

Editorial

Breastfeeding: Let the Baby Begins Own Going with the Divine and Unique Ambrosia

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Every mammal's milk has different compositions suitably specified for their kids. As the cattle's milk is for the calves, so the human milk is for the babies. Then, all concerned with pediatric practice, obstetricians, health workers, social activists, hospital staffs, medias, even the secondary schools and madrasas, practically all persons having public approach should communicate this exclusive and most valuable information of breastfeeding to future mothers, guardians and in the communities.

In my journey with pediatrics since 1986 in different graded hospital settings and also in private chambers I have been encountering women from various socioeconomic background have gathered too many diverse experiences about breastfeeding. From complete ignorance of breastfeeding benefits, injurious prejudice e.g. prelacteal feeds to potentially risky early introduction of infant formula or cow's/goat's milk. With the goal to re-establish a global breastfeeding culture and provide support for breastfeeding everywhere, World Alliance for Breastfeeding Action (WABA) was formed on 14th February, 1991.¹ Later WHO & UNICEF and their partners including individuals, organizations and governments worldwide join with WABA. World Breastfeeding Week is an annual celebration which is held every year from 1st August to 7th August.

WHO and American Academy of Pediatrics (AAP) recommend, the baby should be placed on breast within 1st hour of birth, exclusive breastfeeding up to first 6 months of life and then complementary feeding along with breastfeeding for up to 2 years or more.²

In addition to appropriate amounts of carbohydrates, proteins and fats, some other constituents of human milk present at every feed, many of which can't be replicated. There is long list of ingredients in breast milk and scientists are still discovering more. Remarkably, the levels of these ingredients can fluctuate over time depending on the baby's age and needs. Here are some important constituents - Millions of Live **cells**. These include immune-boosting white cells, as well as stem cell, which may help organ develop and heal.³ More than **1000 proteins** that help baby grow and develop, activate their immune system, develop and protect neurons of brain.⁴ Over called 200 complex sugars **Human oligosaccharides** that act as prebiotics, feeding

'good bacteria' in the baby's gut. They also prevent infections entering the bloodstream and lower the risk of brain inflammation.⁵ More than **40 enzymes**. These enzymes are catalysts that speed up chemical reactions in the body. The ones in breast milk have jobs such as aiding baby's digestion and immune system, as well as helping her absorb iron.⁶ **Growth factors** that support healthy development. These affect many parts of baby's body, including the intestines, blood vessels, nervous system and glands which secretes hormones.⁷ On the subjects of **hormones**, breast milk contains lots of them!

These clever chemicals send messages between tissues and organs to ensure they work properly. Some help to regulate baby's appetite and sleep patterns and even bond with mother.⁶ **Vitamins and minerals** that support healthy growth and organ function as well as help to build baby's teeth and bones.⁷ **Antibodies** also known as immunoglobulin and lymphocytes are present in breast milk that help the baby resist infections.¹ The **immune function** of breast milk is individualized, as the mother, through her touching and taking care of the baby, comes into contact with pathogens that colonize the baby and as a consequence, her body makes the appropriate antibodies and immune cells.⁷ **Long chain fatty acids** in breast milk play a pivotal role in building baby's nervous system, as well as aid healthy brain and eye development.⁸ **1400 micro-RNAs**, which are thought to regulate gene expression, as well as help prevent or halt disease development, support the baby's immune system, and play a role in remodeling the breast.⁸ Breastfeeding offers lower risk of childhood onset diabetes,⁹ decreased the risk of asthma and eczema.¹⁰

Though it is almost universally prescribed, in some countries during the 1950s, the practice of breastfeeding went through a period where it was out of vogue and the use of infant formula was considered superior to breast milk. However it is since universally recognized that there is no commercial infant formula that can adequately substitute for breast milk.¹¹

Human milk is a dynamic, multifaceted fluid is the mainstay for child survival and health especially during the early life. Breast milk provides essential irreplaceable nutrition, also serves as child's first immunization. It provides protection from common childhood illness like diarrhoea and pneumonia, few leading causes of

under five mortality. Breast milk also promotes sensory and cognitive development and is unparallel way of providing ideal food of infants.

Breast milk should be considered as heavenly nectar endowed with all virtuous and is peerless. Breastfeeding also provides many health benefits to the mother. That's why nothing is comparable to human milk. Let's start with the priceless asset at the beginning.

References:

1. "World breastfeeding week". PrWeb.Archived from the original on 12 October 2008.Retrieved 13th November 2010.
2. World Health Organization.(2003). Global strategy for infant and young child feeding (PDF). Geneva,Switzerland.World Health Organization and UNICEF. ISBN 92-4-156221-8. Retrieved 20 September 2009.
3. Hassiotou F et al.Cells in human milk: state of the science Human Lact.2013;29(2):171-182.
4. Beck K L, et al.Comparetive proteomics of human and macaque milk reveals species-specific nutrition during postnatal development. J Proteome Res.2015;14(5):2143-2157.
5. Alsaweed M et al.Human milk cells and lipids conserve numerous known and novel miRNAs.some of which are differentially expressed during lactation. PLoS One.2016;11(4):e0152610.
6. Hamosh M .Bioactive factors in human milk. Pediatric Clinics.2001;48(1):69-86
7. Ballard O,Morrow AL.Human milk composition: nutrients and bioactive factors. Pediar Clin North Am.2013;60(1):49-74
8. Moukarzel S,Bode L. Human milk oligosaccharides and the preterm infant: a journey in sickness and in health.Clin perinatol .2017;44(1):193-207
9. Finigan V(December 2012)."Breastfeeding and diabetes:Part 2"The Practising Midwife 15(11):33-4,36.PMID 23304866.
10. Salone LR, Van WF, Dee DL (February 2013)."Breastfeeding: an overview of oral and general health benefits". Journal of The American Dental Association 144(2):143-51. doi:10.14219/jada.archive.2013.0093.PMID 23372130.
11. "Breastfeeding".www.who.int.Archieved from the original on 2019-05-29.Retrieved 2022-04-28.

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