

What Mattered Most: From NICU Pump Dependency To Exclusive Breastfeeding

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For the newly-delivered NICU mother, the transition to motherhood is often shrouded with feelings of loss and lack of control. The unexpected end of pregnancy by an urgent or emergent delivery and the chaotic early postpartum days are not what she planned. Dreams of blissful hours with the newborn are replaced with the reality of constant worry. Separation of any length from the little someone who means everything to her is often unbearable. If not given accurate information, timely assistance, and frequent follow up, her lactation goals may soon be included among her losses.

I am not just a nurse lactation consultant. Long before I entered the professional field of lactation, I was a new NICU mom. I grieved the end of my pregnancy when my first babies, twins, suddenly arrived at 30 weeks. I longed for the four kicking feet inside that were now swaddled in separate isolettes. Both baby equipment and maternity items brought me to tears as I felt trapped in a state of motherhood limbo, unable to care for them on the inside or outside of my body. My babies were stable and there was seemingly much to celebrate. Yet, we were not a unit anymore and everything felt wrong. In my dazed hours after the emergency C-section, I wondered if all hope of providing my milk to them was also lost. The odds of lactation success felt stacked against us. I knew I wanted to exclusively breastfeed but thought, “How am I going to do this?”

I count it as a great accomplishment that I was able to achieve my goal. I am often asked how I was able to provide 100% of my milk during their 6 week NICU stay and transition to breastfeed them without ever needing formula. I know it was not just sheer determination that led to my success. There were people and factors that kept me on the right path toward my goal. Just as I was transformed from NICU mom to breastfeeding mom, I want to lead other mothers on the same avenue toward success. Looking back, there were key interactions and research proven tools that acted as my bridge and carried me from NICU pump dependency to breastfeeding mother. These were the elements that mattered most and were ultimately able to allow me to become an exclusively breastfeeding mom of twins despite my babies arriving 10 weeks early.

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What mattered most on day one? Initiation of milk supply

As the neonatologist provided an update on my tiny twins only hours old, I interjected, “I do not want them to receive a single drop of formula.” She replied, “We have got to get you pumping!” It seemed like moments later that Paula Meier entered my room, to help me get started with a hospital grade breast pump and to fit me into the proper sized breast shields. She was so reassuring and kind and included my husband and mother in the discussion. She stayed with me and explained what my colostrum would do for my babies. She held up the 1ml syringe full of my first colostrum and told me she was bringing it to the NICU and would be sure that half went to my son and half to my daughter. She explained that it would bring about the cascade of positive changes that were meant to happen so many weeks from now. It was the most emotionally healing and empowering interaction. There was something I could do...something so important to them that only I could provide. My inner voice turned from, “How can I possibly do this?” to “I am doing this. They are going to receive my milk and then they are going to nurse.”

What mattered most during the NICU stay? Maintaining my supply

I received frequent, in person follow up from Paula during the NICU stay. Little did I know at the time I was receiving it, that Dr. Paula Meier is a world-renowned expert on human milk. The NICU set up was as ideal as possible. I was allowed to visit anytime and was able to sit between my two babies and eventually hold them skin to skin or in my arms while pumping. This proximity and ability to stare at them mattered to me. I didn't have to exit the room to pump, but stayed right where I wanted and needed to be. At home, I set up a pumping station with the same style of hospital grade pump. I had a cooler bag to transport my milk in its freshest state right to the babies' caregivers. Labeling my own milk made me confident it was done correctly. The milk expression logs I was using gave me focus. I felt excited each time the 24 hour total increased toward full volume and was reassured by proof that I was making enough to feed two babies. Paula was able to review my milk expression logs to easily provide feedback and adjustments to my pumping plan.

The babies were only about 10 days old when I first asked my son's nurse about non-nutritive nursing. Her initial response was that we should let him rest. Then, she made an about face and replied, “You know what, yes, he needs it, and so do you.” I proceeded to pump and then place my little 3-lb son to my

Table 1. Summary: What Matters Most.

