Pharma certifical Research

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 11, Issue 14, 224-235.

Review Article

ISSN 2277-7105

PAEDIATRIC NUTRITION

Kad Atul U.1* and Bamnikar Mukund D.2

¹PG Scholar, ²Professor

Department of Swasthavritta & Yoga R A Podar Medical (Ayu) College, Worli, Mumbai -18.

Article Received on 22 August 2022,

Revised on 12 Sept. 2022, Accepted on 02 Oct. 2022

DOI: 10.20959/wjpr202214-25861

*Corresponding Author Dr. Kad Atul U.

PG Scholar, Department of Swasthavritta & Yoga R A Podar Medical (Ayu) College, Worli, Mumbai -18.

ABSTRACT

Ayurveda has been available here in this world for millennia and since we have seen Ayurveda serving humankind. Ayurveda has isolated itself into eight branches including illnesses of Human Body Parts. Here, we will attempt to investigate its one branch including Children. Acharya Vridhha Jeevak has depicted three phases of adolescence as Kshirapa, Kshirannada and Annada sequentially in Kashyapsamhita Khilasthana. In this techno and competitive era, life style and diet are major factors influencing the health of the individuals, especially Children. Diet and dietary habits play important role in maintenance of health. Ayurveda, its main aim is to promote and preserve the health, strength and longevity of healthy person and to cure the disease. Ahara

is one of the *trayopasthambha* of sound way of life among *Ahara-Nidra-Brahmacharya*. Here *Ahara* has been placed first which shows that it is most important to maintain and sustain of life. Children are delicate and most sensitive and prone to the infectious diseases. They are miniature of adult. They are in *Ajatvyajanawastha* (developing stage). Being in developmental phase, *Ahara* plays very important role in the life of children. So parents should be aware of dietetic components required by child in different age groups.

KEYWORDS: Ayurveda, Ahara, Kshirapa, Kshirannada, Annada.

INTRODUCTION

As per Ayurveda *Ahara* is one of the *Tryopasthambha* of sound way of life. *Ahara* is also considered as *Sarva Roga Karanama* (Cause of all disease). *Ahara* is considered as *Mahabheshaja* by *Acharya Kashyapa*. These all shows the importance of *Ahara* in our life. A healthy and brilliant child is a national wealth. So, it is important, one should give babies a healthy start and healthy future. The child nutrition begins before birth only. Poor nutrition

during pregnancy may stunts fetal growth and leads poor brain development. Nutrition serves as the corner stone for child survival and quality of survival. It influences the growth, development and immunity. Optimal infant and young child feeding practices rank among the most effective interventions to improve child health. An estimated 9.5 million children die before their fifth birthday, and two thirds of these deaths occurred in the first year of life. Under-nutrition is associated with at least 35% of child deaths. [1] It is also a major factor preventing children from reaching their full developmental potential. Around 32% of children, less than 5 years of age in developing countries are stunted and 10% are wasted. [2] Given that undernourished children are more susceptible to infections and face a higher risk of death, it is not surprising that India has an unacceptably high infant mortality. The underfive mortality rate in India stands at 47.7 per 1000 births amounting to 1.2 million child deaths each year. [3] It is estimated that sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years. [4] Further, If complementary foods are not introduced when a child has completed 6 months of age, or if they are given inappropriately, an infant's growth may falter. [5] This creates an urgent need to publicize more and more on this topic. Success in community always depends up on maximum utilization of community practices and traditional recommendations rather than market strategy. Hence a dispersal of traditional knowledge based on Ayurveda in the current guidelines is essential.

AIMS AND OBJECTIVE

- To highlight the concept of *Ahara* as Nutrition in Children.
- To describe *Ahara* as per three *Awastha* in children.

Review of literature

Concept of nutrition

Ayurveda describes *Ahara* as specific Food/Dietary schedules for different times of the day and for different seasons according to one's age and, most importantly, to suit one's individual constitution or *Prakriti*.

In *Taiteriyopanishad*, *Ahara* has been considered as *Brahma* (Mythologically, the creator of universe) because every animate object is dependent on energy for survival, which comes from any form of food (Tait.Up.Bh.V.-2/1). *Bhagwad Gita* acknowledged diet as a source for the creation of life (Bhag.G.-3/14). It has been said that whatever material taken by mouth

into the alimentary canal, which after proper digestion is transformed into the tissue elements and performs functions such as the promotion of growth, recovery due to loss, and protection from diseases for survival, is termed *Ahara*. *Ahara* restores vigor, provides strength, sustains the body, and increases lifetime, bliss, memory, *Ojas* (immunome), and digestive capability (S.Ci.-24/68).

