Breastfeeding & the NICU

Hello breastfeeding champions,

In the middle of this holiday season, I want to recognize and thank all of the tireless healthcare workers reading this who work in hospitals that are operating 24 hours a day, 7 days a week, 365 days a year. During a wild, frustrating pandemic! I sincerely hope you are getting time to breathe, rest, and relax, and that you can spend any well-deserved off time to fill your cups with whatever works for you: time with family/friends/pets, reading, sleeping, walks in the fresh air, or simply staring at the wall. YOU are miracle workers year-round, evenings, weekends, holidays. **Thank you for all you do**, every day, every week, every month, every year for the vulnerable babies and parents in your care.

When you can, please take a few minutes to read this newsletter. It is full of research and reports related to infants in the NICU and the incredible breast milk that is recommended they receive. The latest policy statements from the American Academy of Pediatrics and the Academy of Breastfeeding Medicine are must-reads.

There are several continuing education opportunities about breastfeeding and the NICU, some low-cost, and some free. Check them out and share!

And last but not least, we have a heart-warming parent pearl from a mom of twins (and superpowers), and an inspirational provider pearl from a NICU lactation consultant. (If you’d like to submit a provider pearl or connect me to a parent who is interested in submitting their own, please let me know!)

As always, contact me anytime with any questions, and Happy Holidays to you and yours,

~Kara Kaikini, MS, IBCLC
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NICU BREASTFEEDING RESOURCES

- Baby Friendly USA NICU Toolkit: https://www.babyfriendlyusa.org/for-facilities/nicu-toolkit/
- Kellymom.com: https://kellymom.com/ages/newborn/nb-challenges/preemie-links/

RELATED RESEARCH & REPORTS

The Effects of Early Oropharyngeal Administration of Microdosed Colostrum on Feeding Status in Ventilated Extremely Low-Birth-Weight Infants

Xiao-Chun Chen 1, Yan-Fen Tong 1, Zi-Min Han 1, Zhen-Lang Lin 1

Results:
On the 6th day of life, concentrations of secretory immunoglobulin A, and lactoferrin in airway secretions and urine of the intervention group were significantly higher than those of the control group (p < 0.05). The intervention group showed younger corrected gestational age of no gastric retention during feeding, corrected gestational age of full enteral nutrition, the corrected gestational age of sucking began and per oral feeding than those in the control group (p < 0.05). The day of recovery to birth weight was earlier than those in the control group (p < 0.05). The rate of feeding intolerance and NEC incidence in the intervention group was significantly lower than in the control group (p < 0.05).

Conclusions:
Early oropharyngeal administration of colostrum improves immune function of the gastrointestinal tract and
the systemic anti-infective capability in ELBWIs on mechanical ventilation, promoting the maturity of gastrointestinal function, improving feeding condition, and reducing the risk of feeding intolerance and NEC.

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**Processing Human Milk to Increase Nutrient Density for Preterm Infants**

Hande Z. Ulus, MSc, Merve Yasemin Tekbudak, MSc, Jonathan C. Allen, PhD, CNS

*Journal of Human Lactation.* First Published November 15, 2021

[https://doi.org/10.1177/08903344211056933](https://doi.org/10.1177/08903344211056933)

**Results:**
A significant reduction of lactose (SW = -262, p < .0001) and osmolality (SW = -211.5 p < .01) was achieved in the concentrated milk without a significant protein loss from centrifugation (SW = -44.5, p = .49). A 30%–40% volume reduction is within the American Academy of Pediatrics recommended osmolality for infant feeding.

**Conclusion:**
Concentrating human milk in a milk bank setting for feeding preterm infants might be a simple and low-cost process to achieve a product with higher nutrient density and no non-human components.

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**AAP CLINICAL REPORT**

**Promoting Human Milk and Breastfeeding for the Very Low Birth Weight Infant**

Margaret G. Parker, MD, MPH; Lisa M. Stellwagen, MD; Lawrence Noble, MD; Jae H. Kim, MD, PhD; Brenda B. Poindexter, MD; Karen M. Puopolo, MD, PhD; SECTION ON BREASTFEEDING, COMMITTEE ON NUTRITION, COMMITTEE ON FETUS AND NEWBORN


[https://doi.org/10.1542/peds.2021-054272](https://doi.org/10.1542/peds.2021-054272)

**Summary**
Mother’s own milk is the normative standard for VLBW infant nutrition and is associated with multiple health benefits. Neonatal staff and health care providers caring for VLBW infants and their mothers play a critical role in advocating and supporting mothers in NICU lactation.

