BFHI Step 6: From Fantasy to Reality

Gini Baker, RN, MPH, IBCLC

and

Eve Dunaway, MA, IBCLC

Baker’s Rules of Life ... and BF

* You are doing the best you can with the information and support you have ...
  OR
* You did the best you could with the information and support you had!

Maya Angelou
BFHI: Step 6

* **GUIDELINE:** *When a mother specifically states that she has no plans to breastfeed (see steps 4 and 5),* or requests that her breastfeeding baby be given a breastmilk substitute, the healthcare staff should first explore the reasons for this request, address the concerns raised and educate her about the possible consequences to the health of her baby and/or the success of breastfeeding. If the mother still requests a substitute, her request should be granted and the process and the informed decision should be documented. Any other decisions to give breastfeeding babies food or drink other than breastmilk should be for acceptable medical reasons and require a written order documenting when and why the supplement is indicated.

* (see Appendix 2 for acceptable medical reasons).

BFHI Steps 4

* **Step 4 ...** Help mothers initiate breastfeeding within one hour of birth

* This step is NOW interpreted as: Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognize when their babies are ready to breastfeed, offering help if needed.

* This step applies to all babies, regardless of feeding method.  

www.hugyourbaby.org
BFHI Steps 4

* Step 4: Help mothers initiate breastfeeding within one hour of birth

* Barriers to implementation ????

  * Compromised delivery: Cesarean
    * Committee to review and present data on skin to skin
    * Skills testing on skin to skin
    * Reporting of non-compliance
  * Review information on Gentle Cesareans
    * Clear and solid drapes in OR so mom can see birth
    * One arm free for mom and EKG leads on back of mother
    * Skin to skin in OR
    * Video: family centered cesareans
      * Vimeo.com/68247922 (Brigham and Women's Hospital)

* Maternal aversion:
  * Pre birth education and guidance
  * Reduce visitors in room
  * In house doula programs

* Compromised Infant:
  * Skin to skin and Kangaroo Mother Care in NICU
BFHI Steps 4

* Step 4 …. Help mothers initiate breastfeeding within one hour of birth
* Barriers to implementation ????
  * Staff resistance:
    * “Ya- Butt – we have always done it this way”
    * “One more thing for me to do!”
* Solutions ???
  * Best practice for skin to skin
  * Risk based education: Risks of Not doing Skin to Skin
  * Maternal and Infant health
  * Time Management for staff

BFHI Step 5

* Step 5: Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.
* Barriers to implementation ????
  * Staff resistance: Lack of concrete skills
* Solutions: CPR of Breastfeeding – Crisis Management
  * Tummy Size
  * Breast Capacity
  * Stages of Lactation
  * Why Babies Suck so much?”
  * Signs of Milk Transfer
  * Positioning and Latching
BFHI Step 5

* Step 5: Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.
  * Hand Expression: All STAFF!
    * Video’s – Demo and Return Demo
    * Resources: Stanford University, You Tube Video’s, healthed.cc
  * Non breastfeeding mothers:
    * Written and verbal instruction:
      * ABM preparation, handling, & storage
      * Paced Bottle Feeding
  * Staff: documentation in chart
    * Chart audits
    * Skills fair: Risks of Not BF; Demo hand expression; Paced Bottle feeding

Step 6: Exploring the reasons for request

* Vocabulary - At admitting
  * “What are your plans for feeding your infant?”
  * VS
  * “What questions do you have about breastfeeding?”

* Vocabulary – when requesting ABM
  * Always agree with the client
  * Ask: “Please help me understand how you came to that decision”
  * Resistant patient:
    * “We are not going to force you to breastfeed” ........
    * “Why do you suppose we are so “pushy” about breastfeeding anyways?”
Step 6: Address the Concerns

*CPR of Breastfeeding:

- Tummy Size
- Breast Capacity
- Stages of Lactation
- Why Babies Suck so much?"
- Signs of Milk Transfer
- Positioning and Latching

Belly Balls ...

- Good News:
  - Convenient - Cute!
- Bad News:
  - Stationary in Size
  - Changed over years
  - CONTRADICTION?!
- Baby’s Fist

- Good news – bad news ....
  - Your stomach size of your fist
  - Obviously can stretch or could not have Thanksgiving!
Breast Capacity …

Amount of storage capacity in breast
- Look big on outside –
  - ?? small or large storage capacities
- Look small but can store lot of milk
- Hmmmmmm …

- Moral of story:
  You won’t know!