The very concept of nutrition in Ayurveda starts from the pre-conception stage, where in best quality reproductive tissue (*Retas* and *Artava*) are a must in order to obtain healthy progeny which will achieve optimum and uninterrupted growth after birth. Also, after conception, the care of pregnant lady mentioned in Ayurvedic classics predominantly deals with nutritional regimen in the best interest of the mother and fetus. During pregnancy, the fetus completely depends up on the mother for both its nutrition and excretion. The regimen during the first trimester which is predominantly milk and milk based foods, points to the fact that, although the physiological aversion to food persists during this period the lady should take minimum quantity balanced diet like milk. Processing of milk with *Madhu* (honey), *Ghee, Navaneeta* (butter) and herbs of the *Madhura Varga* during the first trimester is to enhance the bioavailability along with micronutrient fortification. The emphasis on green leafy vegetables during this phase aids in enriching the food with folic acid, minerals and vitamins.

Navaneeta and milk in 4th month is to target the development of Hridaya (CNS), with due consideration on Sneha Samanyata (Contents rich in Poly unsaturated fatty acids which aid in brain development). Diet rich in pulses, meat products and regimen like Basti (Medicated oil enema) with Bala Taila or Madura Aushadha Siddha Sneha during third trimester is to give a boost to the development of musculo-skeletal tissue in the growing fetus. Also, this helps in conditioning the mother's body for the process of labour as well as to prevent some of the diseases that can affect fetal growth and nutrition (hypertensive disorders of pregnancy). Apart from this, Rasaja and Satmyaja Bhavas^[13] epigenetic factors influencing growth and development, are given importance along with genetic and environmental influences (Balavat purushe deshe kale janma)^[14] Further, all these factors largely depend up the nutritional adaptation of the individual with due emphasis on Ashta Vidha Ahara Ayatana (the rules and regulations regarding the intake of food, its qualities and quantity). [15]

Infant nutrition

In new born care once again, stress is laid upon nutrition. Breast milk is compared to nectar and described as an unparalleled food. [16] Breast feeding is encouraged right from within few hours of delivery as soon as baby is stabilized. [17] Breast milk is the sole food mentioned up till six months^[18] unless situation demands supplementary feeding or food. It is highlighted for its importance in brain boosting and disease prevention of both mother and baby. [19-20] Reviews of studies from developing countries show that infants who are not breastfed are 6^[21] to 10 times^[22] more likely to die in the first months of life than infants who are breastfed. Predominant breastfeeding is associated with substantially lower risk of deaths compared with partial or no breastfeeding. [23-24] Diarrhea and pneumonia are more common and more severe in children who are artificially fed, and are responsible for many of these deaths. Dhatri (wet nurse) is given prime importance than other sources of feed. [27-28] Shishu prashana (prelacteal feeds)^[29] and milk substitutes also find their importance in the form of medicated milk of goat and cow for management of extreme situations like absence of lactation. Definite procedure of fortifying Goat or Cow's milk is mentioned to suit the nutritional needs of the baby and to humanize it by boiling it either with Sthira Dve (Desmodium gangeticum and Uraria picta) or Laghu Panchamula (group of five medicinal plants namely Solanum indicum, Solanm xanthocarpum, Tribulus terrestris, Desmodium gangeticum and Uraria picta)^[30] or Musta (Cyperus rotondus).

Acharya Kashyapa has divided children age group into three categories based on type of diet they can consume in their chronologically growing age as ahead - kshirapa, kshirannada and annada avastha.

Ahara in ksheerap awastha: For new born, breast milk (Stanya) is considered as Amruta and Ayurveda praise breast feeding i.e. Stanyapana. Most of the Acharyas told exclusive breast feed up to 6 month. Mother milk contain the exactly proportion of fat, cholesterol, protein and carbohydrates for baby. Mother's milk is not only perfect nutritional choice; it also provides protection against several diseases. So it is exclusively advised in early age of child. According to Acharya Kashyapa breast feed result in good growth, strength, longevity, and good health of child as well as not causing any trouble or disease to child. [31] The benefits of Stanyapana are Jeevaniya (longevity), Deepaniya, [32] Balakarak (develop immunity), Satmya (congenial), [33] Sthairyakara (stability), Dehavriddha. [34]