**Key Points**

1. Human milk is the optimal nutrition for VLBW infants and decreases the risk of significant complications of prematurity, most notably, NEC. Pasteurized donor milk feeding is recommended when mother’s own milk is not available, is insufficient, or is contraindicated.
2. Culturally appropriate information on lactation and the health benefits of human milk should be provided to families of VLBW infants.
3. NICU care for VLBW infants includes determination and support of maternal lactation goals. Lactation consultation with expertise in the needs of preterm infants is an integral part of VLBW NICU care.
4. Racial and ethnic disparities in the provision of mother’s own milk and pasteurized donor milk for VLBW infants exist and may be best addressed with center-specific efforts to identify and mitigate local disparities.
5. Effective and efficient double electric breast pumps for mothers of VLBW infants will maximally support mothers in milk expression at the hospital and at home.
6. Because of the need for early and frequent milk expression to maintain milk supply, technical assistance in early milk expression should be available to mothers within 6 to 8 hours of birth of any VLBW infant.
7. Mothers should be encouraged to express their milk as often as needed to maintain a milk supply for their infant(s), ideally every 3 to 4 hours.
8. Written protocols and maternal education addressing milk collection, storage, and transport will optimize infant feeding safety.
9. Centers may encourage and support families in SSC, nonnutritive suckling, and direct breastfeeding, when appropriate to the infant’s medical condition.
10. Human milk frequently requires fortification to meet the nutritional needs of VLBW infants. Centers may provide mothers with information on the rationale for and the content of HMFs.
11. CMV infection can be acquired through mother’s own milk feeding. Current evidence is insufficient to support withholding mother’s own milk solely on the basis of this risk.
12. NICU discharge planning optimally includes defined feeding plans that consider and address the mother’s breastfeeding goals in conjunction with the infant’s need for milk fortification.


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**ABM CLINICAL PROTOCOL**

**ABM Clinical Protocol #35: Supporting Breastfeeding During Maternal or Child Hospitalization**

BREASTFEEDING MEDICINE Volume 16, Number 9, 2021

**Summary**

Supporting a lactating mother or breastfeeding infant or child during a hospitalization is important and may aid in their recovery, especially from critical illness. Even when difficult circumstances, such as the SARS-
CoV-2 pandemic, make it necessary to restrict hospital visitors, the presence of a support person for the mother should be strongly considered to allow her to maintain proximity to the child. Whenever possible, care should be delivered at the same facility for the lactating mother and breastfeeding child, and thus facilities should work to adapt their infrastructure to adequately support breastfeeding families.

CONTINUING EDUCATION OPPORTUNITIES

[Image of a webinar advertisement]

https://bestconnection.org/

Supporting Families of Color In The NICU: Lactation and More

Half day recorded webinar featuring Ebony Harvey, BSN, RN, CCRN, CLES, Certified Doula and Jessica Wade, CLES, Certified Doula.

This webinar focuses on what families of color go through when they have their child in the NICU and how to best support them in their lactation journey.

Cost: $40

Continuing Education: 1.5 E-CERPs, 1.5 L-CERPs, 3 Contact Hours
Mental Health & Breastfeeding Considerations When Supporting NICU Parents

Please join us for a recorded webinar on a timely and informative talk about Mental Health & Breastfeeding Considerations When Working with NICU Parents with Dr. Sharon Tan and Stepanie Hazzard.

Objectives:
Following the didactic presentations, participants will be able to:

1. Identify 4 risk factors for postpartum mood disorders in NICU moms.
2. Discuss 2 cultural factors to consider when evaluating and treating postpartum mood disorders.
3. Identify 3 common presentations of postpartum mood disorders in NICU moms.
4. Discuss 3 successful treatment interventions to consider when someone is identified as symptomatic.
5. Explain 2 factors that contribute to building a thriving parent-child relationship in the NICU.

Cost: FREE

Continuing Education Credits: 1 L-CERP & 1 Contact Hour
6. Assess 2 self-care skills to help with the prevention of postpartum mood disorders.
7. Analyze and explain the spectrum of feeding methods and identify 2 alternative and supplements utilized in the NICU.

Cost: $30
Continuing Education Credits offered at no additional charge

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Basics of Breastfeeding Support for the NICU or PICU Dyad

Cost

Students: $15
Regular: $25

Overview

Lactating parents of premature and/or ill infants in neonatal and pediatric intensive care units need support of several dimensions. Given the superior health outcomes for human milk-fed premature and ill infants, this course is designed to educate NICU/PICU teams (nurses, physicians, dietitians, health professional students) on how to encourage provision of breastmilk, support the establishment and maintenance of milk production, and troubleshoot lactation problems associated with pumping, being back to work and transitioning the infant to the breast/chest.

Topic Outline

- Risks of a non-human milk diet for the NICU or PICU patient
- Demographics of human milk feeding in the NICU
- The basics of anatomy and physiology of lactation
- Support the establishment of successful lactation early postpartum
- Preparing and delivering expressed human milk for the NICU or PICU patient
- All about pumps- educating the lactating parent on pump use, and trouble-shooting pump-related problems
- Transitioning the human milk-fed NICU or PICU patient to the breast
- Medications during lactation
- Medical indications for supplementation for term infants in the NICU
What techniques/strategies have you found helpful in educating and supporting lactating parents?

Breastfeeding my own two children was beautiful and torturous at the same time; I loved the deep connection I formed with my babies but certainly had my own personal struggles. I understand that lactation can be a complicated and challenging relationship with a wide variety of highs and lows. As a nurse and lactation consultant in the Neonatal Intensive Care Unit and the Continuing Care Nursery, I work with families who are often feeling vulnerable, tired, and struggling with separation from their babies. Some parents find pumping and providing breast milk for their baby a way to help cope with the separation and NICU admission. Other parents fight with the mundane task of around the clock pumping, leading them to potentially fall short of their breastfeeding goal.

