

# Human Milk Insights

May 2017

*The Human Milk Insights newsletter presents the latest breastfeeding topics and clinical practice solutions, addresses coding issues challenging the lactation community, features a lactation service, as well as announces upcoming webinars and conferences.*

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## **FEATURED STORIES THIS MONTH**

### **NEWS YOU CAN USE**

- Human Milk and Research
- Human Milk in the Hospital
- Human Milk in the Workplace
- Support for Breastfeeding Mothers
- Human Milk in the NICU
- Benefits of Human Milk

### **HUMAN MILK CONFERENCES**

- Human Milk Evidence & Research  
for Improving Infant Outcomes

### **CLINICAL PEARLS IN LACTATION**

- What is Kombucha and is it Safe  
While Breastfeeding?

### **SPOTLIGHT ON PRACTICE**

- Nancy M. Hurst, PhD, RN, IBCLC

## NEWS YOU CAN USE

### HUMAN MILK AND RESEARCH

#### **TED Talk - Breastfeeding Research Gaps**

A recent TED Talk entitled, "What We Don't Know About Mother's Milk," features Katie Hinde from the Comparative Lactation Lab at Arizona State University, who shares insights into breastfeeding and discusses remaining gaps in scientific research.

[https://www.ted.com/talks/katie\\_hinde\\_what\\_we\\_don\\_t\\_know\\_about\\_mother\\_s\\_milk](https://www.ted.com/talks/katie_hinde_what_we_don_t_know_about_mother_s_milk)

### HUMAN MILK IN THE HOSPITAL

#### **ABM Clinical Protocol on Supplementary Feedings in the Health Term Breastfed Neonate Updated**

The Academy of Breastfeeding Medicine has released an updated Clinical Protocol #3: Supplementary Feedings in the Healthy Term Breastfed Neonate. The protocol states that the first step is preventing the need for supplementation; followed by addressing early indicators of the possible need for supplementation; then determining whether supplementation is required and supplementing with care. The protocol discusses choices of supplements, volume of supplemental feedings, timing and methods of providing those feedings.

<http://www.bfmed.org/Media/Files/Protocols/Protocol%203%20Supplementation%20English%20Version.pdf>

### HUMAN MILK IN THE WORKPLACE

#### **Employer Support Helps Maintain Breastfeeding**

Breastfeeding while working is more likely to continue when employers provide support, according to a study in Breastfeeding Medicine. A systematic literature search of peer-reviewed articles about breastfeeding support programs and policies among employees found most workplace lactation support services are helpful in increasing breastfeeding initiation, duration and exclusivity for women who work outside the home.

<http://online.liebertpub.com/doi/pdfplus/10.1089/bfm.2016.0182>

### SUPPORT FOR BREASTFEEDING MOTHERS

#### **Breastfeeding Promotion in Infants of Substance Abusing Mothers**

Sandra Sundquist Beaman, MSN, RNC-NIC, does a review of the information regarding substance abusing mothers and highlights appropriate strategies for promoting and supporting breastfeeding.

<http://blog.neonatalperspectives.com/2017/04/17/breastfeeding-promotion-in-infants-of-substance-abusing-mothers/>

#### **ABM Podcast on 'Unusual' Breastfeeding Topics**

The Academy of Breastfeeding Medicine's podcast, "A Round Robin of Breastfeeding Topics" discusses a unique group of topics related to breastfeeding including tattooing, dialysis and insecticides. The podcast is available at no cost.

<https://itunes.apple.com/us/podcast/breastfeeding-medicine-podcast/id417009927?mt=2>

#### **Support for Breastfeeding Mothers**

The Cochrane Review released the report, "Support for Breastfeeding Mothers." Highlights were that when breastfeeding support is offered to women, the duration and exclusivity of breastfeeding is increased. Characteristics of effective support include: That it is offered as standard by trained personnel during antenatal or postnatal care, that it includes ongoing scheduled visits so that women can predict when support will be available, and that it is tailored to the setting and the needs of the population group. Support is likely to be more effective in settings with high initiation rates. Support may be offered either by professional or lay/peer supporters, or a combination of both. Strategies that rely mainly on face-to-face support are more likely to succeed with women practicing exclusive breastfeeding.

[http://www.cochrane.org/CD001141/PREG\\_support-breastfeeding-mothers](http://www.cochrane.org/CD001141/PREG_support-breastfeeding-mothers)

## HUMAN MILK IN THE NICU

### Reduced Necrotizing Enterocolitis after an Initiative to Promote Breastfeeding and Early Human Milk Administration

Michelle Feinberg, MD, the physician lead for the NICU Nutrition Committee at Saint Joseph Hospital in Denver, and colleagues, outline successful practices to reduce necrotizing enterocolitis after an initiative to promote breastfeeding and early human milk administration in an article in Pediatric Quality & Safety. The researchers implemented a multidisciplinary initiative to promote breastfeeding in the NICU for premature infants. The rate of necrotizing enterocolitis dramatically decreased in the unit.