Ahara in ksheerannada awastha: 6th month onwards is the time for complementary feedings in the form of fruits and infant formulae in the form of bolus of Priyala Majjadi Modaka, Bala Bilva Modaka^[35] and Shalyadi Modaka^[36] (all three are the weaning foods mentioned in Ayurveda to be given in the form of semisolid bolus). Former of them is mentioned in general for improving the nutritional status (Preenana). It has a perfect combination of Priyala majja seed of (Buchanania lanzan, Laja (puffed rice), Yashtimadhu (Glycyrhiza glabra), honey, and Sitopala (candy sugar). Thus it forms a wholesome mixture of carbohydrate rich complementary feed containing essential protein. In conditions where baby has indigestion, one can give Balabilva (unripe fruit of Aegle marmelos) modaka. It contains pulp of unripe Bilva, Laja saktu (powdered puffed rice), and Ela (Elettaria cordamomum). Shalyadi modaka is preferred when the teeth start erupting or at 10 months of age. It is prepared either by using single cereal like rice, bajra, barly, wheet etc as per the nature of the staple food. Around six months the baby begins to grow teeth. Once the teeth are developed giving rise to the ablility to eat food with the grown teeth. Here comes phalaprashan sanskara; It is performed at 6 months.^[37] and infants are supplemented with fruits or fruits juices. Fruits juices are rich sources of these nutrients. Fruit juices helps in supplementing extra nutrition along with Agni vrudhi, relieve constipation and keeps child hydrated. After 6 months of age, children are allowed to eat fruit mashes according to acharya kashyapa i.e. After 6 months of age, gradually introduce semisolid mashed foods. Smashed food is fed to the child 3 to 5 times in little quantity. This is called as *Annaprashana* Samskara. After 6 months child require concentrated energy dense foods are essential in order to maintain an adequate velocity of growth for infant, child teeth begins to erupt, a biting movements begins and tendency to push solid out of mouth decrease, digestive system is mature enough to digest food. Alone breast milk is no longer sufficient to meet nutrition as birth weight doubles.^[38] When food is first time introduced, a small amount and soft food should be given and gradually increase in amount. Acharya Kashyap mentioned food preparation below.^[39] Prepare a *Payasa* by old, husk free and well washed rice mixed with ghee and salt. Powder of wheat and barley also should be given according to congeniality. The one knowing Desha, Agni, Bala observes the child as hungry, should be given food according to congeniality with gap of one or two periods. [40]

Ahara in annada awastha: Child from the age of the 2 years is considered in Annada Awastha. In this Awastha child should be shifted on the cereals as a whole. All type of food with all form i.e. Lehya, Peya, Bhojya etc can be given in this Awastha of children life. [41] On

acclimatization to this schedule cooked meat can be introduced gradually considering the acceptance of the child. [42] This is followed by wholesome family pot feeding. Prakrti and disease specific complementary feeds like use of Yastimadhu and Amalaki (Emblia officinalis) in Pitta Prakriti, Matulunga Rasa (juice of Citrus medica) in Vatika constitution, laja, Bilva in Atisara (diarrheal tendencies), Vidanga (Embelia ribes) in Krimi, Ela (Elettaria cordamomum) in Chardi (vomiting) provide insight in to dietary advice designed to suit minor ailments during infancy. [43]

Later, preservation of health is mainly through food (Mahabhaishajya), [44] provided wholesome dietetics is followed as per guidelines (Ahara vidhi), in adequate quantity (Matrashiteeya)[45-46] and along with avoidance of junk and unwholesome food (Virudhahara). [47-48] Traditional Indian kitchen practices like addition of carminatives like cumins, coriander, ginger or asafetida sall increase bioavailability. Enriching with milk, curds and cheese, coconut milk or dry fruits increases nutritive value. Preparations like *kheer*, dates porridge, shreekhand, basundi, sweets and preparations of basin, suji, chikky, ground nut or nuts or dal puddings shall be nourishing. Fermented traditional and homemade idly, dosa, kichri, mashed veggi bhat, dalia, upma are few handful alternatives to offer continued nutritional supplements.

Prevetion of nutritional deficencies

To prevent nutritional deficiencies, daily food should comprise of cereals, pulses, salt (minerals), vitamins, enough water, fats and if necessary meat. [46] .Thus adapted healthy practices of food, with healthy physical activities will go a long way in preventing impending ill health. [46] To prevent seasonal diseases, dietary variations and selections are given preferences. Table 1 summarizes modification of diet as per season.

Table 1: Modification of diet as per season.

