

Breastfeeding the Premature Baby

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Breastfeeding parents too often have preventable problems with breastfeeding. Many hospital routines make successful breastfeeding difficult, even impossible. When the baby is born prematurely, breastfeeding parents have even more difficulty with breastfeeding, and this is unfortunate because premature babies need breastmilk and *breastfeeding* even more than healthy full term babies. The reason for breastfeeding parents not getting the help they need is that many of the “techniques” used to save the lives of premature babies were developed during the 1960’s and 1970’s when breastmilk, never mind breastfeeding, really wasn’t a priority in neonatal intensive care units (NICUs). Unfortunately, despite much about what we have learned since that time about how to help with breastfeeding, NICUs seem to be, in general, with some exceptions of course, resistant to change the way babies should be fed. Even worse, some techniques have been adopted that make the situation even more difficult, basically because many NICU routines related to the feeding of the premature are obsessively geared to weight gain only and not the many other equally or even more important issues around feeding such as the premature baby’s need to be protected against infection and necrotizing enterocolitis as well as the importance of parent and baby bonding. Kangaroo mother care (KMC), which is skin-to-skin for most of the day, is often seen as unnecessary, and even as a sop to “demanding” parents, though even then, KMC is rarely done as it should be. But KMC is an important measure to maintain the baby’s physiological and metabolic functions, such as respiration, heart rate, blood sugar, blood pressure and many others. And let us not forget bonding.

Some Myths About Premature Babies and Breastfeeding

1. Premature babies need to be in incubators

Actually premature babies, even very small ones, often do better skin to skin with the breastfeeding parent (or partner) than they do in incubators. Evidence shows that premature babies (and term babies too for that matter) are more stable metabolically when they are skin to skin with the breastfeeding parent and that the baby being skin to skin helps the breastfeeding parent to increase her milk supply. The baby’s breathing may be more stable and less distressed, their blood pressures are more normal, they maintain their blood sugars better and their skin temperatures better in KMC than they do in incubators. Furthermore, breastfeeding parents will more likely produce more milk if kept skin to skin, she will get the baby to the breast earlier and the baby will breastfeed better. A document from the WHO discusses this at length with many references. You can download it as well as the evidence, free of charge, [here](#). Please show this document to your baby’s doctor(s). See also the studies in [this list](#).

2. Premature babies all need fortifiers

Actually, most don't. If the mother is expressing enough milk, babies over about 1500 grams (usually about 32 weeks gestation babies weigh this much, though there are exceptions) can grow just fine with breastmilk only, perhaps with the addition of vitamin D or phosphorus, maybe. If premature babies were encouraged to start breastfeeding much earlier than the usual 34 weeks gestation, a lot of the fortifiers would not be necessary.

The real problem behind this "need" for fortifiers is that it has become a gospel, carved in stone, for many NICU policies that babies must grow at the same rate outside the gestational parent as they would have had they not been born so early. But there is no good evidence to prove that, whereas there is evidence that babies who grow faster than the premature baby on breastmilk (and breastfeeding) has problems later in life with higher levels of "bad" cholesterol, higher blood pressure, insulin resistance (which may be an early finding of type 2 diabetes) and overweight. These studies were done in premature babies given a) just breastmilk b) breastmilk plus banked breastmilk or c) breastmilk plus preterm formula. The babies who got the preterm formula did grow faster and bigger but there was a price.

How can the baby be fed without using fortifiers? Well, first of all, some babies will need fortifiers, true: really tiny babies and babies whose mothers are not able to express enough milk. However, fortifiers are now being made from human milk (breastmilk) but admittedly they are not easily available yet and are very expensive as well. There is no reason fortifiers need be made from cow's milk. However, most premature babies don't need fortifiers because most premature babies are "big" premature babies. For references, click [here](#).