- Breasts two measuring cups:
  - Each woman has a different sized set of measuring cups
  - Each breast can be different size!
  - Most find one breast will supply more milk than the other

Colsolur is MILK …

- High Beta Carotene
  - Immunoglobulin’s
- High in Protein
  - Cause peristalsis
- Amount in breast vs. Stomach capacity
  - DOL: 0-3 = 5-7ml
  - Size of Quarter
  - Size Chuck E Cheese Token
  - Size of 5 Pesos coin

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Strategies for Staff ... 

*Teaching Handouts  
*Reflective listening  
*Risk based education  
*WIC in-services to hospital staff
Secretory IgA

*MALT*
- Mucosa-associated lymphoid tissue
  - Gut
  - Lung
  - Mammary Gland
  - Salivary gland
  - Lacrimal glands
  - Genital tract
- Immunization at one site might be effective means of producing immunity at other sites
  - Example: Antibodies found in milk found in saliva

Secretory IgA

*GALT*
- Gut-associated lymphoid system

*BALT*
- Broncho-associated lymphoid tissue
**Entero-Mammary Pathway**

- Human milk has been called environmentally specific milk
  - Mother’s milk protects specifically against organisms that her infant is most likely to be exposed to
- Mother’s milk triggers infant immune system
- Licking and Kissing VIP

**Strategies for staff:**
- Teach Concept
- Outcomes:
  - NICU infant better health
  - Infant in daycare issues
  - Make it fun!

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**Why Do Babies Suck “So Much”?**
Lactogenesis Stage I and II

Sucking DOES NOT = Hunger

1. **High Suck need**
   - Infant Job/Goal: Clean out Meconium
   - Maternal Goal: Prolactin receptor sites - Prolactin “Plug-in’s”

2. **Low Milk Volume**
   - Baby born full Meconium

3. DOL 0-3
4. Sucking doesn’t mean hunger
5. Baby born with high suck need
6. Low Milk Volume
7. Why = Baby is Born Full (Meconium)
8. Infant Job/Goal = Poop!
10. Suck becomes more efficient
11. Milk increases in volume
12. Doesn’t COME IN – collecting since 10-14 wks
13. Increased volume = slower/deeper suck
14. This happens at DOL 3-4

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UC San Diego
**Stages of Lactation**

* **Mammogenesis**
  (Milk making ... In the beginning)
  * Breasts grow: Size & weight
  * Ducts & glands proliferate
    * Estrogen and progesterone

* **Lactogenesis Stage 1**
  * About 10-14 weeks gestation
    * Milk secretion accelerates
    * Alveoli distend
    * Accumulation of colostrum
    * WHY there is milk at delivery!

**Supply & Demand**

Rule of BF:
* “If it’s not broke, try not to fix it so it is!”

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From Breastfeeding & Human Lactation
Jan Riordan

Gini Baker RN, MPH, IBCLC

Shannon April 2006
**Stages of Lactation**

**Lactogenesis Stage 2**
- 3-4 days after birth
- Can be delayed by “third spacing” of fluids
- Placenta Delivery Triggers:
  - Fall progesterone/estrogen
- **Milk “coming in”**
  (Change Vocabulary !!!!!!)
- Premie = preterm milk
  - ??? How long ???
  - Decreased milk levels sodium, chloride, protein,
    Rise in lactose and milk lipids

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3rd Spacing...

**Orders for epidural**
- 1000cc fluid load before procedure
  - Rationale:
    - Maternal: Maintain maternal blood pressure
    - Infant: Oxygenation of the fetus
- Maintenance IV at 125cc/ml/hour
  - UNLESS Maternal BP drops
  - Increase fluid rate as necessary to maintain maternal BP
  - Add Pitocin to IV after delivery

**Potential 10 hour epidural**
1000 + (125 X 10 hours) 1250
+ pp pitocin 500 = 2750cc/ml
3rd Spacing .... Reality

* 1000+ cc fluid load
* Maternal BP drops .. Open the IV
  * Average in 10 hours = 300-700cc/hr
  * Common 3500-5000 cc fluid

* No consideration to postpartum fluid shift

* What about the baby?
  * Do epidurals effect infant instinctive behaviors? Of course !!!!!!