Ritu	Diet
Hemant & Shishir	Snigdha (unctuous) and Medura Ahara (fatty meal) [49]
Vasant	Yava (Indian Barley), Godhuma (wheat) ^[50] Bhojana (diet)
Grishma	light, sweet, liquid and dairy rich products in ^[51]
Varsha	light foods processed with honey ^[52]
Sharada	light diet predominant of <i>Madhura</i> (sweet), <i>Tikta</i> (bitter) in <i>Sharad Ritu</i> (autumn) ^[52]

Further, processing of food enhances nutritional value and at the same time makes it easily digestible and absorbable. Hence, encouraging roasted, parboiled cereals, malting, and addition of ghee, jaggery and honey is essential. *Ayushman Kumara Lakshanas* (screening for healthy baby and estimation of life). ^[53] *Pramana shareera* (measurement of body parts) ^[54] and *Samskaras* (traditional rituals at different age) reveal importance of repeated and regular nutritional and developmental assessment. In current practice too, nutritional anthropometry is a vital clinical tool to assess nutrition or in other words 'growth for the age'. These include anthropometrical measures of weight, height, mid upper arm circumference (MUAC), weight for age and weight for height. Improved nutritional status is key to sustainable development, affecting how other investments in education, health and child protection impact on Indian society. The costs of inaction are immense, resulting in losses to individuals, states and the Indian economy as a whole from millions more undernourished and poorly educated children.

Current guidelines

Care of nutritional needs should be at three stages; nutrition of fetus, nutrition in infancy and nutrition in childhood. Fetal nutrition is totally dependent on maternal nutrition. In fact, intra uterine growth retardation (IUGR) may be due to maternal deprivation and / or diseases in pregnancy. IUGR in term be a cause for nutritional disorders in infancy and childhood. Hence, safe practice is to promote diet rich of pulses, greens, veggies and nuts, meat and dairy products. Breast feed is the first and best feed of an infant to satisfy its nutritional and psychological needs. Infant nutrition should be through exclusive Breast feeding up to 6 months to meet the nutritional demands of the infant and to prevent morbidity. Following period is complemented with other foods along with breast feed to meet the growing needs of the infant. It could be with fruits, staple cereal based porridge enriched with sugar, jaggery and ghee at 6months. Followed by cereal pulse based feed enriched with jiggery, sugar, oil or ghee, mashed vegetables and tubers for 6 to 9 month age. 9 to 12 months one can give soft chewable foods without spices. Cooked meat soup and fish can be introduced. Chapathis and other hard item may be soaked in milk, made soft and offered. By one year baby should be offered everything cooked at home including meat. Protein rich food like egg to be started after 10 months. [55] Most traditional foods like khichidi, dalia, suji kheer, upma, idli, dokhla, bhaat-bhaii etc^[56] are hailed for their better acceptance, easy availability and nutritional value. Fortifying them with ghee, vegetables and introduction of egg, fish and meat can yield better outcome. Following completion of one year one can resort family pot feed. Diet in children needs equal emphasis on both quality and quantity. Toddler needs more than half the portion of the food that mother eats. The diet of pre-school children needs special attention to

vitamins and minerals varieties; while school going children need 3/4th of food that father eats. Children should not miss meals, especially breakfast.

CONCLUSION

Ahara is considered as Bahyaprana as it gives nourishment to body and protects from the infection improves functioning of sense organs imparts physical and mental well-being and enhances process of growth and development in child. As the popular saying 'one who knows to manage diet will not easily yield to disease; food determines the life and health of humans! A wholesome management of nutrition is essential at all ages of life, as nutritional factor is one among those which influence progeny at genetic as well as epigenetic level. An emphasis on this shall yield better out comes in all initiatives that are taken to prevent nutrition related morbidity in infants and young children. Nutritional concepts of Ayurveda target at all ages and stages of life with due importance to Prakrti, health, diseases, seasons as well as economy. Traditional knowledge needs resurgence in the scientific light for better community involvement.