[http://journals.lww.com/pqs/Citation/2017/03000/Reduced\\_Necrotizing\\_Enterocolitis\\_after\\_an.2.aspx](http://journals.lww.com/pqs/Citation/2017/03000/Reduced_Necrotizing_Enterocolitis_after_an.2.aspx)

### Analgesic Effect of Maternal Human Milk Odor on Premature Neonates: A Randomized Controlled Trial

Study showed that maternal milk odor has an analgesic effect on preterm neonates.

<http://journals.sagepub.com/doi/abs/10.1177/0890334417693225>

### Mothers' Own Milk and Donor Human Milk for VLBW Infants: Health Outcomes and Costs

Paula Meier, PhD, RN, FAAN, discusses the differences in mother's own milk and donor human milk for VLBW infants. Her conclusion is that, "It is time to carefully examine the evidence and invest precious dollars in to prioritizing the acquisition of MOM for VLBW infants."

BLOG:

<http://blog.neonatalperspectives.com/2017/04/13/mothers-own-milk-and-donor-human-milk-for-vlbw-infants-health-outcomes-and-costs/>

WEBINAR:

<http://www.medelabreastfeedingus.com/professionals/Education/Programs/Detail/675>

Promo code for \$5 off: HMIjS6Sf5

Exp 6/30/17

### Cue-Based Feeding: Who is Driving the Feed?

Kim Flanagan, MSN, CRNP, compares the traditional volume/time based model of feeding preterm infants with the benefits of a cue based feeding in the NICU. Cue based feeding involves a paradigm shift focusing on infant readiness and tolerance versus the amount ingested.

<http://blog.neonatalperspectives.com/2017/04/10/cue-based-feeding-who-is-driving-the-feed/>

## BENEFITS OF HUMAN MILK

### Human Milk Microbiome: A Paradigm Shift

Shelley McGuire, PhD discusses the complexity of human milk, not only the basic nutrients, but the myriad of other biologically active components that make up its microbiome.

BLOG:

<http://blog.neonatalperspectives.com/2017/04/21/human-milk-microbiome-a-paradigm-shift/>

WEBINAR (recorded):

<http://www.medelabreastfeedingus.com/professionals/Education/Programs/Detail/663>

\$5 off promo code: HMIeN5GyS

Exp 6/30/17

### Stem-Like Cell Characteristics from Breast Milk of Mothers with Preterm Infants as Compared to Mothers with Term Infants

Breast milk stem cells are hypothesized to be involved in infant health and development. Breast milk from mothers of preterm infants and mothers of health full-term infants were evaluated. Findings were that stem cells are present in preterm breast milk and stem-cell markers vary between preterm and full-term milk.

<http://online.liebertpub.com/doi/full/10.1089/bfm.2017.0002>

### Risk of Childhood Obesity Reduced with Breastfeeding

A longitudinal study showed that children who were breastfed for at least six months had the lowest prevalence of obesity as compared to those who were breastfed for less than six months or never breastfed. The researchers found that breastfeeding for more than six months vs. never breastfeeding was associated with a 42% reduction in obesity risk.

<http://online.liebertpub.com/doi/pdfplus/10.1089/chi.2016.0210>

## HUMAN MILK CONFERENCES

### Human Milk Evidence & Research for Improving Infant Outcomes

Paula Meier, PhD, RN, FAAN  
Spokane Valley, WA

Monday, June 5, 2017: 7:45 am – 4:30 pm

For more information or to register:

<http://www.medelabreastfeedingus.com/professionals/Education/Programs/Detail/673>

\$5.00 off promo code: HMIwR6Re4

## CLINICAL PEARLS IN LACTATION

*This column is for lactation practitioners to share clinical problems and successes, observations, and pearls with colleagues. To share a clinical pearl, [submit it here](#).*

### WHAT IS KOMBUCHA AND IS IT SAFE WHILE BREASTFEEDING?

Here's the "scoop" on a product that has gained recent popularity among women – many of whom are pregnant and/or breastfeeding. Kombucha is a fermented, lightly effervescent green or black tea drink made by using a mushroom-like colony of bacteria and yeast, also known as a SCOBY. Many women are producing kombucha in their kitchens and are drinking it to boost the body's immune system, restore balance and promote a probiotic healthy environment in the gastrointestinal tract. But is it safe for mothers and their breastfeeding babies?

With so much emphasis on having and maintaining a "healthy gut" these days, many women are making diet changes and taking probiotic supplements. Probiotics are living microorganisms (or "good" bacteria) that are normally present in healthy intestines, and are necessary to balance the harmful bacteria that live there. If there are more "bad" bacteria than "good", then an imbalance or dysbiosis occurs, the immune system may be compromised and illness may result.

However, when it comes to kombucha, there is not a lot of evidence to support the claims of health benefits and, although rare, there have been some documented adverse effects. Due to the microbial source of the SCOBY culture and risks of bacterial contamination in processing and storage, consumption of kombucha is not recommended for pregnant or breastfeeding women, children under the age of four and for people with compromised immune function.

