

**A REVIEW STUDY ON CONCEPT OF INFANT FEEDING –
AYURVEDIC AND MODERN PERSPECTIVE****Dr. Akash Narendra Sangwai*¹ and Dr. Anjali D. Kamat²**¹PG Scholar, Kaumarbhritya Dept., Annasaheb Dange Ayurved Medical College, Ashta.²Prof & HOD Kaumarbhritya Dept, Annasaheb Dange Ayurved Medical College, Ashta.Article Received on
27 July 2021,Revised on 17 August 2021,
Accepted on 07 Sept. 2021

DOI: 10.20959/wjpr202112-21711

Corresponding Author*Dr. Akash Narendra
Sangwai**PG Scholar, Kaumarbhritya
Dept., Annasaheb Dange
Ayurved Medical College,
Ashta.**ABSTRACT**

Adequate nutrition for the newborn child is fundamental for a healthy life. The growth and development of an individual is directly proportional to the type of nutrition he / she receives. The rate of growth and development is faster in an infant until 6 months of age compared to any other period in life. Therefore, the source of nutrition should be adequate both quantitatively and qualitatively while taking care of digestion and absorption capability of the child. Ayurveda gives more importance on nutrition at all stage of life, in order to preserve health of an individual. Breast milk is most important food for almost all infants in the first year of life. The ideal source of nutrition for a newborn is breast milk. It is widely recognized that breastfeeding

is the best nutrition for human infants. Breast milk is the optimal food for almost all infants in the first year of life. The breast milk provides numerous health benefits to both mother and baby. Breastfeeding should begin soon after birth. In Sushruta Samhita clearly indicated about solid foods at the age of six months, when teething starts. Early weaning and late weaning both are dangerous in infants. According to modern sciences breast milk contains many antibodies that improve immunity in infants and provide power to fight off viruses and bacteria.

KEYWORDS: Stanya, Stanyapana, Dhatri, Breastfeeding, Breast milk, Colostrum, Lactation, Weaning.

INTRODUCTION

Breast milk has been mentioned as the one and only effective food for infants. Ayurveda Acharyas have quoted the importance of breastfeeding in many instances. Breast milk is best

gift from mother to baby. In Ayurveda *stanya* (Breast milk) is mention as *Updhatu* of *Rasadhatu*. According to *Acharya Kashyapa* formation of *stanya* is due to *Rakta* during pregnancy period. Normal *Stanyapramana* is 2 *Anjali*. According to *Charaka* when pregnant lady take *Ahara* then *Ahara rasa* is equally divided in three parts-

1st part for nourishment of pregnant lady self.

2nd part for breast milk.

3rd part for development of fetus.

Stanya is *Vatahar*, *Pittahar* and *Raktadoshar*, *Abhighatjanya* and gives instant relief in eye disorders. It is used for *Nasya* in *Raktapitta* and *Aaschotan* in *Netraroga*. According to *Brihatrayi* and *Laghutrayi* *Stanya* is said to be a complete food for babies and is *Satmya* for all. Breast feeding creates a strong emotional bond between a mother and her newborn. The amino acid tryptophan present in milk helps the baby to acquire a sound sleep during night time. *Stanya* (human breastmilk) is considered as an ideal and complete source of nutrition for the baby as it is specific for the human baby and contains almost all the nutrients, Vitamins, minerals, immunoglobulins, water and other bioactive factors needed. Ideally a child lives exclusively on breastmilk for the first 6 months of life and continues to nurse for as long as possible or mutually desirable. Breastfeeding creates an emotional bond between baby and mother, necessary for future growth and development.

MATERIAL AND METHOD

Material related to this topics have been collected from different journals, Ayurvedic and Modern text books, authentic websites.