One of the most helpful strategies I’ve discovered in the last year has been talking early on with new parents about what to expect from pumping, breastfeeding and baby’s development in the first two weeks. I explain that my role as the lactation consultant is to help them achieve their family breastfeeding goal and that every family has a different breastfeeding journey. I focus on what their goals are for the first two weeks and how those first 14 days will impact their breastfeeding journey long term. When parents come to me with the initial goal of exclusive breastfeeding, I will typically explain, “your hard work with pumping around the clock now will help you reach your goal of building a full breast milk supply by day 14 postpartum.” Focusing on short term goals can be more manageable to parents, especially if they are expecting a long stay in the NICU/CCN. Setting short term goals with frequent lactation counseling visits to coach parents before they encounter difficult breastfeeding challenges helps them feel prepared for obstacles and typically more likely to persevere. At the end of a lactation visit I discuss a need for another visit and give families some things to work on for that next visit.

Another strategy that is always helpful is to leave the visit on a positive note, celebrating their hard work, acknowledging that this can be a challenging journey and they have access to continued support and resources.

Why do you support breastfeeding?

I support breastfeeding because of the heavily researched health benefits for both mom and baby, and the boundless need for breastfeeding support in the NICU/CCN population. There seems to be a high percentage of parents who want to try breastfeeding initially but run into some barriers to breastfeeding in NICU/CCN. Having a baby in the NICU/CCN setting is often a stressful experience and these families need all of the support available to them. Parents who don’t receive support and assistance needed with breastfeeding can result in discontinuing breastfeeding and later may regret that decision. I hope to encourage other members of the health care team to support breastfeeding families and give every family the chance they deserve to succeed.
**What was the most helpful support or education you received from a healthcare provider about breastfeeding?**

This was all new to me. My learning style is to prepare ahead of time, and repetition. I found it really helpful that I had a couple visits from a lactation consultant before the babies were delivered. Then I had consistent visits from a couple of LCs pretty regularly from Day 2 on, as much as I needed. In this beginning stage when all of this was new, they set me up with education in those two visits before delivery and the weeks following. They shared info about the two-week window when your supply would be established and how much I should be pumping. I was in a unique situation when I couldn’t breastfeed since they were 30 weeks. They were being fed by a feeding tube. I was hand expressing colostrum for the first couple of days and then exclusively pumping. This was one thing I felt like I was able to control in the unconventional beginning we had. I wanted them to have my breastmilk in whatever capacity I could be so I was super determined to do it. It was challenging, but one of the few ways I could have control.

At first it was a struggle to get my supply and I was worried I wasn’t going to be able to meet their needs. Day two or three in the NICU we were using donor milk and I pumped in my daughter’s room. I pumped 2 ml. The nurse said I could give her that for her full feeding! It was the first time I was able to feed her. It felt like such a win! That was such a huge moment for me to feel motivated to feed one of my children with my milk. Now I’m producing 250mL in a pumping session! I had these little victories that kept me going.

Having multiple visits before and after delivery was so helpful. I would have been lost if I only had one or two visits when all of that info was shared with me since there is so much going on outside of feedings as a new mom. It is easy to be overwhelmed. It made it possible for me to do it successfully.

**What breastfeeding-specific education or support do you wish you had received from a healthcare provider?**

The transition home was tough. But luckily, I haven’t needed to reach out to the LCs since I’ve stuck to the script and I received so much education and support while I was there. I got mastitis while babies were still in the NICU, and had a visit from an LC to get through that. Having been there for 2 months and reaching out more than once a week, I got the info I needed. I felt confident. I envisioned moving from pumping to direct breastfeeding, but I haven’t. I want both of my babies to be drinking my breast milk and there aren’t enough hours in the day to do everything. It is more efficient and effective for me to pump and bottle feed. I do breastfeed them both, but probably only once or twice a day, which I was advised to do while in the hospital because they were getting such fortified milk because of being growth restricted. Now they’re both on regular breastmilk, and this system we’ve established works!

I can honestly say I would have given up on breastfeeding early on if I didn’t have that lactation support available to me. I needed someone to tell me how to keep going, to be my cheerleader, to know I was doing the right thing and that I could get there. I am so eternally grateful to the lactation consultants, especially Lindsay Marlow! Everything is so new being a new mom, especially in the breastfeeding world. I’ve got
these two babies and I’m not sure I’m holding them the right way or that they’re latching the right way or actually swallowing! Everything from how to latch, how to get enough, weighing before and after, listening to swallowing, working through mastitis journey, and setting me up with other resources like kellymom.com, phone # to have at home. Establishing that confidence while in the hospital was critical. It was so much more than learning how to breastfeed. Now that I’m home I don’t feel like I need more help or have questions.

If you have any questions, requests for specific education, or something you’d like to include in a future newsletter, please contact us!

Also, if you received this email from a colleague and would like to be added to the distribution list, please contact Kara.

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