So, while the answer of whether consuming kombucha is safe while breastfeeding is unknown, the recommendations of numerous experts is to avoid it while pregnant and during lactation. Potential risks outweigh the benefits. Mothers need to be informed of the potential risks so they can make an informed decision.

#### References:

Hale TW & Rowe HE. (2017). Medications and mothers' milk 2017, 17th ed., New York, New York: Springer Publishing.

Infant Risk Center. [www.infantrisk.com](http://www.infantrisk.com). (806) 352-2519

## SPOTLIGHT ON PRACTICE

*This month we are spotlighting Nancy M. Hurst, PhD, RN, IBCLC*

From administrators to bedside clinicians, the staff at Texas Children's Hospital Pavilion for Women are mindful of the efforts of Dr. Nancy Hurst to support breastfeeding and human milk delivery for mothers of healthy and compromised infants. Through Dr. Hurst's leadership and direction, the lactation and milk bank (lab) services at Texas Children's Hospital has witnessed wide scale growth since its inception in 1984. Under Dr. Hurst's leadership, along with Kristina Tucker as manager and a dedicated staff of lactation consultants, peer counselors and milk bank technicians, mothers of infants born at the Pavilion for Women and those hospitalized at Texas Children's Hospital receive a variety of services. Lactation services include prenatal and postpartum breastfeeding education, inpatient and outpatient lactation consultation, and procurement of hospital-grade and single-user electric breast pumps. The Milk Bank at Texas Children's Hospital was one of the first of its kind in the US to provide a centralized processing lab for the storage, preparation, fortification and delivery to the bedside of mother's own milk. In January 2009, Dr. Hurst spearheaded an initiative to provide pasteurized donor breast milk to preterm infants in the NICU when mother's own milk was not available. To ensure the supply of donor milk was maintained to support the needs of the 173-bed NICU, the Mothers' Milk Bank was opened in 2011 to recruit mothers for milk donation. To date, over 175, 000 ounces of human milk has been donated.

Originally, from Memphis, Tennessee, Dr. Hurst considers the Houston area her home. She began her nursing career as a staff nurse in an adult intensive care unit. In the late 1970s, Dr. Hurst became active in the Houston childbirth education and lactation community as a childbirth instructor and lactation expert for the Houston Organization for Parent Education. In the 1980s, Dr. Hurst began her affiliation with Texas Children's Hospital first as a Lactation Consultant and Manager of the Lactation and Milk Bank services. Presently, as director of Women's Support Services, Dr. Hurst oversees clinical, financial and research activities for the Lactation and Milk Bank services as well as the Patient Education Program at Texas Children's Hospital.

The focus of Dr. Hurst's initiatives at Texas Children's has been to create a breastfeeding and human milk culture both in the pediatric and maternity care units. In 2016, Dr. Hurst led the hospital in its goal to achieve the Baby Friendly Hospital Initiative designation. To build on the progress and increase in breastfeeding rates realized through the BFHI designation, a new hospital-wide program was developed the same year. In collaboration with her colleagues, Dr. Hurst developed an infrastructure of staff members acting as breastfeeding resources at the unit or department level whereby breastfeeding and human milk feeding is the expected norm. Through the efforts of the lactation clinical staff and over a hundred resource staff members throughout the hospital system, lactation and breastfeeding support is provided for patients, as well as employees returning from maternity leave. Dr. Hurst also works with Texas Children's Hospital partnering hospitals in neighboring communities to share education and best practices regarding infant feeding. Additionally, Dr. Hurst serves on the Texas Collaborative for Healthy Mothers

and Babies as the co-chair of the neonatal sub-committee for the Texas Health and Human Services to share newborn practices within the state.

Dr. Hurst is a world renown speaker presenting at numerous professional conferences on the topics of human milk, the care of NICU and Late Preterm Infants, the use of donor milk, and the process of designing and maintaining hospital based milk banks. She is the first author of numerous peer-reviewed journal articles and a participating author in copious other articles that have appeared in renown journals. She has authored four different chapters on human milk and nutrition for preterm and term infants as well as breastfeeding. She has been a member of the International Society of Research in Human Milk and Lactation (ISRHML) since 2006, serving on its executive council from 2010 to 2013.

Dr. Hurst and her husband of 26 years, Randy, have four adult children and three grandsons. She acknowledges that Texas Children's Hospital has provided her with a tremendous opportunity to grow and learn from others during a time when the science of human milk and breastfeeding has exploded. Professionally, Nancy has built a remarkable legacy about human milk at the hospital and the hospital has given her the opportunity to showcase her compassion for supporting mothers and babies; personally, Nancy met her architect husband at the hospital when he served as the Project Manager of the West Tower building project that now houses the NICU.

The science of human lactation has been strengthened by the research and publication work Dr. Hurst has conducted. The Houston community and the many mothers and infants served by the direction, resourcefulness and determination of Dr. Hurst to create a breastfeeding and human milk culture at Texas Children's Hospital are forever grateful for her passion and dedication.

*This column is for lactation practitioners and facilities who wish to acknowledge the work of others. We invite you to submit suggested practitioners or facilities you would like to spotlight. If you have a suggestion, [submit it here](#).*