Stanyotpatti

- 1) According to A. Sushruta, during pregnancy, Artava (menstrual fluid is obstructed) and goes downwards to form Aparas (placenta), and upwards to form Stanya.
- 2) According to A. Charaka, Stanya is formed as a byproduct of Rasa Dhatu during its metabolism. Rasa Dhatu is circulated all over the body from Hridaya by Vyana-Vayu. When Rasa Dhatu enters Stana, Madhura Rasa of Rasa Dhatu forms Stanya.
- 3) According to A. Vagbhata, Artavavaha Srota constrict immediately after delivery due to excessive Vata, which causes opening of Stanyavaha Srota and Stanyavaha Dhamani.

Stanyapravritti

The causes for Stanyapravritti (milk ejection) are:

- Physical contact with the baby
- Sight of the baby
- Thought of the baby
- Holding the baby

Due to these factors, Stanya gets ejected from the breasts of a woman in the same way as Shukra gets ejaculated from the body of a men.

Constant affection towards the baby is said to be the main reason for the maintenance of lactation.

Stanya sampat

The qualities of pure/normal breast milk are assessed based on its physical features and its effect on the child.

Lakshana

- When dropped in water, Stanya mixes uniformly.
- Colour = White (like Shankha)
- Neither frothy nor sticky, does not form any threads
- Cold to touch
- Clear without any sedimentation
- No vitiation of Dosha
- Normal colour, smell, taste & touch

Prabhava

- Normal growth & development are observed in the baby.
- Arogya
- Bala
- Susattva
- Agni vardhana
- Srotovishuddhi
- Vrishya
- Tridoshashamana
- Rupavan

According to Acharya Sushruta, Nari-Ksheera is the breastmilk which is:

Madhura, Kashaya (Anurasa), Hima, Laghu

Pathya, Jeevana, Deepana

According to Acharya Charaka, Manusha Paya is:

Jeevana, Brimhana, Satmya, Snehana

Substitute of stanya (Breast milk)

In Ayurvedic texts, there are clear cut descriptions about the substitute milk in case of non availability of milk of mother. Acharya Sushruta advised that when mother is unable to feed due to any reasons, Goat or Cow's milk should be given in appropriate amount. Vagbhata advised that goat or cow's milk should be given to the child after medicating it with decoction of Laghu-panchmoolamixed with sugar.

Concept of Dhatri/Wet nurse

When the mother is unable to breast-feed the baby due to any reasons, a wet nurse is appointed to breast-feed the baby. A wet nurse is a woman who breast-feeds and takes care of the baby of another woman.

WHO & UNICEF have made a joint statement that the best food for a baby who cannot be breastfed is milk expressed from the mother's breast or from another healthy mother.

Selection of dhatri

A woman is selected to become the wet nurse of a child if following criteria are fulfilled:

- From identical cast & place
- Young / Middle aged
- Having own child, not pregnant
- Modesty, Affectionate, Clever, Clean, Pious
- Free from hatred, greed, and impatience
- Without any deformity of body parts, free of diseases
- Not one of Astaninditapurusha.
- Having Stana- & Stanya-sampat
- Having good amount of breast milk
- Nitya samshodhana should be done (daily purifying measures for the breast milk)

Specific feeding schedule as per ayurveda

- Only Acharya Charaka has stated to initiate breast-feeding to the newborn on the first day soon after Madhu-Sarpi Prashana during Jatamatra Samskara.
- Acharya Sushruta & Vagbhata have mentioned that the actual establishment of lactation happens only after 3 days of delivery, hence breast-feeding should be initiated from 4th day. Stanyapana should be continued until tooth eruption and should then gradually be withdrawn while increasing the intake of normal food

Day	Feeding substance (3x / day)
1 st day	Madhu + Ghrita + Svarna (Suvarnaprashana)
2 nd day	Lakshmana Siddha Sarpi
3 rd day	Lakshmana Siddha Sarpi
4 th day	Morning: Navanita / Ghrita Afternoon: Navanita / Ghrita After that Stanyapana is initiated.

