

New Thoughts

An app is available for doctors and parents to track the baby’s weight loss in the early days to see if the baby is on a trajectory for weight loss problems.
www.newbornweight.org

Differential weight loss by delivery mode was evident 6 hours after birth. Of those babies who lost 10% or more of birth weight, 5% were vaginal births and 10% were surgical births. (Flaherman 2015)

In NICU mothers low milk volume on Day 4 is associated with Cesarean births. (Murase 2014)

Some hospitals are using banked donor human milk for full-term babies. (Kair 2014)

The milk ejection reflex in individual ducts can vary from 2 to 8 seconds. (Gardner 2015)

Uterotonics may reduce breastfeeding duration due to pain. (Brown 2014)

One-third of women with gestational diabetes experienced delayed onset of Stage II Lactogenesis. (Matias 2014)

Steroid injections can suppress lactation for several days. In one case it took 4 days for the mother to get back to a full supply. (Babwah 2013)

Breastfeeding education via a tablet offered to women during prenatal visits was well received by the pregnant women and the women successfully learned the breastfeeding content. (Pitts 2015)

Up-dated Association Statements for 2015

Academy of Breastfeeding Medicine
 Academy of Nutrition and Dietetics
 Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN)

Nipple Pain

There is insufficient evidence that

1. glycerine gel dressings
2. breast shells and lanolin
3. lanolin alone
4. all-purpose nipple ointment

significantly improve maternal nipple pain. (Dennis 2014)

The most common product used by women is lanolin. (Buck 2015)

Women continue to breastfeed through many weeks of pain

- At the time of discharge almost 80% of women reported nipple pain
- During the first 8 weeks almost 60% of women reported nipple damage
- During the first 8 weeks 23% of women experienced nipple vasospasm
- At 8 weeks postpartum 8% of women still had nipple pain. (Buck 2014)

Some babies suck too hard. (Perrella 2015)

Maternal nipple pain was associated with restricted tongue motion. (McClellan 2015)

Infant Pain

Breastfeeding with the baby skin-to-skin is the best way to decrease pain during heel sticks and injections. (Marin Gabriel 2013)

Breast Pain

Women with chronic breast pain are more likely to have higher *S. aureus* growth. Culture the milk, if *S. aureus*, treat with antibiotics. (Witt 2014)

Some women with breast pain respond to pectoral muscle massage and stretching. (Kernerman 2014)

Probiotic effective in treating lactating breast pain (Maldonado-Lobon 2015)

Milk expression

Research has shown all the following to be helpful

- Early initiation when the baby is not breastfeeding [Within the first hour after birth (Parker LA 2015)]
- Massage of the breasts
- Hand expression (Morton 2009)
- Listening to relaxation music (Keith 2012)
- Warming of the breasts (Kent 2011, Yigit 2013) (Becker 2015)

- Skin-to-skin with baby just before pumping or while pumping (Acuna-Muga 2014)

Hand expressed milk has more fat than milk expressed via electric pump. (Morton 2012, Mangel 2015)

Pumps can transfer infection from one mother to another in the hospital environment. (Engur 2014)

Bright pink milk (that looks like a pink highlighter) is *Serratia marcescens*. Treat both mother and baby with antibiotics. (Del Valle 2014)

There is a lower risk of pump-related problems when women learned how to pump from a person rather than from written instructions. (Oi 2014)

When full-term infants fed poorly in the hospital, mothers were taught either to hand express or electric breast pump their milk. Those who were taught hand expression were more likely to be breastfeeding at 2 months. (Flaherman 2012)

Milk Storage

2006 “Mother’s milk that has thawed in the refrigerator for up to 8 hours may be safely refrozen.” (Rechtman)
 2010 Fresh mother’s milk may be stored in the NICU refrigerator for as long as 96 hours (4 days). (Slutzah)

2015 In the NICU pasteurized donor human milk can be thawed in the refrigerator and held for up to 9 days with no evidence of microbes. (Vickers)

2015 Leftover (after a bottle-feeding) human milk can be refrigerated for up to 7 days and be fine to feed to the baby. (Fogleman)

Expression in the first 48 hours

One study showed more milk by hand expression (Ohyama 2010); another, by electric pump. (Lussier 2015)

