

Babies Are Born... Full!

Did you know??.....Milk production begins at 10-14 weeks gestation! This means there's already milk in your breasts for baby right now! This milk is the thicker, more calorie-dense milk called colostrum, which plays several important roles in your baby's early development.

What's up with colostrum and why is it so important?

"Your breasts produce colostrum beginning during pregnancy and continuing through the early days of breastfeeding. This special milk is yellow to orange in color and thick and sticky. It is low in fat, and high in carbohydrates, protein, and antibodies to help keep your baby healthy. Colostrum is extremely easy to digest, and is therefore the perfect first food for your baby. It is low in volume (measurable in teaspoons rather than ounces), but high in concentrated nutrition for the newborn. Colostrum has a laxative effect on the baby, helping him pass his early stools, which aids in the excretion of excess bilirubin and helps prevent jaundice.



Colostrum Milk

Mature Milk

When your baby is breastfed early and often, your breasts will begin producing mature milk around the third or fourth day after birth. Your milk will then increase in volume and will generally begin to appear thinner and whiter (more opaque) in color. In those first few days it is extremely important to breastfeed your newborn at least 8-12 times each 24 hours, and more often is even better. This allows your baby to get all the benefits of the colostrum and also stimulates production of a plentiful supply of mature milk. Frequent breastfeeding also helps prevent engorgement.

Your colostrum provides not only perfect nutrition tailored to the needs of your newborn, but also large amounts of living cells which will defend your baby against many harmful agents. The concentration of immune factors is much higher in colostrum than in mature milk. Colostrum actually works as a natural and 100% safe vaccine. It contains large quantities of an antibody called secretory immunoglobulin A (IgA) which is a new substance to the newborn. Before your baby was born, he received the benefit of another antibody, called IgG, through your placenta. IgG worked through the baby's circulatory system, but IgA protects the baby in the places most likely to come under attack from germs, namely the mucous membranes in the throat, lungs, and intestines.

Colostrum has an especially important role to play in the baby's gastrointestinal tract. A newborn's intestines are very permeable. Colostrum seals the holes by "painting" the gastrointestinal tract with a barrier which mostly prevents foreign substances from penetrating and possibly sensitizing a baby to foods the mother has eaten. Colostrum also contains high concentrations of leukocytes, protective white cells which can destroy disease-causing bacteria and viruses.

The colostrum gradually changes to mature milk during the first two weeks after birth. During this transition, the concentrations of the antibodies in your milk decrease, but your milk volume greatly increases. The disease-fighting properties of human milk do not disappear with the colostrum. In fact, as long as your baby receives your milk, he will receive immunological protection against many different viruses and bacteria." (<http://www.la lecheleague.org/faq/colostrum.html>)

Day of Life 0-3:

