The Science of Mother’s Own Milk Feeding for the Healthcare Professional

* Mother’s Own Milk is an ESSENTIAL MEDICATION for NICU babies, not just a food
* Focusing on ***breast milk production, not breast feeding***is essential for success, as some *breast feeding issues* are controversial and are a distraction to mothers initiating pumping
* Breast milk pumping should begin by *6 hours* after delivery, and *pumping should occur every 3 hours*. This gives mom the best chance of successfully producing optimal amounts of breast milk for the baby
* Routinely asking moms about pumping (frequency and milk production problems) should be done *daily* for at least the first week to get breast milk production established. Viewing of *maternal pumping log* is essential
* Research provides strong evidence for the following Health Benefits of Mother’s Own Milk:

- Better neurodevelopment: for every 10ml/kg/day an extremely premature baby ingests, Bayley MDI scores increase 0.59 points

- Less necrotizing enterocolitis, a life-threatening NICU disease (Surgery often means death, and non-surgical NEC costs $73,700 on average per case and 22 day increased length of stay)

- 50% less nosocomial infections, including less bacterial meningitis and late-onset sepsis

- Less rehospitalization after discharge

-21% less postneonatal mortality

-Possible decreases in Type I and Type II Diabetes, decreased risk of SIDS, decreased leukemia and lymphoma, obesity, hypercholesterolemia, and asthma

-The potential for *$3.6 billion* in decreased ANNUAL health costs in the USA, including less costs for WIC programs and less parental work loss due to child illness

* Mechanisms for protection of the baby by Mothers Own Milk include:

-nutritional, enzymatic, anti-infective, anti-inflammatory, and immunomodulatory factors which are more highly concentrated in milk of women who delivery prematurely

-lipids in human milk provide energy and long chain polyunsaturated fatty acids which promote optimal vision and brain development

-breast milk, when metabolized in the GI tract, makes it difficult for pathogens (germs) to grow and develop, thus protecting the GI tract from nosocomial infection and NEC

* Mothers Own Milk composition changes as the milk is pumped and as the baby matures in order to provide optimal nutrition for the baby
* In studies of mothers of extreme premature infants, ***the #1 determinant of the decision to breastfeed was hearing from the health care provider that breast milk was best for their infant.***
* Empowering mothers to affect outcome by emphasizing that ***breast milk is the most important medication that is “needed to make their babies healthy”*** has been shown in the literature to help convince mothers to breastfeed and does not result in feeling coerced or guilted into pumping.

References:

1. PDX Medical Group 100K Babies Campaign. ‘Breastmilk as a Medicine’

2. American Academy of Pediatrics Policy statement on Breastfeeding and the Use of Human Milk.. Pediatrics, Vol. 115 No. 2 Feb 2005

3. Rodriguez, Miracle, and Meir. ‘Sharing the Science on Human Milk Feedings with Mothers of VLBW Infants’. (JOGNN Jan/Feb 2005.)

4. Vohr, et al and the NICHD. Persistant Benefits of Breast Milk Ingested in the NICU on Outcomes of ELBW Infanst at 30 months of age. Pediatrics Vol 120, No. 4, Oct 2007.

5. For more info and CME/CEU, see *www.breastfeedingtraining.org*