

Breastfeeding and the Use of Nipple Shields

Friend, Foe, or Tool
in the Preservation of Breastfeeding



Minnesota Breastfeeding Coalition Workshop
October 22, 2015 | Essentia Health, Duluth

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What the Evidence Says.....

- 2009 Study from Journal of Clinical Nursing: **Reexamination of Ultra-thin nipple shield use, infant growth and maternal satisfaction** Chertok IR, J Clin Nurs. 2009; Nov 18 (21):2949-55

The nipple shield may facilitate successful breastfeeding outcomes when indicated. There has been question regarding infant weight gain with nipple shield use. A published pilot study using within-subject design indicated no significant difference in infant test weights and maternal prolactin levels when breastfeeding with and without nipple shields. The current study builds and expands upon the pilot study.

Results demonstrate no statistically significant difference in weight gaining weight gain at two weeks, one month and two months.

89.8% of the women reported a positive experience with nipple shield use.

67.3 % of the women reported that it helped prevent breastfeeding termination.

Literature review of studies done since mid-nineties mixed on whether enough evidence to conclusively determine safety and efficacy.....

Chevalier McKechnie, Eglash Anne; Nipple Shield: A Review of the Literature, Breastfeed Med. 2010 Dec.; 5(6):309-14

Other wide spread practices?

- Epidurals, Infant Formula, Pacifiers
- The Auerbach 1990 study demonstrated less milk production resulted using breast pumps over nipple shields of non-nursing infants.
- Amatayayakul et al. concluded that a thin latex NS does not impact hormone release or infant suckling time
- Meier et al. 2000 on preterm, Very effective for infants who do not transfer milk well, no impact on breastfeeding duration.
- Increased Use? Absolutely
- Indicated in every case? Probably not



Nipple Shield Indications

- Nipple shape such as flat, short, or inverted nipples
- A high palate, a tight frenulum or a tongue tie
- Mom has severely sore damaged nipple
- To keep infant with weak or disorganized suck at the breast until effective suck is achieved
- To increase milk transfer for infant with weak or immature suck
- To help control flow of milk when mother has an overactive letdown reflex
- To transition to breast for babies that display signs of breast refusal or bottle nipple preference
- Finally, to keep breastfeeding in the game when.... Not going well; asking for an early bottle due to inability to latch; breastfeeding is seen as too hard; he'll only latch when I get help; don't think I can do this..... "I might have something that can help."

Ways to help avoid usage in full term healthy infants and breasts



- Uninterrupted, unhurried Skin to Skin Contact in first hour of life
- Unrestricted Skin to Skin Contact thereafter
- No introduction of pacifiers
- Assessment of feeding readiness and cues
- (Not trying to latch a sleeping infant because it's been too long)
- Positioning help, side-lying seems helpful
- Shaping and erecting nipples repeatedly
- Hand expression of colostrum

Pre-term and Late Preterm- Now that's a horse of a different color

- Paula Meier's work with the preterm breastfeeding infants found that nipple shields were very helpful in this population in transferring milk at the breast
- Preterm infants breastfed sooner and continued breastfeeding longer
- Less brown fat in cheeks - to create vacuum needed to keep nipple elongated and remove milk from breast
- Usually can wean from Nipple shield around 40 weeks adjusted age or due date
- *Premature weaning from nipple shield in preterm can lead to decreased milk transfer and quick drop in milk production as in a few days. (So this, too, would be an intervention!)

- http://www.youtube.com/watch?v=5_FmTJ1zul0



Revisiting the “Overuse” Possible reasons...

- Widely available over the counter.
- Increase in early discharges.... Less feedings in hospital
- Increase in breastfeeding rate - at Essentia- 83-85% Breastfeeding initiation rate
- Larger numbers breastfeeding, though not necessarily more prenatal education or preparation for breastfeeding (not Nipple Prep!) But gearing up for what breastfeeding is like in the early weeks and how it might be slightly harder to latch a baby than it looks
- It's as if many new parents come as prepared as they can be for the birth, the pain, the fear..... But the breastfeeding is a bit of afterthought..... How hard can it be?
- Nursing staff helping with latching- infant having difficulty- and reaching for shield
- Because of that “hardness” many find themselves on verge of giving up even though they don't really want to

Going Home: What we see in the Community

Detective Work: Public Health Nurse, IBCLC, or Healthcare Provider spends time to diagnose and address the underlying issue

- Positioning?
- Milk Supply?
- Latch?
- Gestation?
- Nipple Damage?
- Anatomy?

What can we do to help reduce the detective work?

- Anticipatory Education: PRN Breastfeeding Ed for EVERY woman, incl. nipple shield
- A Lactation Consult for EVERY woman in the hospital before discharge
- A Referral to an IBCLC, PHN or Clinic for EVERY woman discharged with a nipple shield

Knowing when to begin to wean from the shield is not a science.

Moms who are weaning from the shield need a lot of reassurance & support!

Weaning from the Nipple Shield, I can help with that! So can you!

Best to wait until other issues resolved.

- Sore nipples
- Milk supply issues
- Prematurity
- Maternal fatigue
- Mother usually has tried on her own but is no longer shaping her breast or using breast compression

Techniques and Strategies

- Position - one where mother can support breast and infants upper back and neck
- Supportive Pillow
- Nipple to nose alignment with asymmetrical latch
- Bring baby quickly on and keep there until infant realizes she can get milk
- Avoid distractions like rocking, stroking, or even talking until infant gets into rhythm and letdown
- Have mother replicate on second side
- May take baby 24 hours to learn or relearn latching without shield

Thank You!

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Essentia Health

Here with you

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