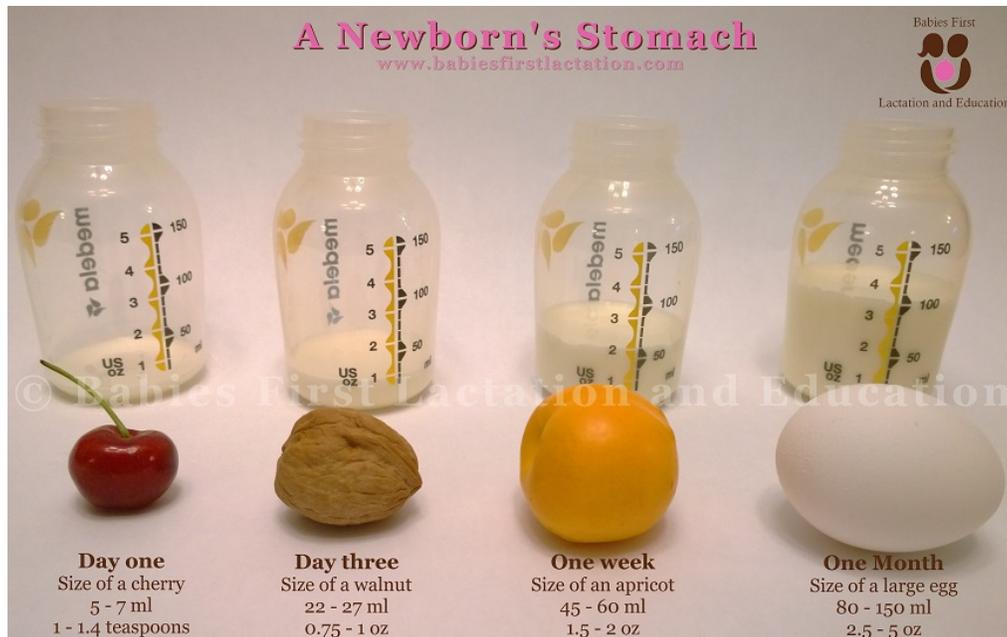
- Why do babies have a high suck need? When babies are born, they often have a very high suck need. This is important for both mom and baby...
 - ▶ **For Baby:** When babies are born, they are born full... of poop! Baby's first poop — that thick, tarry stuff called meconium — lines the digestive system of your baby. In order to help get all of this poop out, babies must consume protein (colostrum) and move their jaw in a chewing motion, which is called mastication. Mastication jumpstarts the digestive system and causes defecation!
 - ▶ **For Mama:** The more a baby sucks on the breast, the more receptor sites are turned on in Mama's breast, increasing her overall potential, maximum output for her milk supply at 3 months postpartum and beyond. Imagine you are constructing a house, and in one of the rooms, you plan to have an enormous entertainment center. This entertainment center will require so much electricity to flow through it that you will need to have at least 20 outlets in order to plug in all of the electronics you want to use. If the 20 outlets are available, everything can remain plugged in and you can choose how many of the electronics you turn on at one time — sometimes you'll use more, sometimes less — but the overall maximum capacity is there. However, if you decide to only install 10 out of the 20 outlets, then the number of electronics you can plug in and the amount of electricity flowing through the outlets is restricted - sometimes less than what you need in order to run everything. You will not be able to use all of your electronics at once. Now imagine those outlets in the wall are the receptor sites (cells) in your breast. These receptor sites are responsible for allowing milk to be produced in your breast. Baby nursing on the breast during the first 3 days of life is the installation of those outlets — the baby turning on and making available the receptor sites. The first three days of feeding are so important for long-term breastfeeding, because this is the time when your baby is “installing” the potential maximum capacity for your milk supply. In order to increase the number of receptor sites in your breast, baby should be nursed on demand as often as baby wants during the first 3 days of life (this should equate to 8-12 times in a 24 hour period OR MORE).



So when does my milk come in?

- Well, we just learned that you've already had milk in your breasts since around week 14 of your pregnancy - so your milk has actually been in for a while! So why do people keep talking about your milk "coming in"? It's one of those poorly thought out phrases... In actuality, what really happens is your milk volume INCREASES. This means all of your receptor sites are turned on by baby nursing on demand during the first 3 days after birth, and then BOOM! Those receptor sites start pushing through more milk than ever before. So why does it happen like this? Your body and baby are super smart and know just how to support baby during his/her growth on the outside of the womb...

Milk volume in your breast at time of birth: 5-7 ml = size of quarter = 1 teaspoon, per breast per feeding



As you can see, baby does LOTS of growing over the first 3, 7 and 30 days of life! On day one, your baby's stomach isn't any bigger than a cherry, but by week one it has grown to the size of an apricot – that means your baby's stomach has grown 4 times its original size in three days and nine times its original size in 7 days! Your baby definitely needs more milk volume in order to stay full, however baby still needs to be eating frequently (8-12 times in a 24 hour period OR MORE during the first 6 weeks of life).

Overall, the more suckling at the breast in the first 3-5 Days of Life, the more receptor sites will be created, and the more milk supply you will have at baby's 3 Months of Life and beyond.