
X.	Sandra(Solid)
X.	Drava(Liquid)

❖General characteristics of dravya used in processing and prescribing (Paradi Gun)⁽²²⁾

Sr.No.	Classification
i.	Para(superiority)- Relating place, time, age and measurement
ii.	Apara(Inferiority)
ii.	Yukti(proper application)
V.	Samkhya(number for enumeration)
V.	Samyog(Combination of two things or many things)
νi.	Vibhakti(Division)
ii.	Pruthakatwa(Seperation of consisting of
	non combination, distinctness and plurality)
ii.	Pariman(measurement, quantity)
X.	Sanskar(method of preparation)
X.	Abhyas(repetition same thing)

• Forms of diet-(According to method of ingestion) (23),(24),(25)

Four forms of diet	Six forms of diet
CharakaSamhita	Bhavprakash
i)Ashita (eatable)	i) Chushya (chewables) as
	sugarcane, pomegranate and oranges
ii)Lidha (lickables)	ii) Peya (drinkables) as mild and other beverages
iii)Pita (beverages)	iii) Lehya (lickables) as Honey
iv)Khadita (masticables)	iv) Bhojya (partially masticables) as rice etc.
	v) Bhakshya as Ladukam (sweet)
	vi) Charvya (masticables) as
	dried fram (Canaka) as other fruits

• Aahara Vargas according to different Acharya(authors)

Carakain Annapanvidhiadhyay classified dietetic articles and drinks in twelve groups.

The 12 groups mentioned by Charaka are) (26)

Sr No.	Classification
i.	Shookadhanya (corns with bristles)
ii.	ShamiDhanya(Pulses)
ii.	Mamsa(Meat)
V.	Shaaka (vegetables)
v.	Phala (fruits)
i.	Harita(greens, Salads)
ii.	Madya (Wine)
ii.	Ambu (Water)
X.	Gorasa(Milk and milk products)
х.	IkshuVikara (Products of sugar cane)
ii.	Kritanna (Food preparations, recipes)
ii.	AharaUpayogi (Accessory food articles)
	like condiments, spices, etc.

Types with superior and inferior qualities in each classified group are also mentioned in detail

- In Susruta Samhita Dravya dravyayavidhi anannapanvidhiadhyay classified Liquid and solid group classification and their properties in detail
- 1. Dravya (Liquid)-10⁽²⁷⁾
- 2. Anna (Solid food)-13⁽²⁸⁾

Sr No	Classification
i.	Ambu (Water)
ii.	Kshira (milk)
ii.	Dadhi (Curd)
V.	Takra (Whey group)
V.	Ghrita (Clarified butter)
'n.	Taila (Oil)
ii.	Madhu (Honey)
ii.	Ikshu (Sugercane)
X.	Madya (Beer etc.)
X.	Shali (Species of rice)
i.	Kudhanya (Ordinary corns)
ii.	Mudga (Pulse)
ii.	Mans (Meat)
V.	Phala (fruit)
V.	Shak (Shak)
'n.	Kanda (Bulb)
ii.	Lavan (Salt)
ii.	Kritanna (prepared food)
X.	Bhakshya (Sweet group)
X.	Panak (Beverages)
i.	Anupan (drinks used after food)

Acharya Susruta gives a greater elaboration regarding the classification of food articles where as Susruta included twenty one groups. Shukadhanya and samidhanya/simbidhanya the Cereals and Pulses under Sali, kudhanya and Mudgavargas. Three types of rice namely, Sali, Sashtika and Vrihi are

mentioned. Botanically all of them belong to the same family and species. But according to Ayurveda there is a great difference in their nutritive value.