Day One	Approach mother to discuss her lactation goals; provide timely and accurate information about outcomes for mothers and babies who receive mothers own milk and mothers who provide their milk to their babies.	When possible, the use of breastfeeding peer counselors for day one interaction with the new NICU mother is ideal. Those who have personal experience providing milk for hospitalized infants may be important to increasing the rates of human milk feedings and breastfeeding in other NICU settings. (Rossman 2010) Mothers often change the decision (about providing milk) when hearing about the health outcomes for them or their infant. (Miracle 2004)
	Stay with mother throughout the first pumping session to assist with set up, proper usage, assessment of proper breast shield sizing, provide careful assistance to teach milk collection techniques, demonstrate care and cleaning of breast pump parts, provide milk expression records with instructions for use.	Properly fitted breast shields maximize pumping efficiency. (Meier 2000)
	Provide a hospital-grade (multi-user), double electric breast pump with Initiation Technology™ with instructions for use and care, encourage her to use it freely at her baby's bedside and provide rental for use home.	Breast pumps that mimic the unique sucking patterns used by healthy-term breastfeeding infants during the initiation and maintenance of lactation are more effective, efficient, comfortable and convenient than other breast pump suction patterns. (Meier 2011)
During the NICU stay	Ensure professional "check in" occurs with the NICU mother daily/ nearly daily for the first two weeks.	Frequent contact is needed as NICU mothers often change their feeding goals after birth of a VLBW infant. (Hoban 2015)
	Monitor milk collection and storage. Provide target volumes with routine discussions about volume and pumping intervals.	Ideal target volumes should reach 750-1000 milliliters within the first two weeks post birth. Providing target volumes helps set expectations of the volume of milk toward meeting lactation goals. (Meier 2010).
	Provide a lot of encouragement and comfort measures. Facilitate Kangaroo care and encourage/facilitate non-nutritive feeding at breast.	Nonnutritive sucking can be initiated once the infant is no longer intubated and has demonstrated improvement in the transition to direct breastfeeding and longer breastfeeding rates. (Narayanan 1981)
	Encourage and offer assistance to facilitate nutritive feedings by providing a nipple shield in the proper size with instructions for use and care, effective positioning along with and pre and post test-weights.	Nipple shield use increases milk intake without decreasing total duration of breast feeding for preterm infants. (Meier 2000)
	Observe for appropriate intervention needed in special circumstances, ie, hind milk collection. Provide simple growth charts during hind milk feeding, tour to the deep freezer to view stored milk.	
Transition home	With the mother, plan for a gradual transition from state of pump dependence toward increased breastfeeding with an understanding that continued use of hospital-grade (multi-user) breast pump during this vulnerable period of time along (with scale rental for pre and post weights) will be needed.	Pre and post test weighing provides an accurate estimate of intake during breastfeeding across a large range of infant weights and intake volumes.. (Meier,1994) This information is critical as a mother determines volumes transferred at breast feeding.
	Provide resources for community support such as local La Leche League International chapters to connect with other breastfeeding and pumping mothers in the community.	
	Ensure frequent contact by phone by Breast Feeding Peer Counselor, IBCLC, to answer questions during the final weeks of transition toward meeting lactation goal. Remind that attainment of lactation goals is in sight.	Encouraging words are often the support mothers need.

breast. To my surprise he opened wide, latched on and fell asleep. I was crying with joy and could almost feel the prolactin surge in my body. I'll never forget that. These are the moments that propel NICU mothers onward. There were dozens more of these interactions with both babies. Kangaroo care, pumping, and non-nutritive feedings filled my days and finally, I began to feel like their mom.

Once the babies began showing development in feeding cues, Paula taught me how to use a nipple shield and obtain pre and post weights with their breastfeeding attempts. This was an exciting and busy time. The scale revealed to all the amount of milk transferred which was very useful. The nipple shields were the tool that helped them transfer more milk. They were

still tiny and still needing supplements of my pumped milk — but they were breastfeeding. We were part way to my goal of exclusivity.

About 3-4 weeks into their NICU stay their growth began to plateau. Paula ran creatinins on my milk and taught me how to collect and label my hind milk. She created a simple growth chart on the end of their isolettes and the spikes in both did more than just show evidence of progress. It probably did not take Paula long to create, but I'll never forget the growth charts showing the weight gain that was a direct result of my hind milk pumping. It was because I had maintained an adequate supply for two babies that I was able to obtain hind milk when it was needed.

What mattered most during the busy transition home?

We took them home together after 6 weeks. I have a special place in my heart for NICU moms, but an extra special place for moms who are bringing home NICU multiples. The cycle of nursing, pumping and feeding never quite seemed to end. It is a huge milestone to bring a NICU baby home, and it is perhaps the most important time for frequent contact as it is an overwhelming transition. If not reminded often that the goal is in sight, it may still feel unattainable to a former NICU mother.

At about 44 weeks corrected, I sat nursing my twins, together. Shortly thereafter we weaned from the nipple shields. We would nurse thousands of times after, and breastfeeding quickly became the easiest part of caring for them. This was made possible thanks to all of the elements put into place starting after delivery. With the NICU a distant memory and the pump, shields and scale now unused in the background, I had four eyes gazing into mine. Finally, I was just a new mom breastfeeding her babies, and they were what mattered most.

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