



Review Article

THE CONCEPT OF *STANYA APANAYANA* (WEANING)

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ABSTRACT

The gradual replacement of breast milk and supplement of nutrients that is complimentary food is weaning. In Ayurveda it was explained under *Stanya Apanayana* concept. The World Health Organization defines complementary food as any food whether manufactured or locally prepared, suitable as a complement to breast milk or to infant formula, when either of them become insufficient to satisfy then nutritional requirements of the infant. Such food is also commonly called complimentary food. Breast feeding alone is sufficient for first six months of life, thereafter complementary foods are essential in order to maintain an adequate growth and development of the infant.

The process of weaning and time period of weaning, role of weaning in growth and development of infant is explained in detail by Ayurvedic scholars as a concept of *Stanya Apanayana*. As per *Ayurveda*, *stanya Apanayana* is the process through which infant gradually changes from dependency of breast milk or formula to independence of it and starting solid foods. Supplementary feed of fruits is first described by Kashyapa at 6th month of life. No other author has described *Phalaprasa*. First cereal feed described in 6th month of age by *Sushrutha* and *Vagbhata*. Cereal feed is prescribed at 10th month by *Kashyapa -Dantha jatha* i.e., after teeth eruption. *Vagbhata* accepted this opinion of *Annaprasana* after eruption of teeth but during 6th month of age.

The cereals form the important part of diet in India. They form an important source of energy, carbohydrates, proteins, iron and also supply certain amount of fat. Hence the preparation with *Shastika Shali* (a variety of rice which is harvested in 60 days) and other *Dravyas* such as *Godhuma* (wheat), *Yava* (barley) are best as complimentary food (along breast milk) explained in *Kashyapa Samhitha*.

KEYWORDS: Weaning, complementary food, *Stanya Apanayana*, nutrients, *Phalaprasa*, *Annaprasana*, *Shastika shali*.

INTRODUCTION

Breast milk serves both as a source of nutrition and immunological support for the developing infant. The World Health Organization recommends exclusive breastfeeding for the first six months of life in both developing and developed countries.^[1]

The same explained in Nelson text book of pediatrics that is feeding in first 6 months life of infancy by exclusive breast milk.^[2] In Ayurvedic classics also exclusive *Stanya Pana* for *Sishu* described up to 6 months then solid food has to be started. Breast milk should continue up to 2 years of age along solid foods.

Additional food or liquid not required in infants feeding on breast milk during first 6 months, as breast milk completely supplies nutritional requirements of child and also protects child from infections providing immunity.^[3]

As per WHO it will be important to realize that, breast milk alone will no longer enough to meet an infant's nutritional requirements after certain age which lead to nutritional disorders.^[4] Weaning process plays vital role at this point. Better term for weaning –Complementary feeding.^[5] There is a need of complementary foods which are with optimum nutritional value and also economically sustainable.

Weaning is defined as the process of progressive transfer of the baby from breast milk to usual family or adult diet. Ayurvedic classics have mentioned gradual withdrawal of breast milk and introduction of semisolid, solid food as *Stanya Apanayana-vidhi* (weaning) with *Phalaprasana Annaprasana samskara* (ceremonial initiation of complementary feeding). Weaning is transition period when solid foods replacing mother's breast milk or substitute of breast milk.

Definition of “weaning” the act or process of causing a baby or young animal to stop feeding on its mother's milk gradually and to start eating other food.

WHO-Weaning is the process by which a baby slowly gets used to eating family or adult foods and relies less and less on breast milk. The process depends on baby's requirement and culture. It varies from culture to culture and is often regulated by the child's individual needs.^[6]

The term weaning comes from the Anglo-Saxon word “wenian” meaning “to become accustomed to something different”. It is a complex process involving nutritional, immunological, biochemical and psychological adjustments.^[7]

Weaning is the crucial time for upgrading your baby's nutrition. It is a period of gradual shift of functioning of gastro intestinal tract from digestion of milk to digestion of more complex foods.^[8]

Weaning is defined as systematic process of introduction of suitable easily digestible food at right time in addition to mother's milk in order to provide needed nutrients to infant. (UNICEF-1984)^[9]