REFERENCES

- 1. World Health Organization. The global burden of disease: 2004 update. Geneva: World Health Organization, 2008; 14.
- 2. World Health Organization. Indicators for assessing infant and young child feeding practices, country profiles, 2010; 3: 1.
- 3. United Nations. UN interagency group for child mortality estimation (IGME), 2015, 2016: 12. Available from: www.childmortality.org
- 4. World Health Organization. The global burden of disease: 2004 update. Geneva: World Health Organization, 2008.
- 5. The optimal duration of exclusive breastfeeding. Report of an Expert Consultation. Geneva, World Health Organization, 2001.
- 6. Acharya JT, editor, (reprint ed.2009). Caraka Samhita of Agnivesha, Shareera sthana; Khuddika Garbhavakranti: Chapter Varanasi: Choukamba Surabharati Prakashan, 2009; 308: 3 - 3.
- 7. Acharya JT, editor, (reprint ed.2009). Caraka Samhita of Agnivesha, Shareera sthana; Shareera vichaya: Varanasi: Choukamba Surabharati Prakashan, 2009; 334; 6 – 23.
- 8. Acharya JT, editor, (reprint ed.2009). Caraka Samhita of Agnivesha, Shareera sthana; Jatisutreeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 351: 8 – 32.

- 9. Jaimini Pandey. Hareeta samhita of Hareeta, trteeya sthana; Garbhopachara vidhi: Varanasi: Chaukhambha Visvabharati, 2010; 467: 49 1.
- 10. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Jatisutreeya: Chapter Varanasi: Choukamba Surabharati Prakashan, 2009; 346: 8 32.
- 11. Government of India. National guidelines on infant and young child feeding. Ministry of women and child development (food and nutrition board), 2006; 27: 1.
- 12. Acharya JT, editor, Sushruta Samhita of Sushruta, Shareera sthana; Gharbhini Vyakarana: chapter. Varanasi: Chaukhambha orientalia, 2002; 387: 10 4.
- 13. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Mahati Garbhavakranti. Varanasi: Choukamba Surabharati Prakashan, 2009; 316: 4 4.
- 14. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Mahati Garbhavakranti. Varanasi: Choukamba Surabharati Prakashan, 2009; 332: 6 13.
- 15. Acharya JT, editor, (reprint ed.2009). Caraka Samhita of Agnivesha, Vimana sthana; Rasa: Varanasi: Choukamba Surabharati Prakashan, 2009; 235: 1 21.
- 16. Sharma H, editor, Kashyapa samhita of Vrdha Jivaka, Sutra Sthana; Ksheerotpatti adhyaya Chaukhambha Sanskrit Sansthan, 2009; 9: 19.
- 17. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Jatisutreeya: Chapter. Varanasi: Choukamba Surabharati Prakashan, 2009; 345: 8 46.
- 18. Acharya JT, editor, Sushruta Samhita of Sushruta, Shareera sthana; Gharbhini Vyakarana: Varanasi: Chaukhambha orientalia, 2002; 392: 10 49.
- 19. Sharma H, editor, Kashyapa samhita of Vrdha Jivaka, Sutra Sthana; Ksheerotpatti adhyaya, Chaukhambha Sanskrit Sansthan, 2009; 9: 19.
- 20. Acharya JT, editor, Sushruta Samhita of Sushruta, Sutra sthana;drava dravya vidhi adhyaya: Varanasi: Chaukhambha orientalia, 2002; 200: 45 49.
- 21. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Medicine, 2006; 3: e442.
- 22. UNAIDS, WHO. Resource needs for AIDS in low- and middle-income countries: estimation process and methods. Methodological Annex II: Revised projections of the number of people in need of ART. Geneva, Joint United Nations Programme on HIV/AIDS, 2007.
- 23. Bahl R et al. Infant feeding patterns and risks of death and hospitalization in the first half of infancy: multicentre cohort study. Bulletin of the World Health Organization, 2005; 83(6): 418–426.