Many NICUs have a rule that babies can receive only a certain amount of liquid a day. This is usually kept at about 150 to 180 ml/kg/day, sometimes less. If the baby also has an intravenous, the fluid given orally is cut down even more. This restriction of fluid makes sense, for example, if the baby is on a ventilator to help him breathe because too much fluid may cause him to go into heart failure and prevent his coming off the ventilator. So, restriction of fluid, plus the "baby must grow as if he were still in the uterus" results in the "need" for fortifier.

One way avoiding the need for fortifiers in some premature babies, I learned when I worked with premature babies in Africa, was to give them more breastmilk than what is 'allowed' in NICUs. True, these babies were not like babies in NICUs in affluent countries; they were bigger, not as sick and needed not more than a little oxygen to survive. But, as a believer at that time in "the baby must grow as if he were still inside the gestational parent", I increased the amounts of milk the baby received well above the 150 to 180 ml/kg/day, sometimes up to 300 ml/kg/day and the babies did fine and grew well. So as not to give the baby too much milk at one time, the milk was dripped into the baby's stomach continuously, a few drops at a time.

There may be a need for additions to the breastmilk, depending on the baby's levels in the blood. It is possible to add vitamin D, phosphorus, calcium, even human protein (albumin) and human milk fat (from a breastmilk bank) to the baby's milk without using fortifiers. If the baby doesn't need fortifiers, then fortifiers actually should be considered diluters since they decrease the concentration of all those elements that make breastmilk special and unique.

The need for fortifiers has become so ingrained in the minds of neonatologists and pediatricians they are telling the parents of premature babies leaving the hospital that the babies will need fortified breastmilk until the baby is 10 months old. This is absurd, irrational, and ridiculous.

3. Premature babies cannot go to the breast until they are at 34 weeks gestation

This is simply not true. Work in NICUs friendly to breastfeeding, especially in Sweden, have shown that babies can start taking the breast even by 27 to 28 weeks gestation and many are able to latch on and drink milk from the breast by 30 weeks gestation. Indeed, some babies have gone to full breastfeeding by 32 weeks gestation and a few even earlier. This means breastfeeding, not receiving breastmilk in a bottle or tube in the stomach. With KMC and early access to the breast, it can be done anywhere in the world, not just Scandinavia.

Of course, every baby is different and some babies may take longer depending on whether they were sick with respiratory problems or other issues, but routinely waiting until the baby is 34 weeks gestation before even trying the baby on the breast is using the bottle-fed baby as the model for infant feeding.

See the following articles or refer your doctor to them:

Bergman NJ, Linley LL, Fawcus SR. **Randomized controlled trial of skin-to-skin contact from birth versus conventional incubator for physiological stabilization in 1200- to 2199-gram newborns.** *Acta Paediatr* 2004;93:779-785 <https://goo.gl/MTihfg>

Hedberg Nyqvist K, Ewald U. **Infant and maternal factors in the development of breastfeeding behaviour and breastfeeding outcome in preterm infants.** *Acta Paediatr* 1999;88:1194-203 <https://goo.gl/GEjYJp>

Nyqvist KH, **Early attainment of breastfeeding competence in very preterm infants.** *Acta Paediatr* 2008;97:776-781 <https://goo.gl/AGGIq5>

4. Breastfeeding parents of premature babies need to use nipple shields to get their babies latched on well and getting milk well

This is certainly not true most of the time from my experience in Africa (actually, we never used nipple shields in Africa) and the experience of others in the NICUs in other countries such as Sweden. The second article by Nyqvist had babies born as small as 26 weeks gestation and up to 31 weeks gestation and only a small minority ever used a nipple shield.

Yet, unlike what happens generally in North American NICUs from which very few babies leave the hospital breastfeeding (at best they are getting breastmilk in the bottle and frequently the mother is not putting the baby to the breast), almost all the babies actually left the hospital breastfeeding.

