

## THE IMPORTANCE OF HUMAN MILK

The American Academy of Pediatrics (AAP) recommends that babies be exclusively breastfed, with no supplements, for the first six months of life. They also advise that breastfeeding continue for 12 months or longer if mutually desired. The AAP recognizes that, "Human milk is uniquely superior for infant feeding and is species-specific; all substitute feeding options differ markedly from it... Human milk is the preferred feeding for all infants, including premature and sick newborns."

Colostrum is a yellow, sticky fluid, which is secreted during the first 3-5 days postpartum:

- It contains over sixty components, thirty of which are exclusive to human milk.
- Colostrum continues to offer the immunities that were available to your baby via the placenta.
- It is high in protein, as well as fat-soluble vitamins and minerals.
- Colostrum contains high amounts of sodium, potassium, chloride and cholesterol thought to encourage optimal development of your baby's heart, brain and central nervous system.
- The yellow color of colostrum is due to B-carotene, one of the many antioxidants present.
- Colostrum's natural laxative benefit encourages the passage of meconium, which reduces the risk of jaundice in your baby.
- This fluid is rich in immunoglobulins, which protect your infant from viruses and infections.
- It continues to be secreted in breastmilk for up to two weeks postpartum.

Human milk is a complex living, biological fluid. It contains just the right amounts of nutrients, in the right proportions for your baby. It is processed gently through the baby's digestive system so that these important nutrients are easily absorbed. Breastmilk's features include special factors and hormones that contribute to the optimal health, growth and development of infants:

- Human milk contains at least one hundred ingredients not found in any artificial infant milk.
- It resembles blood more than milk due to the many live cells called macrophages. These cells kill bacteria, fungi and viruses.
- Lactoferrin coats and protects your baby's intestines. When combined with lysozyme, they have a direct antibiotic effect on bacteria such as E. coli and staphylococci.
- Secretory IgA, along with other immunoglobulins protect the ears, nose and throat, as well as the GI track against foreign viruses and bacteria. These antibodies are capable of altering their protective qualities to fight any allergens, germs or bacteria that may be present in your environment. This action decreases your infant's chances of developing allergies, respiratory infections, otitis media (ear infections) and asthma.
- Lactose accounts for the majority of carbohydrates in human milk. It enhances calcium absorption and metabolizes into galactose and glucose, which supplies energy to your infant's rapidly growing brain.
- Human milk contains numerous long-chain fatty acids including DHA and ARA. These lipids are responsible for cell membrane integrity in the brain, retinas and other parts of your baby's body.
- Breastmilk changes during the course of a feeding and throughout the day. It is secreted first as foremilk, which satisfies your baby's initial thirst. Hindmilk is secreted as the feeding progresses. It is high in fat and calories to promote growth and development in your baby.
- Preterm milk differs markedly from full term milk by offering premature babies longer access to colostrum, higher levels of IgA and other anti-infective properties. Preterm milk also contains greater concentrations of triglycerides and long-chain fatty acids. These qualities offer the premature infant optimal nutrition for his short-term energy needs as well as for his long-term neurological and visual development. Preterm milk also offers the best protection from necrotizing enterocolitis (NEC), an often fatal condition in premature babies.

All the research on human milk confirms it's many advantages. Babies who are breastfed have a decreased chance of developing:

- Respiratory and ear infections
- Allergies and atopic diseases
- Asthma
- Urinary tract infections
- Diarrheal infections, gastrointestinal reflux and NEC
- Bacterial meningitis
- SIDS
- Juvenile rheumatoid arthritis
- Childhood lymphomas such as Hodgkin's Disease and Leukemia

Current research indicates that human milk's protective qualities last well into adulthood. Adults who were breastfed as infants have a decreased risk of developing:

- Ulcerative colitis and Crohn's Disease
- Diabetes, Heart Disease and Obesity
- Multiple Sclerosis
- Breast Cancer

For more information on Human milk:

<http://www.medscape.com/viewarticle/408813>

[United States Breastfeeding Committee](#)

<http://aappolicy.aapjournals.org/cgi/content/full/pediatrics;100/6/1035>

[www.aafp.org/x6633.xml](http://www.aafp.org/x6633.xml)

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