- 24. Arifeen S et al. Exclusive breastfeeding reduces acute respiratory infection and diarrhea deaths among infants in Dhaka slums. Pediatrics, 2001; 108(4): e67–74.
- 25. Global economic prospects 2008. Washington, DC, The World Bank, 2008.
- 26. Ahmad O, Boschi-Pinto C, Lopez AD, Murray CJL, Lozano R, Inoue M. Age standardization of rates: a new WHO standard. Geneva, World Health Organization, 2001; 31.
- 27. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Jatisutreeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 351: 8 52.
- 28. Paradkar Harishastri, editor, Astanga Hrdayam of Vagbhata, Uttara sthana; balopacharaneeya adhyaya: Varanasi: Krishnadas academy, 2000; 778: 1 15.
- 29. Paradkar Harishastri, editor, Astanga Hrdayam of Vagbhata, Uttara sthana; balopacharaneeya adhyaya: Varanasi: Krishnadas academy, 2000; 778: 1, 12 14.
- 30. Paradkar Harishastri, editor, Astanga Hrdayam of Vagbhata, Uttara sthana; balopacharaneeya adhyaya: Varanasi: Krishnadas academy, 2000; 778: 1 20.
- 31. Pandit Hemraj Sharma, Kashyapa Samhita Khilsthana Chaukhamba Sanskrita Sansthana, Varanasi, Reprint, 2006; 256: 5 9.
- 32. Dr. Ambikadutta Shastri, Sushurta Samhita Sutrasthana, Chaukhamba Sanskrita Sansthana, Varanasi, Reprint 2014 page.no.223.
- 33. Dr.Brahmanand Tripathi, Charaka Samhita Sharirasthana 8/54, Chaukhamba Subharti Prakashana Varanasi, Reprint, 2013; 977: 8 54.
- 34. Dr.Brahmanand Tripathi, Ashtanga Hridya Uttarasthana Chaukhamba Sanskrita Pratishthana Delhi, Reprint, 2015; 878: 1 15.
- 35. Paradkar Harishastri, editor, Astanga Hrdayam of Vagbhata, Uttara sthana; balopacharaneeya adhyaya: Varanasi: Krishnadas academy, 2000; 780: 1, 38 39.
- 36. Satyapal bhishagacharya (ed), Kashyapa Samhita of Vridha jeevaka, khila sthana; jatakarmotharadhyaya: Varanasi: Chaukhambha Sanskrit Samsthan, 2009; 12, 19 22, 318-19.
- 37. Pandit Hemraj Sharma, Kashyapa Samhita Khilsthana, Chaukhamba Sanskrita Sansthana, Varanasi, 2006; 256: 5 9.
- 38. O P Ghai, Ghai Essential Pediatrics CBS Publisher and Distributors New Delhi, Reprint, 2007; 99.
- 39. Pandit Hemraj Sharma, Kashyapa Samhita Khilsthana, Chaukhamba Sanskrita Sansthana, Varanasi, Reprint, 2006; 318: 12 19.

- 40. Pandit Hemraj Sharma, Kashyapa Samhita Khilsthana, Chaukhamba Sanskrita Sansthana, Varanasi, Reprint, 2006; 318: 12 20.
- 41. Shamama Firdaus, Sunil Topre, Nitin Mane. Ayurvedic Dietary Concepts In Different Age Group of Children. International Journal of Ayurveda and Pharma Research, 2020; 8(8): 84-86.
- 42. Sharma H, editor, Kashyapa samhita of Vrdha Jivaka, Khila Sthana; Jatakarmottaradhya: Chaukhambha Sanskrit Sansthan, 2009; 12, 19-22, 318-319.
- 43. Satyapal bhishagacharya (ed), Kashyapa Samhita of Vridha jeevaka, khila sthana; jatakarmotharadhyaya: Varanasi: Chaukhambha Sanskrit Samsthan, 2009; 12, 15: 318-19.
- 44. Sharma H, editor, Kashyapa samhita of Vrdha Jivaka, Khila Sthana; Yusha Nirdeshiya: Chaukhambha Sanskrit Sansthan, 2009; 249: 4 6.
- 45. Acharya JT, editor, Caraka Samhita of Agnivesha, Vimana sthana; Trividha Kuksheeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 238: 2 6.
- 46. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Matrashiteeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 38: 5 8.
- 47. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Matrashiteeya. Varanasi: Choukamba Surabharati Prakashan, 2009; 149: 26 81.
- 48. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Shareera Vichaya: Varanasi: Choukamba Surabharati Prakashan, 2009; 329: 6 5.
- 49. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Tasyashiteeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 45: 6 11.
- 50. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Tasyashiteeya. Varanasi: Choukamba Surabharati Prakashan, 2009; 46: 6 25.
- 51. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Tasyashiteeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 47: 6 28.
- 52. Acharya JT, editor, Caraka Samhita of Agnivesha, Sutra sthana; Tasyashiteeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 48: 6 36.
- 53. Acharya JT, editor, Caraka Samhita of Agnivesha, Shareera sthana; Jatisutreeya: Varanasi: Choukamba Surabharati Prakashan, 2009; 350: 8 51.
- 54. Acharya JT, editor, Sushruta Samhita of Sushruta, Sutra sthana; Aturopakramaneeya adhyaya. Varanasi: Chaukhambha orientalia, 2002; 150: 35 12.
- 55. Elizabeth KE. Nutrition and Child development. Feeding of infant and children. In, 2002; 2: 32-33.

56. Government of India. National guidelines on infant and young child feeding. Ministry of women and child development (food and nutrition board), 2006; 27: 1.