- In Ashtang Hriday 12 groups are divided into⁽²⁹⁾
- 1) Dravyadravya- 5
- 2) Annaswarup- 7

1)Dravyadravya

Sr.No.	Classification
i.	Toya (Water)
ii.	Kshira (Milk)
ii.	Ikshu (Sugercane)
V.	Taila (Oil)
V.	Madya (Wine)

2)Annaswarup

Sr.No.	Classification
i.	Shuka (Cereals)
ii.	Shami (Pulses)
iii.	Kritanna (Prepared food)
iv.	Mansa (Meat)
V.	Shaka (Green vegetables)
vi.	Phala (fruit)
vii.	Aushadha (Medicine)

• Sadapathyam or Swabhavhita (Naturally best foods)

Sr.No.	Classification
i.	Sadapathyam (Naturally best foods)
ii.	Sada-apathyam ((Not to practice routinely)

• Sadapathyam -

- a) Shashtika Sali (rice variety which gets ripened in 60 days),
- b) Mudga (Green gram),
- c) Amalaki (Indian gooseberry),
- d) Rock salt
- e) rain water,
- f) Ghee,
- g) Jangala mamsa (meat of animals of arid, desert-like land) and
- h) honey are wholesome and can be taken regularly.

• Sada- apathyam (Not to practice routinelya) Guru (heavy) aharadravyas such as

- a) Vallura (Dried meat),
- b) Sushkasaka (Dried vegetables),
- c) Lotus rhizome,
- d) Lotus stalk,
- e) Meat of diseased animals,
- f) Kurchika (boiled buttermilk) Kilata,
- g) Pork,
- h) Beaf,
- i) Meat of buffalo,
- j) Fish,
- k) Curd,
- l) Masha (blackgram) and
- m) Yavaka (pounding barley to remove chaff and then boiling the grain in water or milk) should not be taken regularly. Curd shouldn't be taken at night.

• Viruddhaahar (Incompatibility)

The Ayurvedic texts give great emphasis on the compatibility and incompatibility of certain foods. Caraka describes in detail the 18-fold denominators of Viruddhahara, i.e., dietary incompatibility. Aharadravyas become incompatable due to their mutually contradictory qualities, by (33)

- 1. Desha (Place)
- 2. Kala (Time)
- 3. Agni (Power of digestion)
- 4. Matra (Dosage)
- 5. Satmya (Habit)
- 6. Dosha
- 7. Sanskara (Mode of preparation)
- 8. Veerya (Potency)
- 9. Koshtha (Bowel)
- 10. Avastha (State of health)
- 11. Krama (Order)
- 12. Upachara (Proscription) and Parihara (prescriptions)
- 13. Paka (cooking)
- 14. Sanyoga (Combination)
- 15. Hrit (Palatability)
- 16. Sampat (Richness of quality)

According to Ashtanghriday⁽³⁴⁾ & Ashtang Sangraha ⁽³⁵⁾ incompability by Vidhi i.e. procedure is enlisted in addition to Charak Samhita.

Diet as therapy (Nutrition in diseased)

• Kritannavarga^{(36),(37),(38)}

Processing of food results in the transformation of attributes of the dravya. Methods of preparing of different type of food items like

- 1. Manda (rice water which is the clear supernatant watery portion (without rice) in which rice is boiled)
- 2. Peya (rice soup),
- 3. Yavaagu (semi solid meal thicker than Peya),
- 4. Vilepi (thick rice soup which thicker than Yavaagu)
- 5. Yusha (Lentil soup), are mentioned in the samhitas. The different aharakalpanas of the same dravya differ in their properties and digestability. The body is the result of consumables taken in four forms i.e., Ashita (eatables), Peeta (liquid food), Khadita (linctus) and Leedha (masticable foods)

Through the seasons, each of the doshas is pacified naturally through following seasonal regimes of diet and routine.