Specific feeding schedule as per modern

Exclusive breast-feeding (nothing other than colostrum and breast milk) is recommended by WHO up to 6 months of age with continued breast-feeding along with appropriate complementary foods up to 2 years of age or beyond.

Recommendations of Who & Unicef

- Initiation of breast-feeding within the first hour of life. In case of caesarean delivery, it may be after 4-5 hours.
- The infant should only receive colostrum and breast milk without any additional food or drink (not even water). No other food or fluids should be given to the infant below six months of age unless medically indicated.
- Breast-feeding on demand: The baby should be breast-fed as often as he / she wants throughout day and night. This is called Demand feeding.
- No use of bottles, teats or pacifiers.

Time schedule

Demand feeding is the advisable schedule. The following should be considered as the approximate time period:

One feed per 2-3 hours for first 24 hours

One feed per 3-4 hours by the end of one week

Night feeds are also necessary to avoid long intervals between feeds.

Duration

Initial feeding = 5-10 minutes at each breast

Gradually, the time on each breast should be increased so that the baby gets both, fore milk and hind milk. Each breast should be fed alternatively.

Quantity

Average requirement of breast milk:

100 ml / kg / 24 hours by 3rd day

150 ml / kg / 24 hours by 10th day

Burping

It is the technique by which the baby is held upright with its chest or abdomen against the shoulder of the mother / care taker and the back is gently patted until the baby belches out excessive air. This is done after feeding to push the air out of the stomach of the baby which is swallowed during the act of suckling.

Advantages of breast-feeding**1) For the mother**

- Convenient as there is no need of any special preparation to feed
- Cheaper than artificial milk
- Faster maternal recovery and involution of the uterus
- Regain figure faster due to utilization of fat deposited during pregnancy
- Less risk of breast and ovarian cancer
- Less risk of osteoporosis in later life period
- Lesser post-partum depression

2) For the baby

- Best natural food having ideal composition for infants which is easy for digestion & absorption and provides proper growth & development
- Available 24 hours a day
- Reduces mortality rate
- Lesser chances of becoming overweight or obese
- Lesser risk of allergic disorders
- Lesser nutritional deficiency
- Protection against infections

- Better motor and cognitive development
- Better configuration of jaw
- Less dental caries
- Lesser risk of cancer

Breast milk

Properties of normal breast milk

Human milk is exclusively suitable to an infant as it provides the complete nutrition for the first 6 months of life.

In addition to the appropriate amounts of carbohydrate, fat and protein, breast milk contains antibodies and lymphocytes from the mother that protect the baby from infections.

The composition of breast milk varies from day to day, depending on food consumption of the mother and environmental factors. It varies within a feeding, lactation and between mothers and different populations.

To understand the properties of breast milk it can be divided into 3, based on the stages of lactation.

1) Colostrum: (Piyusha)

- The first breast fluid produced by mothers in the late stage of pregnancy and just after delivery is called as colostrum.
- It is thin and yellowish in colour.
- It is produced in low quantities and only in the first few days postpartum.
- It acts as a mild laxative which helps in expelling the meconium and prevents the build-up of bilirubin.

2) Transitional milk

Transitional milk appears in the first 3-4 days after delivery. It is thin, watery and tastes very sweet. Gradually, the quantity of breast milk increases and the colour and compositions also change. The approximate duration during which it can be transitional milk is from 5 days to 2 weeks. It has relatively lower protein content compared to colostrum, but contains more sugar and fat.

3) Mature milk

Mature milk is produced after the stage of transitional milk and continues until termination of breast-feeding.

By approximately 4-6 weeks postpartum, milk is considered as fully mature. It contains more fat, sugar and water soluble vitamins, but fewer proteins compared to colostrum.

Fore & Hind milk

In addition to the changes from colostrum to mature milk, variation exists within one given breast-feeding session. The milk first ingested by the infant is known as the fore milk. It has a lower fat content.

As the infant continues to be fed over the next several minutes, the fat content increases. This milk is called the hind milk, which is said to help in satiety of the infant.