The key is to take time to get the baby to take the breast well. This does take extra time compared to using a nipple shield with the breastfeeding parent, but in the long run the result is worth it. Nipple shields eventually lead to a decrease in the milk supply which makes getting off the nipple shield very difficult (see the information sheet ["When Baby Does Not Yet Latch"](#)).

The way to get the premature baby latched on is not essentially different from the baby who was born at term. See the information sheet ["Latching and Feeding Management"](#) and our [video clips](#). These video clips do not show premature babies but the principles of a good latch are the same.

5. Premature babies need to learn to take a bottle which teaches them how to suck

Well, I don't know what to say about this. It's just not true. Premature babies can learn to suck without getting bottles as shown, once again, from experience elsewhere in the world. Too often, parents and babies are hurried out of hospital with the "advice" that the baby will be discharged earlier if he starts taking a bottle. This is not a way to help the breastfeeding parent and baby. In any case it would not be true that the baby needs a bottle to learn. KMC and getting the baby to the breast before the "magic" 34 weeks gestation would do a lot to avoid this situation. Furthermore, as different muscles are used when bottle-feeding vs. breastfeeding, bottle-feeding 'teaches' baby poor sucking skills and these can sometimes be extremely difficult to 'unlearn'. In any case, babies learn to breastfeed by breastfeeding, not bottle feeding. How anyone ever thought a baby learns to breastfeed by bottle feeding is beyond reckoning.

6. Premature babies get tired at the breast

This is believed to be true because babies, not only premature babies, tend to fall asleep at the breast when the flow of milk is slow especially in the first few weeks. The baby is given a bottle and because the flow of milk is rapid, the baby wakes up and sucks forcefully. The false conclusion? The baby tired out at the breast because it's hard work to breastfeed and the bottle is easier. This notion is also believed because even lactation consultants believe that babies "transfer milk", that they suck milk out of the breast and thus they get tired at the breast, that they burn too many calories by breastfeeding and many other myths. No, here's the secret: breastfeeding parents transfer milk, not babies. Babies do their part by latching on well and stimulating the flow of milk to increase.

Premature babies often do not latch on well, partly because we teach latching on so poorly. With a good latch, the use of breast compression and, if necessary, using a lactation aid at the breast to supplement if necessary, the baby will get good flow and not fall asleep at the

breast. Get that flow increased and you will see that breastfeeding is neither difficult for the baby nor tiring for him.

7. Test weighing (weighing the baby before and after a feeding) is a good way of knowing how much milk the baby got at a feeding

Test weighing presupposes that we know what a breastfed baby is supposed to get. How can we know since the rules that say a baby of this weight and this age should get x amount of milk are based on babies fed formula by bottle? And how can we say how much the baby would have gotten if he had been well latched on, with the breastfeeding parent using compression, especially if the breastfeeding is limited to a particular time or schedule like 10 or 20 minutes (because of the concern that the baby will tire out)?

The best way to know if a baby is getting milk well from the breast is to watch the baby at the breast. See our [video clips](#).

8. Premature babies need to continue getting fortifiers once they leave hospital

This is a relative new wrinkle in the undermining of breastfeeding the premature baby. Perhaps someone presented a paper at a conference (very likely a conference sponsored by a formula company that makes fortifiers) that showed the baby gained better if the fortifiers were continued even after his discharge from hospital. But, again, more is not necessarily better and breastfeeding is more important than more weight gain, which is not necessarily good. See the information on fortifiers above.

Premature babies and their breastfeeding parents run into breastfeeding problems much more frequently than do babies born at term. But these can be prevented and fixed. Get good hands on help as soon as possible. See also our other [information sheets](#).

The information presented here is general and not a substitute for personalized treatment from an International Board Certified Lactation Consultant (IBCLC) or other qualified medical professionals.

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Questions or concerns? [Email Dr. Jack Newman](#) (read the page carefully, and answer the listed questions).

[Make an appointment at the Newman Breastfeeding Clinic.](#)