Volumes in mL on Day 1

	hand	electric
Ohyama	2.0	0.6
Lussier	0.1	3.7

Common Sense

Most pediatric waiting rooms do not have information about breastfeeding. (Dodgson 2014)

Parents and healthcare professionals should be informed of the prevalence of infrequent stools in exclusively breastfed infants and adopt a wait-and-see attitude. (Courdent 2014)

An event of blood in the stools does not increase the risk of developing hypersensitivity syndromes or food allergies during childhood. (Reiter 2014)

Validating Previous Research

Baby-Friendly

Once hospitals become designated as Baby-Friendly they may have a tendency to slip back into old practices, so they need to keep monitoring themselves. (Hawkins 2014)

Visitors can be a barrier to skin-to-skin holding at birth. (Ferrarello 2014)

Not accepting free formula in one hospital

- reduced formula supplementation in the hospital
- increased exclusive breastfeeding in the hospital
- increased duration of breastfeeding. (Tarrant 2015)

New mother questions

Mothers are satisfied with the information they receive in the hospital, most do not have questions. If they do have questions, it is usually about breastfeeding. (Herrero-Morin 2015)

In addition to businesses supporting their employees, universities need to support their students. (Dinour 2015)

We are what we eat. (Britton 2015)

Among healthy premenopausal women, bone mineral density was associated with lactation. (Mgodi 2015)

Acupressure increases milk volume. (Esfahani 2015)

Breastfeeding during pregnancy is not harmful. (Ayrim 2014, Cetin 2014)

Fathers

Prenatal education of fathers increases duration and exclusivity of breastfeeding. (Hunter 2014, Bich 2014, 2015, Maycock 2015)

Still Breastfeeding at 6 Months

Mothers who initiated skin-to-skin contact in the first hour had a higher rate of breastfeeding.

Primiparous women who had Cesarean births reported higher use of formula and breastfed for a shorter time.

Reasons for stopping breastfeeding

1. Low milk supply
2. Returned to work
3. Baby did not latch and suck well. (Augustin 2014)

Vitamin D supplements can be given to the mother (6,400 IU) such that baby will receive appropriate vitamin D levels from her milk. (Hollis 2015)

Research continues on health risks of not breastfeeding

Childhood cancers

(Kucukcongar 2015)

Leukemia (Greenop 2015)

Ear infections (Bowatte 2015)

Respiratory tract infection (Lui 2015, Yamakawa 2015)

Maternal endometrial cancer (Ma 2015)

Infant and child death (Sankar 2015)

Cardiorespiratory fitness (Vafa 2015)

Environmental Contaminants

Daily arsenic intake by formula fed infants was 5.5 times higher than for breastfed infants. (Carignan 2015, Fangstrom 2008)

NICU

For preterm infants an exclusive human milk diet through 33 weeks reduces the incidence of NEC (use of fortifier made from human milk). (Herrmann 2014, Abrams 2014, Philip 2015, Alshaikh 2015)

Having pasteurized donor human milk available increases the amount of mother's own milk consumed by VLBW infants (Parker MG 2015)

Human milk oral care motivates mothers to maintain milk supply (Froh 2015)

Resources are needed to ensure mother's own milk (MOM) for her baby, because using MOM reduces cost to the NICU for donor human milk or commercial formula. (Jegier 2013)

Colostrum oral care reduced sepsis rates in ELBW infants. (Maxwell 2015)

Use of bottles for NICU babies does not get them home sooner. (Briere 2015)

Cup feeding of preterm babies increased likelihood of exclusive breastfeeding and did not increase length of stay. (Yilmaz 2014)

Use of a bottle influences the baby's intake of milk whether formula or mothers' own milk. (Li 2010)

When bottles are covered and weighted, moms with controlling feeding styles feed their babies less milk. (Ventura 2014)

Hands-on help

Mothers do not like hands-on help with breastfeeding (Cato 2014)

Centering

Centering pregnancy grouped prenatal care increases breastfeeding among adolescent mothers. (Trotman 2015, Rowley 2015)

More and more pediatric practices are hiring lactation consultants. IBCLCs bring more babies to the practice (and thus more money) and increase breastfeeding duration rates. (Brown 2015, Morris 2015)

Academy of Breastfeeding Medicine

ABM Protocols
www.bfmed.org

There is no substitute for human milk. (ABM conference 2013)

www.pubmed.gov