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3rd Spacing ... Postpartum

* 8-10 hours later ..
  * Fluid shifts
    * 1st Space: IV
  * 2nd Space: Intracellular
  * 3rd Space: Extra Cellular
    * Path of least resistance:
      * Any part that ”hangs down”

* – Feet
  * – Bottom
  * – Hands
  * – Breasts

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http://www.uct.ac.za/depts/ich/teaching/tmp/th_women/wus/teen%20olth-c06_c06.html
Baby Friendly Step 6: From Fantasy to Reality

Pituitary

Oxytocin
Prolactin

Third Spacing:
Due to fluid load
1st space – Intravenous
2nd space – Intracellular
3rd space – Extra cellular

Delayed mammary cell response:
Fluid Creates “lake” effect
Reduces hormonal influence
Diuresis: “Lake dries up”
Takes about 4-5 days

Breast stimulation: Suckling
Sends message to pituitary to secrete oxytocin and prolactin

Delayed onset Lactogenesis II

Reverse Pressure Softening
Jean Cotterman at Kellymom.com
Counseling the Nursing Mother Pg 500

* Two handed, two-step method
Using 2 or 3 straight fingers on each side, first knuckles touching nipple. Move ¼ turn, repeat above & below nipple
Reverse Pressure Softening
Jean Cotterman at Kellymom.com

- Two handed, two-step method (step 1)
  Using straight thumbs, base of thumbnail even with side of nipple.

- Two handed, two-step method (step 2)
  Move ¼ turn, repeat above & below nipple

3rd Spacing vs. Engorgement

- How old is the baby?
  - 3rd Spacing = 8-10 hours
  - Engorgement = 3-5 days

- How does the breast feel to touch?
  - 3rd Spacing = pliable
    * (Fluid moves)
  - Engorgement = firm – hard

- Treatment?
  - 3rd Spacing =
    * Reverse pressure softening
  - Engorgement =
    * Cold, expression milk
**Stages of Lactation**

* **Galactopoiesis**
  - About 9 days
  - Maintenance established milk secretion
  - Supply – Demand vs.
    
    Demand -- Supply

* **Involution**
  - Approx 40 days after last breastfeeding

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### Stages of Lactogenesis

<table>
<thead>
<tr>
<th>Mamogenesis</th>
<th>Lactogenesis Stage 1</th>
<th>Transition</th>
<th>Lactogenesis Stage 2</th>
<th>Galactopoiesis</th>
<th>Involution</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Milk making ... In the beginning)</td>
<td>Delivery of Placenta To Milk Increasing in Volume</td>
<td>3-4 days after delivery Placenta</td>
<td>Maintenance of Established Milk Supply</td>
<td>Return of uterus and breasts to pre-pregnant state ~ 40 days Lots of choices based on this ...</td>
<td></td>
</tr>
<tr>
<td>a. Breasts grow: Size &amp; weight</td>
<td>Note: Milk does NOT come in! It increases in volume!</td>
<td>Delayed by 3rd Spacing! (3rd spacing seems to resolve ~ DOL 4) Reverse Pressure Softening</td>
<td>Demand and Supply! FIL Factor Feedback Inhibitor of Lactation</td>
<td>Are ya sure?</td>
<td></td>
</tr>
<tr>
<td>b. Ducts &amp; glands grow</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c. Influences of Estrogen and progesterone</td>
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<tr>
<td>Part of Menses Hyperactivity during Pregnancy</td>
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</tbody>
</table>

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Rules of Breastfeeding ...

Always First Question Asked: How old is the baby?

Signs of Milk Transfer – Quantitative

Infant 0-3 Days

Before onset Lactogenesis II ("Milk In")

* Bursts of sucking 10+ or more
  * Most infants do 15-25 Pause for 3-5 seconds

* Pause and Self start after 3-5 seconds
  * Stimulate if necessary: Move ear, raise arm, rub head

* Audible Swallowing
## Signs of Milk Transfer – Quantitative

### Infant >3 Days

(Or as soon as onset Lactogenesis II “Milk In”)

* **Bursts of sucking 1:1 or 2:1 or 3:1**
  * Suck-Swallow-Breathe

* **Pause and Self start after 3-5 seconds**
  * Stimulate if necessary: Move ear, raise arm, rub head

* **Audible Swallowing**

* **Voids & Stools**
  * One Void/One Stool per day of life up to 5 days
  * Wet: 6-8 wet/day (Cloth Diapers)
  * Stool/day: None (0) to every feed session

* **Weight: Infant begins to regain weight**
  * BF infant usually regain birth weight by DOL 10
  * Need to regain birth weight by DOL 14

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## What is enough?