Stanya Apanayanakala (Weaning Period)

Acharya Vagbhata opinion that after eruption of teeth gradual weaning has to be done.^[10] Anthropological theories have recommended final weaning at the following points: when the infant acquires four times his birth weight; or when the first molar erupts.^[11]

The quantity equal to thumb after making it soft given to child in mouth 3 or 5 times after feeding, which is licking-*Lehya* that should be made palatable, hot electuary is preferable i.e., *Pakkoshna leham hitam* according to Kashyapa.^[12]

Acharya Kashyapa described *Phalaprasa samskara* during 6th month, *Annprasana Samskara* during 10th month^[13] –time of teeth eruption which helps in mastication of solid food.

Acharya Kashyapa only author described *Phalaprasa* i.e., feeding fruits/ fruit juices to child.

Acharya Vagbhata described *Annprasana* by 6th month after teeth eruption.^[14]

Sushruta described *Annprasana* by 6th month -it should be *Laghu* and *Hitham* i.e., solid food boiled rice made easily digestible and suitable to infant.^[15]

Complementary feeds should be started at 6 months age, while continuing breast feeding. To avoid nutritional disorders and healthy growth and development of child encouraging breastfeeding up to 2 years of age in addition to solid foods is necessary.^[16]

Factors influencing weaning period

Acharya Kashyapa mentions that *Vaidya* (physician) also have to take into consideration factors like *Desha* (Region/ living Place of the child), *Agni* (Digestive Fire), *Bala* (strength), *Kala* (time-season) and according to congeniality.^[17] Ultimate criteria determining frequency of weaning hunger of child.

Weaning process

Vagbhata described well cooked soft semi solid form initially gives in small feeds preparation should be wholesome with *Sarvarasa*. The same explained by WHO.

According to WHO, following instructions in weaning process 1. Feeding very frequently in little quantities 2. Using foods with high nutrient rich foods 3. Food which is made soft in order- easy to chew and swallow cooked rice, softly mashed pulses, cooked vegetables, mashed fruits used.

Balanced diet is defined the diet that should be nutritionally adequate and appropriate with micro and macro nutrients to ensure proper growth and development. Balanced diet helps to stay healthy and disease free. A combination of carbohydrate rich food, protein source and a fat rich food along salt makes nutritionally adequate complimentary food.^[18]

These foods are carefully segregated into sections according to nutrients and mentioned below. Proteins- pulses, cereals, cow's milk, meat, fish.

Soaked nuts

Carbohydrate-Cereals, roots, tubers, fruits. Fats-Ghee, butter, milk, eggs, fish, meat, groundnuts.^[19]

Proteins

Infants have the highest protein requirement per weight, compared to any other age group. Proteins form cells and hormones and function as enzymes. Proteins are the building blocks of life.

Carbohydrates

Carbohydrates (commonly known as sugar and starches) provide energy to the cells in the body. Complex carbohydrates, such as grains, rice, starchy vegetables and cereals are good sources.

Fat: Babies need fat for brain development and growth. These fatty acids are important for the neurological development of a child. In fact, it is so important for babies, that 30-40% of the calories infant consumes should come from fat.

Iron

Iron is the main mineral that babies will need beyond about six months of age. Iron transports oxygen around the body and is important for energy and brain development. Until six months, most babies

rely on the iron stores they've retained from birth, Around six months, the iron stores from before birth run out, and risk of iron deficiency anemia is high. Anemia can cause delays in both physical and mental development. Good sources for Iron include cereal, meat poultry, beans, lentils; eggs. At four to six months of age, the infant is developmentally ready to accept solid foods. The minerals iron and zinc are present in relatively low concentration. Infants are born with a store of iron to supply their needs.

By four to six months of age, iron stores from birth are diminishing and it is therefore appropriate to begin iron-containing foods at that time. Delaying the introduction of solid foods much beyond six months of age is also likely to put the infant at risk for iron deficiency anemia and other micronutrient deficiencies.^[20]

Sucking and chewing are complex behaviors, having both reflex and learned components. The learned component is conditioned by oral stimulation. If a stimulus is not applied when the neural development is taking place, then the infant may become a poor eater.^[21]

Intestine becomes ready to digest cereals, pulses by 6 months as secretion of intestinal enzymes starts. Gastro intestinal system matures. By 6 months tooting begins and enjoys mouthing.

