

Matrustanya One of The Key of Immunity**Dr. Priyanka Hrishikesh Lonkar**

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Abstract

Matrustanya is the ideal nutrition for infants. It is the lifelong best gift that a mother can give to her baby. Matrustanya contains all the nutrients for normal growth and development of a baby. A well studied narration of the physiology of the stanya is seen in every classic of Ayurveda. Stanya is updhātu of Rasadhātu. If Rasa Dhatu formation is disturbed, its Updhatu Stanya will also be disturbed. Ayurveda explains the importance of Stanya (Breast Milk) through its main function Pushti and Jeevan. The Stanya is Jeevana Amsha as it is the chief source of Nutrition and diet to the infant due to Satmyatva. Breast milk is composed of immune globuline IgA, fat, proteins, carbohydrates, minerals digestive enzymes, antibodies. So breast milk is best than any other type or feeding. Babies who are breastfed exclusively for the first 6 months without any formula, have fewer ear infections, respiratory illnesses, and bouts of diarrhoea, lowers your baby's risk of having asthma or allergies. Matrustanya provides numerous health benefits to both mother and baby. Good qualities of matrustanya, proper techniques of feeding are very important in the nourishment of child.

Key words- Matrustanya, nutrition, Rasadhātu

Introduction

Breast milk is the ambrosia to the child, which gives many benefits to child as well as mother. Breast milk is ultimately the best source of nutrition for newborn baby. Ayurveda explains the importance of *Stanya* (Breast Milk) through its main function Pushti and Jeevan. The *Stanya* is Jeevana Amsha as it is the chief source of Nutrition and diet to the infant due to Satmyatva. Breast milk contains antibodies that help your baby fight off viruses and bacteria. Babies who are breastfed exclusively for the first six months without any formula, have fewer ear infections, respiratory illnesses, diarrhoea, lowers your baby's risk of having asthma or allergies. Breastfeeding has been linked to higher IQ scores in later childhood in some studies. Breast feeding should be started within half hour of birth. The physiology of lactation involving *stanya nirmaana* (milk formation), *stanya pravritti* (expression), *stanapana vidhi* (breast feeding), *stanasampat*, *stanayanasha hetu* (causes of cessation of milk formation), *stanyavridhhi dravyas* (drugs increasing breastmilk) and maintenance of lactation can be best achieved only by a lady who is having the best of dhatus comprising the formation of stana as well as

stanya. According to Ayurveda, breast feeding is the easiest and the healthiest way to feed a newborn, as the milk is rich in nutrients.

Stanya Nirmana

When *rasa dhatu* is subjected to transformation is *prasoot avastha* in female, its *saara* portion in the breast region is known as *Stanya*. *Stanya* is *updhatu* of *Rasadhaatu*. This physiology has been started since the time of conception. Whatever *ahar* taken by *garbhini* is divided in three parts one for the *stanyapushti*, Second for the *Garbhavridhhi* and third for her own *sharir vridhhi*.

Stanya Pravritti (expression)

According to *aacharya Sushruta*, the *stanya* is ejected from the breast by thought, touch, sight and physical contact of baby. This physiology is similar to the one in *ejaculation*. Maintenance of lactation is mainly by the uninterrupted affection towards the baby.

Stanya Paanam

The baby has to be bathed and dressed with new clothes. The baby should be facing the north. Mother should be faced towards the east. A little milk should be expressed out before feeding the baby. Initially the right breast to be given for feeding along with the enchantment of mantras. A normal baby

should be kept with mother as early as possible after birth. This help to keep baby warm in addition to stimulation of oxytocin production in mother's body through emotions.

Stanya Sampat

Kashyapa, the father of Kaumarbhritya told that Unimpaired strength, body parts and longevity, sufficient growth and development in a disease free state along with comfortable state of child and mother are the features of pure milk. Vagbhatacharya opines that the mixture which mixes completely in water forming a homogeneous mixture and that which does not have any dosha vitiation, is ideal for the baby.

According to acharya Charaka, the milk which is normal in colour, smell, taste and touch, mix evenly when pour into water is known as pure milk. This milk provides nourishment (pusttikar) and good health (aaryogum) to the child. Acharya Sushruta described that sheet (cold), clean, free from impurities, shankhabh, sweet in taste, mixes evenly in water, not producing any froth or streaks when mix in water. This type of milk provides good health, growth and development of body, strength to the body.

Stanapana Vidhi

The baby should be bathed and dressed with new clothes. The baby should be facing the north. A small quantity of stanya should be expressed out before feeding the baby. Initially right breast has to be given for feeding along with the enchantment of mantras.

Important health factors in Stanya Piyusha (colostrum)

There are ninety known components in colostum.

Immune factors

1. Specific anti bodies- there are 20 specifically sensitized antibodies present in the colostrums to fight against the organisms like E.Coli.
2. Immunoglobulins- these are protein molecules predominantly Ig G type.
3. Protein rich polypeptide (PRP)- it either stimulate or stabilizes the deranged immune mechanism. So it can enhance the immunity to prevent the aalergies. Colosturm was used for treatment of rheumatoid arthritis once.