DISCUSSION

Ayurveda lays great deal of emphasis on proper diet for the preservation and promotion of positive health, and prevention and cure of diseases. For each and every disease wholesome and unwholesome (pathya and apathya) food have been specified. Most of the incurable diseases are produced due to improper food. As per Ayurveda, an intelligent and self-controlled person should consume conductive food in right quantity, according to his Prakriti (mind and body constitution), age, season, place where he is living and at right

time to prevent diseases. Also, great emphasis has been given on mental and physical constitution of an individual. In the classification and requirements of food it is explained how the food, is divided and should be consumed on a day to day basis. Aa person suffering from any disease must follow strictly the dietary guidelines which is described as pathyapathya, if he does not follow the regulations of diet, medicine may be fruitless. Food taken in proper quantity provides strength, vigor, good complexion and nurtures the health of the tissues. In order to live healthy, one must live in harmony with his surroundings and follow a diet suitable to his own bodily constitution. Description of Ayurveda is very organized as Ayurveda has a health-oriented approach, and the basic approach incorporates body (sharira), mind (manas) and soul (atman). Ayurveda uses the concept of 6 tastes to motivate well-balanced meals. According to Ayurvedic logic each of the 6 tastes has a role and an action. Taking into consideration prakriti (mind/body constitution), season, age, we can create appropriate taste relations for the person. Ayurveda states that the quality of food eaten, food preparation, appearance, aroma and freshness of the food have a direct impact on state of mind. These factors influence all the five senses and regulate proper digestion.

Conclusion

While planning the diet, utmost importance should be given towards classification of food. The Samhitas help us to plan balanced diet in healthy and diseased person. Ayurvedic classification of food according to Acharyas is appropriate and more precise for physical and mental wellbeing. The classification of foods in Ayurveda is based on all Indian foods which makes it easier for a common man to understand and adapt as most of us still have the same basic eating pattern which we have followed for centuries. So while planning diet, classification of Ayurveda fulfills about psychological aspect of treatment. The purpose of wholesomeness also includes personal liking of patient and food which is recommended for healthy or diseased person. In Ayurveda do's and don'ts are given of every food article. Thus, we can conclude that while planning diet, Ayurvedic classification is focused on every aspect of diet.

REFERENCES

- 1. Charak-Samhita, AGNIVESH, 1994. elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.25/40,Page no.-455
- Charak-Samhita, Elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukham basurbharati prakashan, Varanasi, 3rd edition-1994, Ch.Su.27[349-350], Page no.544
- Yogratnakar Edited and translated by Dr. MadhanShetty Suresh BabuChaukhamba Sanskrit Series office Varanasi, 1st Edition 2005, chapter-Nityapravritti (daily regimen) 107 (Page no.88)
- 4. Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 (Ch.Su.25/32), Page no.-448
- Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan,Varanasi,3rd edition-1994 (Ch.Su.25/36), Page no.-450

- Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan,Varanasi,3rd edition-1994, Ch.Su.25/31), Page no.-448
- Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi,Published by Chaukhambasurbharati prakashan,Varanasi,3rd edition-1994 (Ch.Su.45-47), Page no.-484
- 8. Sushrut Samhita of Maharshi Sushrut Part I, by Kaviraj Ambikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11thEdition Su.Su.-20/5, Page no.82
- Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.25/37, Page no.451
- 10. Sushrut Samhita of Maharshi Sushrut-Part I, by Kaviraj Ambikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11th Edition Su.Su.46/334-341, Page no.210
- 11. Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.25/39,, Page no.452
- 12. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.5/11-12), Page no.107
- 13. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.[27/343], Page no.543
- 14. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.26/11, Page no.471
- 15. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 (Ch.Su.26/14), Page no.473
- 16. Charak-Samhita, ,elaborated by CHARAK and Dr Udhbala by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su. 27/30), Page no. 473
- 17. Charak-Samhita, elaborated by Charak and Drudhbala by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su. 26/14. Page no. 475
- 18. Ashtanghridayam of Vagbhat by Kaviraj Atridev Gupta, Published by Chaukkhamma Sanskrit Sansthan,12th edition, 1997, A.H.Su.10/39, ,Page no.84
- 19. Sushrut Samhita of Maharshi Sushrut Part I, by Kaviraj Ambikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11th Edition, Su Su.43/24,Page no.156
- Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.26/24,Page no.475
- 21. Charak-Samhita, elaborated by Charak and Drudhbala by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch. Su. 25/36), Page no. 450
- 22. Charak-Samhita, "elaborated by CHARAK and DRUDHBALA by Dr.brahmanandTripathi, Published by Chaukhambasurbharati prakashan,Varanasi,3rd edition-1994 Ch.Su.26/29,Page no.476