In Ayurveda great scholars described weaning in phases.

1. Introduction of fruits
2. Introduction of solids
3. Withdrawal of breast feed ^[22]

Acharya Kashyapa has mentioned in *Khilasthana* 12th chapter stated that after 12th month child should be given *Shashtika*, *Shali* especially old which is husk-free and well washed. Along with fine powders of *Godhuma*, *Yava* that should be given as semi-solid porridge cooked (*Lehya* form) daily adding oleaginous substances and salt.^[23] Also these foods *Sali*, *Sastika*, *Godhuma* etc., are *Laghu* not so guru and *Satmya dravyas*. *Lavana* (salt) is known to enhance appetite and ensures maximum bioavailability of nutrients. Best supplementary food that described in *Kashyapa Samhitha* makes child healthy. Warm gruels treated with *Vidanga*, *Ghritha* and *Saindhava lavana* suit very well children. *Vidanga* also is added to prevent further gastrointestinal disorders. *Vidanga* is mainly *Krimihara* and *Deepana-Pachana* in nature. *Shali*, *Godhuma* are *Brumhana*, *Hridya*, *Balya*, *Ruchya* and *Pittagna* and *Pathya*. *Yava* is *Shleshmahara*, *Pushtikara*, *Balakara* and *Agnivardhaka*. Well cooked gruel is one ideal food that can be given during weaning time. Weaning foods should be acceptable culturally, available locally, inexpensive, may be home made, clean and hygienic. The foods should be

suitable to child, prepared easily and easily digestible.^[24]

The concepts of breast feeding, complimentary feeding, time period of weaning, nutritional requirements, *Ahara dravya Vargas* are well explained by our great scholars in Ayurvedic classics. With the evidences from *Brihatrayee* it was proven that weaning is not at all novel concept and having vital role in growth and development of infant.

DISCUSSION

Carbohydrates, protein and essential fatty acids along micro nutrients form balanced diet that is necessary for growth of body and brain. That was fulfilled through weaning process described under *Shanyapanayana vidhi* beautifully explained in Ayurvedic classics. Pulse cereal combination is always good as deficiencies present in them compensated by each other. Legumes (pulses) are poor in methionine, rich in lysine (micro nutrients). Wheat (cereals) poor in lysine, so mixing both supplies balanced micro nutrients. This exactly suitable with the concept explained by *Acharya Kashyapa* in *Khila Sthana*- mentioned the use of *Shashtika*, *shali* specially *Purana*. Along with fine powders of *Godhuma*, *Yava*, that should be given as semi-solid porridge cooked daily adding *Sneha lavana* i.e., oleaginous substances and salt. Delaying the introduction of solid foods much beyond six months of age is also likely to put the infant at risk for iron deficiency anemia, other micronutrient deficiencies. Over diluted weaning foods results in malnutrition. So, one has to be careful about delayed weaning and dilution of weaning foods.

Weaning is the second step for self existence. The first step was cutting of the umbilical cord. Breast feeding and weaning process are the two most important dietary habits that determine child health, growth and development. In classics most of food supplements are mentioned those are easy to prepare in home base and effective one.

CONCLUSION

Phala prasana Annaprasana samskaras are described by *Kashyapa*; *Annaprasana* by other Ayurvedic scholars are very scientific ceremonies scattered in Ayurvedic classics which helps infants as complimentary food necessary for proper nourishment. Ayurveda follows slow smooth transition of weaning -*Apanayana* of *Stanya* in a systematic way. *Sthanya apanayana*, *Phala prasana Annaprasana* explained at very right time to prevent *Kuposhananajanya vyadhis* like *Phakka roga*, *Sosha*, *Paarigarbhika* correlated as nutritional disorders PEM Marasmus, Kwashiorkar etc., giving baby complementary foods that fulfill needs of body in

order to maintain an adequate growth and development of the infant and prevents from nutritional disorders.