* **Babies need to eat 10+ times 24 hours**

  **How many babies lose weight for 3-4 days?**
  * ALL BABIES Lose weight - WHY?
    * Cleanse meconium
    * ?? Fluid shift

  **What is the suck pattern of newborn?**
  * How old is the infant?
    * WHY?
      * Fill the reservoir in the infant mouth
      * Maternal: Stimulate breast
      * Infant: Stimulate lower intestinal peristalsis

  **What is the milk volume in breast? WHY?**
  * Baby born “full”
  * Maternal: Stimulate prolactin receptor sites
  * Infant: Peristalsis “poop out” meconium

* **Babies need to eat 10+ times 24 hours**
Feeding Recommendation ... Common Sense

* Breastfeed infant 10+ times in 24 hours
* IF, it has been more than 2-3 hours in the daytime, you may want to wake infant and breastfeed (Intervention).
  Infants “cluster feed” or “load” calories by having several breast feeding sessions within a short period of time

* Breastfeed infant 10+ times in 24 hours

More women Quit BF at 2 weeks than any other time ... WHY ?????

- Whose fault ? ..... OURS !
- Growth Spurts:
  - Feed More Often
    - 2-3 weeks
    - 4-6 weeks, 3 months, 4 months, 6 months and 9 months
    - Babies don't read calendars, however, so your baby may do things differently
- Do preterm babies have growth spurts ?

- Strategies:
  - Prenatal Education
  - Delay visitors

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Biological Nurturing
Alpha and Omega

* Biological Nurturing
  * Biological Nursing
  * Laid Back Nursing
  * Frontal Nursing
  * Ventral Nursing
* Natural vs Crisis Management

Positions ...
* Laid Back
* Football/Clutch
* Cradle
* Cross the Cradle
* Transition to Cradle
* Side Lying
* Australian

Positioning...

* Positioning:
  * MOM
    * Sitting upright – Footstool
    * Other discomforts addressed
    * Other siblings considerations
    * Position of relaxation
    * Pillow “table” level of breast
    * Ridge Breast to match mouth
    * Discuss “other” things to do while BF
  * BABY
    * Organized state
    * Wrap or unwrapped?
    * Readiness to feed
  * FEEDING SESSION
    * Lock Doors
    * Available:
      * phone, TV remote, food, fluids
    * Other people ???

* Skin to Skin
  * What is the baby wearing?
  * Mom - Bra on or off?
  * Are the breasts exposed or covered?
  * How much?
  * All the time or scheduled?

* Baby Wearing
  * What is baby wearing?
  * Mom - Bra on or off?
  * Are the breasts exposed or covered?
  * How much?
  * All the time or scheduled?
GUIDELINE: When a mother specifically states that she has no plans to breastfeed (see steps 4 and 5), or requests that her breastfeeding baby be given a breastmilk substitute, the healthcare staff should first explore the reasons for this request, address the concerns raised and educate her about the possible consequences to the health of her baby and/or the success of breastfeeding. If the mother still requests a substitute, her request should be granted and the process and the informed decision should be documented. Any other decisions to give breastfeeding babies food or drink other than breastmilk should be for acceptable medical reasons and require a written order documenting when and why the supplement is indicated.

(see Appendix 2 for acceptable medical reasons).

Risks of Not Breastfeeding?

* Informed Choice
  * Indications
  * Contraindications
  * Alternative

* Medicinal Effect of Human Milk
  * Nils Bergman

* Strategies
  * Prenatal Office Handouts
  * Prenatal office teaching EACH visit
  * Handouts of Risks of Not BF
Strategy Review

* Best Practice
* Prenatal education for attending's
* Tangible Tools for education
* Reduce visitors
* Support Groups (step 10)
* Accountability

Car Seat or No Car Seat

Bicycle Helmet or No Bicycle Helmet

Smoking or Non-Smoking

Breast or Bottle?
IF you had a drug that could ...

* Change IQ’s
* Reduce risks for diseases
* Reduce risks for death
* Reduce violence
* Save the environment
* Save “billions” in health care costs

* **Would you be morally and ethically obligated to give it?**

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**Use of Breast Milk for Supplementation**

* Eve Dunaway, MA, IBCLC
* Coordinator Baby Friendly Hospital Initiative
* Woodland Healthcare
* Eve.Dunaway@DignityHealth.org
* 530.669.5420
Risks of Not Breastfeeding

* http://californiabreastfeeding.org/
* http://www.babyfriendlyusa.org/
* http://www.usbreastfeeding.org/
* http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812877/
* http://www.naba-breastfeeding.org/nabareal.htm
* http://www.kellymom.com
* http://www.bobrow.net/kimberly/birth/BFLanguage.html
* http://www.dshs.state.tx.us/wichd/lactate/position.shtm
* http://www.breastfeedingcanada.ca/html/webdoc47.html

Bibliography


American College of Obstetrics and Gynecology, authors. Special Report from ACOG. Breastfeeding: maternal and infant aspects. ACOG Clinical Review. 2007;12(suppl):1S–16S.