- 23. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr. Brahmanand Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.25/36, Page no.450
- 24. Bhavprakash of BhavmishraCommentry by Dr.B.Sitaram foreword by-Prof. K.C. Chunekar Chaukhambhaorientalia, Varanasi, First edition 2006, Chapter 5-(134,135,136,137), Page no. 79-80
- 25. Sharangdhar Samhita Purvakahnd, chapter 6/2-3, by Acharya Pandit Radhakrishna Parashar, Shri. Baidyanath Ayurved Bhavan Ltd. great nag road, Nagpur-9, 4th edition 1994, Page no.115.
- 26. Charak-Samhita, elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.27/5-6-7, Page no.501
- 27. Sushrut Samhita of Maharshi Sushrut Part I, by Kaviraj Ambikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11th Edition, (Su.Su.45/3-229), Page no.186-187
- 28. Sushrut Samhita of Maharshi Sushrut Part I, by KavirajAmbikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11th Edition, Su.Su.46/3-539), Page no.226-227
- 29. Ashtanghridayam of Vagbhat by Kaviraj Atridev Gupta, Published by Chaukkhamma Sanskrit Sansthan,12th edition, 1997,A.H- A.H-5and 6-Page no.36-64
- Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi, 3rd edition-1994 Ch.Su.25/37, Page no.451

- 31. Sushrut Samhita of Maharshi Sushrut Part I, by Kaviraj Ambikadatta Shastri Published by Chaukhambha Sanskrit Sansthan 11th Edition, Su.Su.46/3, Page no.187
- 32. Bhavprakash of BhavmishraCommentry by Dr.B.Sitaram foreword by-Prof. K.C. Chunekar Chaukhambhaorientalia, Varanasi, First edition 2006, Chapter-6-1/121-127, Page no.113
- 33. Agniveshakrita, Charaka-Drudabalapratisamskrita, Charaka Samhita with chakrapanidattavirachita Ayurveda deepikavyakhya, published by Choukhambhasamskrita Samsthana, Varanasi, 4th edition 1995, Ch.su.26/86-101, Page no.497,498,499.
- 34. Ashtanghridayam of Vagbhat by Kaviraj Atridev Gupta, Published by Chaukkhamma Sanskrit Sansthan,12th edition,1997,(A.H.7/46-47),Page no.70
- 35. Ashtangsangrah of Vagbhat, Translated by Prof. K.R. Shrikantha Murti Chaukhambhaorientalia, Varanasi,ninth edition, 2005, A.S. 9/2-5, Page no. 197-199
- 36. Sharangdhar Samhita Madhyamkh and chapter 2/161-166,by Acharya Pandit Radhakrishna Parashar, Shri. Baidyanath Ayurved Bhavan Ltd.great nag road, Nagpur-9,4th edition 1994, Page no.222-223
- 37. Charak-Samhita, ,elaborated by CHARAK and DRUDHBALA by Dr. Brahman and Tripathi, Published by Chaukhambasurbharati prakashan, Varanasi,3rd edition-1994 (Ch.Su.-27/250-256), Page no.531,532
- 38. Sushrut Samhita of Maharshi Sushrut Part I, by Kaviraj AmbikadattaShastri Published by Chaukhambha Sanskrit Sansthan 11th Edition, Su.Su.46/342-346, Page no.210
- Ayurveda Encyclopedia by Swami Sadashiva Thirtha, Published by Indian book center, Delhi.