REFERENCES

1. World Health Organization. A systematic review. Geneva: World Health Organization; 2002. The Optimal Duration of Exclusive Breastfeeding.
2. Nelson Richard E. Behsnanh Robert M. Kliegman, Hal B. Jenson, Nelson's text book of Pediatrics 18th edition, 2007, pp.214.
3. OP Ghai, Vinod K Peul, Arvind Bagga, Ghai Essential Pediatrics, 7th edition, 2009, New Delhi; CBS Publishers & Distributers; Pg 60
4. https://www.who.int/nutrition/topics/complementary_feeding/en/
5. Dr.CHS Sastry, Chavali's Principles of Practice of Pediatrics in Ayurveda, 2nd revised edition, 2015, Varanasi; Chaukamba visvabharati; pg 150, 151, 255, 266, 267, 286
6. Kramer MS1, Kakuma R. The Optimal Duration of Exclusive Breastfeeding A systematic review. Exp Med Biol. 2004;554:63-77.
7. Lawrence R. Breastfeeding: A Guide for the Medical Profession. 5th edn. Vol. 335. St Louis: Mosby; 1999. pp. 338pp. 343-344.
8. Dr.CHS Sastry, Chavali's Principles of Practice of Pediatrics in Ayurveda, 2nd revised edition, 2015, Varanasi; Chaukamba visvabharati; pg 150, 151, 255, 266, 267, 286
9. Dr.Shrinidhi.K. Acharya, Acharya's Text book of Kaumarabryta, vol -1 first edition 2016, Varanasi; chaukamba orientalia; Pg563, 565
10. ProfessorK.R. Srikantha Murthy, Vagbhatas Asthanga Hridayam English translation, reprint-2012, Varanasi; Pblished by Chaukambha Krishna Das Academy; Pg 9, 10
11. Piovanetti Y. Breastfeeding beyond 12 months. Pediatr Clin North Am. 2001; 48:199-206.
12. Dr.N.Krishnaiah, Kashyapa Samhitha Telugu translation First edition 2000 AD, Tirupath; Sidhartha Publications; pg no 639,640.
13. P.V.Tiwari, Kashyapa Samhitha English translation reprint 2016, Varanasi; Chaukamba visvabharati oriental Publishers; Pg No 599, 600.
14. Professor K.R. Srikantha Murthy, Vagbhatas Asthanga Hridayam English translation, reprint-2012, Varanasi; Published by Chaukambha Krishna Das Academy; Pg 9, 10
15. Prof.K.R. Srikantha murthy Sushrutha Samhitha, Edition reprint2012, Varanasi; Chaukambha Orientalia; pg 166
16. OP Ghai, Vinod K Peul, Arvind Bagga, Ghai Essential Pediatrics, 7th edition, 2009, New Delhi; CBS Publishers & Distributers; Pg 60
17. P.V.Tiwari, Kashyapa Samhitha English translation reprint 2016, Varanasi; Chaukamba visvabharati oriental Publishers; Pg No 599, 600
18. OP Ghai, Vinod K Peul, Arvind Bagga, Ghai Essential Pediatrics, 7th edition, 2009, New Delhi; CBS Publishers & Distributers; Pg 60
19. Dr.Dinesh K.S, Kaumarabryta updated, fifth edition 2008, New Delhi; Chaukamba Publications; Pg109, 132
20. Dewey K. Nutrition, growth and complementary feeding of the breastfed infant. Pediatr Clin North Am. 2001; 48:87-104.
21. Lawrence R. Breastfeeding: A Guide for the Medical Profession. 5th edn. Vol. 335. St Louis: Mosby; 1999. pp. 338pp. 343-344.
22. Dr.CHS sastry, Chavali's Principles of Practice of Pediatrics in Ayurveda, 2nd revised edition, 2015, Varanasi; Chaukamba visvabharati; pg 150, 151, 255, 266, 267, 286
23. P.V.Tiwari, Kashyapa Samhitha English translation reprint 2016, Varanasi; Chaukamba visvabharati oriental Publishers; Pg No 599, 600
24. Dr.Dinesh K.S, Kaumarabryta updated, fifth edition 2008, New Delhi; Chaukamba Publications; Pg109, 132

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