4. Lactoferrin- this is an iron binding protein that plays an important role against cancer cell and also has anti bacterial and anti inflammatory properties.
5. Cytokines- they are substances which booster T cells activity and have antiviral and anti tumor activity.
6. Lymphokines- these are peptides involved in mediating immune response.
7. Oligopolysaccharides and glycoconjugate sugars- they prevent the entry of bacteria in the mucosal lining of the gut.
8. Glycoprotiens and trypsin inhibitors- these are factors which inhibit the breakdown of colostrums in the gut hence it can have its effect in the gut.
9. Lysozymes- these are destroying bacteria and viruses. Now a days these are added to the baby food commercially.
10. Leucocytes- they stimulate interferon production and slow down the viral infection.
11. Lactoperoxidase- thycyanate, peroxidise and xanthine oxidase enzymes they oxidize bacteria by generating the hydrogen peroxide.
12. Lactalbumins- they are active against many forms of cancers and viruses. By hormonal regulation it compensates the ill health produced by stress.

Growth Factors

1. Insulin like growth factors (IGF)- These are promoting muscle and body growth.
2. Epidermal growth factors (EGF)- This stimulates the repair process at the site of inflammation. This also stimulates the gut immunity.
3. Transforming growth factor (TCF)- This stimulate gastro intestinal growth and repair, inhibit acid secretion, stimulate mucosal secretion, stimulate mucosal restitution after injury and increases gastric mucin concentration.
4. Platelet derived growth factor- it has mitogenic activity for fibroblasts and smooth muscle cells.
5. Cytokines and lymphokines- they troigger the acute response for chemotaxis and protein synthesis and play as immune modulators.
6. Lactoferrin- this factor facilitates iron absorption and acts as anti microbial agent. It promotes the growth of fibroblasts and intestinal epithelial cells. It plays a role in gut immunity.
7. Anti oxidants- colostrums has adequate amount of vitamin A, D, C and E which has anti oxidant property hence protective for our body.

Benefits of Matrurstanya according to modern

- 1) Breast milk is a complete food for baby.(upto 6 months)

- 2) The breast milk is free from contamination and adulteration.
- 3) It contains several anti-infective factors which protect the baby from infection.
- 4) Low incidence of infective diarrhoea, respiratory infection, necrotizing enterocolitis and mortality.
- 5) Breast milk having high concentration of secretory IgA, IgM, lysozyme, antistaphylococcal factor and specific inhibitory substances against viral infection.
- 6) Breast milk contains live cell to the extent of 1-2 *10 leukocytes/ml macrophage makes upto 90% of the white cells while 10% are lymphocytes with equal distribution of B & T cells.
- 7) Lactoferrin present in breast milk is less than 50% saturated with iron and this does not make breast milk a suitable medium for a growth of enterobacteria.
- 8) High level of bifidus factor protects the baby from the infection with Escherichia coli.
- 9) Para amino benzoic acid (PABA) provides protection against malaria.
- 10) Easily digestible, well absorbed and available in right quantity at the right time.
- 11) Hygienic as it passes straight from the breast into the infants mouth.
- 12) The breast feed babies are less likely to develop obesity, hypertension and atherosclerosis in latter life.
- 13) Late onset of tetany, metabolic acidosis and acrodermatitis enteropathica.
- 14) Presence of epidermal growth factors in breast milk helps for to develop and mature more quickly intestinal epithelium in baby, preventing foreign proteins from entering the system.
- 15) It is rich source of carnitine which is required for ketogenic ability of the liver.
- 16) It is a source of free fatty acids which promotes brain growth.
- 17) Taurine prevents retinal degeneration and blindness.
- 18) Economically cost of human milk is negligible as compare to the fresh milk or commercially obtained powder milk for artificial feeding.
- 19) Breast feeding promotes close physical and emotional bonds between the mother and baby.
- 20) Lactoferrin binds iron which prevents the growth of harmful bacteria.
- 21) Lysozyme destroys the pathogenic bacteria.
- 22) Unsaturated fatty acids protect against giardia lamblia and fat.
- 23) In breast milk carbohydrates (6.7 g/dl) protein (0.9-1.1) are more sufficient for growth.

- 24) Vitamins and minerals- the quantity and bioavailability of vitamins and minerals is sufficient for the needs of the baby in first 4-6 months of life.
- 25) Breast milk has a water content 88% due to this breast feed baby does not require additional water in the first few months of life.

Benefits to Mother

- 1) Breast feeding provides about 98% protection against another pregnancy. (lactational amenorrhoea)
- 2) Breast feeding soon after birth helps uterine involution, reducing bleeding after delivery.,it is due to oxytocin produced during maternal hormonal reflexes required for milk production.
- 3) Nursing mother are less prone to develop breast cancer.
- 4) Breast feeding promotes better figure of the mother because fat reserves laid down during pregnancy are consumed during lactation.
- 5) Decrease mothers work load by saving time and energy.

Conclusion

In conclusion, significant and long-term health benefits are associated with breastfeeding for the individual mother and baby. Breastfeeding is the ideal food for babies. Matrustanya provides both as a source of nutrition and immunological support for the developing infant. Ayurvedic texts describe in detail about normal/abnormal breasts and their effect upon the child, wet nurse, importance and formation of breast milk, method of breast feeding, conditions of woman unfit for breast feeding, abnormalities of breast milk, vitiation of breast milk, substitute milk, and general treatment of stanyanasa etc.

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