Weaning

Weaning refers to getting the baby accustomed to other foods in addition to breast milk or other milk. The food substances used may be termed as Complementary feeding.

The main purpose of initiation of weaning is to prevent growth faltering. The ideal time period for introducing complementary food items is at the age of 6 months; it should never be initiated before completion of 4th month. Food should preferably be given between breast-feeding.

Delay in weaning may result in malnutrition.

Improper introduction of complementary food may lead to diarrhoea or malnutrition as well.

Guidelines

- The weaning food substances should be formulated from usual family diet.
- Family pot feeding is preferable; the family foods should be given in a mashed form, without or before adding hot spices or extra salt, and providing little bit extra oil / fat and green vegetables is best since it is economical, saves time and the infant grows accustomed to the food prepared at home.
- Use of commercial weaning foods should be avoided.

6-9 Months

- Porridges with a cereal base: Ground rice, wheat flour, semolina, ragi, millet, etc. added with ghee / oil and animal milk.
- Mashed fruits like Banana or seasonal fruits such as Papaya, Mango, etc.
- Start with 1-2 tsp., by the end of this phase, the baby should consume half a cup of food.
- Gradual feeding from the family pot; mashed rice, dhal, khichadi, etc.
- 4-5 weaning foods a day in addition to regular breast feeding is recommended.

9-12 Months

- Food does not need to be mashed, but can be chopped or pounded.
- A variety of household foods should be given.
- Quantity should be gradually increased.
- By about 1 year of age, the child should be eating foods cooked for the family.

CONCLUSION

With the help of all the above information we can conclude that breastmilk is the only natural and complete source of nutrition for the baby up to the age of 6 months and continuation of breastfeeding as long as mutually possible is beneficial for the healthy growth and development of the baby. In conclusion, significant and long-term health benefits are associated with breastfeeding for the individual mother, baby and society. Breastfeeding is the ideal way to feed babies; Breast milk serves both as a source of nutrition and immunological support for the developing infant.

REFERENCES

1. Sushruta. Sushrutasamhita, English translation by Sharma P.V, Vol II, Nidansthan Chaukhambha Vishvabharati, Varanasi, 2005; 163: 10-18.
2. Meharban Singh, Care of the Newborn, CBS Publishers & Distributer Pvt. Ltd., Eighth Edition, Reprint, 2017.
3. 2.O. P. Ghai, Essential of Pediatrics, CBS Publishers & Distributer Pvt. Ltd., Seventh Edition, Reprint, 2012.
4. Bramhanand Tripathi, Ashtangahrudayam, Chaukhmbha Sanskrit Pratishtan, Delhi, Edition Reprinted, 2015.
5. Shastri KA SushrutaSamhita edited with 'Ayurveda TattvaSandipika' Hindi commentary, Part-I, II, Chaukhambha Sanskrit Sansthan, Varanasi, 2006.

6. Tripathi B Astang Hridayam of Srimadvagbhata, Edited with 'Nirmala' Hindi Commentary. Chaukhamba Sanskrit Pratishtan, Delhi, 2009.
7. WHO GUIDELINE, protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services, 2017.
8. Kashyapa Samhita, VriddhaJivaka, Hemraj Sharma Hindi Commentry, PV Tewari, Sutra Sthana, Snehadhyayam (19) Chaukhambha Surbharati Prakashana, Varanasi, 2008.
9. Ambikadutta Shastri, Sushrut Samhita, Part-1, Chaukhamba Sanskrit Sansthan, Varanasi, Edition Reprinted, 2015.
10. Jan Riordan, Breast feeding and human lactation, Jones and bartett publishers, Sudburry, third edition Acharya YT. Charak Samhita of agnivesh, Varanasi, chaukhamba prakashan, 2007; 154: 5.
11. Agnivesha. Charakasamhita, English translation by Sharma RK, Dash B. Vol-II, Sharira Sthan Chaukhambha Sanskrit series office, Varanasi, 2010.