The Journey to Successful Breastfeeding: Pregnancy through Hospital Discharge

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Faculty Disclosure Information

- *In the past 12 months, I have not had a significant financial interest or other relationship with the manufacturer(s) of the product(s) or provider(s) of the service(s) that will be discussed in my presentation.*
- *This presentation will not include discussion of pharmaceuticals or devices that have not been approved by the FDA and I will not be discussing unapproved or "off-label" uses of pharmaceuticals or devices.*

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Objectives

The participant will be able to:

- incorporate comfortably into their pediatric practice when and how to help their patients make informed feeding choices;
- promote and support breastfeeding easily within your office and practice;
- identify the factors which support successful breastfeeding outcomes and how to implement them in the 3 days following the birth of the baby;
- list several practices or medical conditions that can occur in the hospital which can de-rail successful breastfeeding and the basics to first avoid and/or treat them.

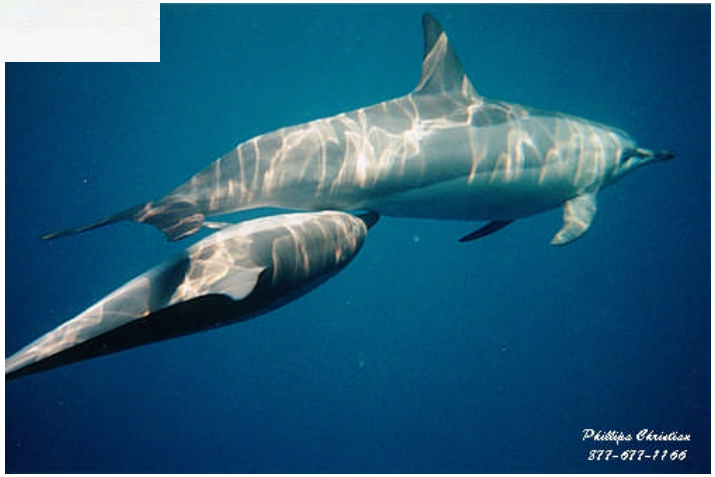
AAP Policy Statement*

- Human milk is the preferred feeding for all infants, including premature and sick newborns, with rare exceptions.

*Breastfeeding and the Use of Human Milk
Pediatrics 2005;115:496–506.

A Little History……

Mammals: characterized by glands specialized in producing milk



We are mammals…

Throughout most of human's history, breastfeeding was **the only way** babies and young children were fed. Very few survived who were fed any other way.

To understand how we interact with and affect our patients' feeding choices,

How did we get from ←here, to here→, and how to find our way back on this journey.

Wet Nursing

In the distant past, wealthy women had access to wet nurses, but with the advent of the industrial revolution, higher paying jobs decreased this activity.

Plate 11.3. Goats were kept on the premises of some foundling hospitals to suckle infants (especially those with infantile syphilis). They were particularly popular from the late 18th C. onwards.

Artificial Feedings

Poster advertisement for Nestle's Milk
by Théophile Alexandre Steinlen, 1895

- 19th century, the prevalence of wet nursing decreased, while the practice of feeding babies mixtures based on animal milk rose in popularity
- As early as 1846, scientists and nutritionists noted an increase in medical problems and infant mortality were both associated with artificial feeding
- in 1867, Justus von Liebig developed the world's first commercial infant formula, *Liebig's Soluble Food for Babies*

Late 19th Century

- Infant mortality from unsafe artificial feeding became an acknowledged public health problem
- Public health nurses promoted breastfeeding and home pasteurization of cows' milk
- Commercial formula companies found a market for artificial baby milks as "safer alternatives to cows' milk"
- Infant feeding recommendations became the purview of the newly organized medical profession
  - The support of physicians
  - A vision of "scientific" infant care
  - Widespread use of formula as a breastmilk substitute for healthy mothers and babies emerged in the first half of the 20th century

THE MESSAGE ON BREAST-FEEDING ISN'T NEW

Fig. 1-11. "Value of Natural Feeding" poster used in 1918 to educate parents. Text explains that mortality of bottle-fed infants (Flaschenkinder) is seven times higher than that of breastfed infants (Brustkinder). (From Langstein R: *Atlas der Hygiene des Säuglings und Kleinkindes*. Berlin, 1918. Springer-Verlag.)

Pakistan, 1989
© Unicef

Late 19th -20th Century

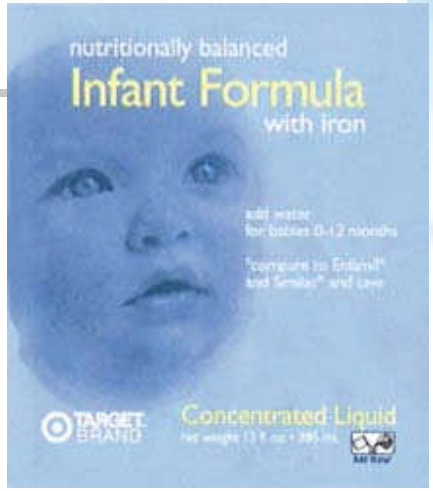
1888 anatomy class, U of P

Early 20th century nursery

- Mid 20th century:
  - Most physicians did not advocate breastfeeding
  - Most women did not choose to breastfeed
- Entire generation of women and physicians grew up not viewing breastfeeding as norm
- Despite resurgence of breastfeeding in the late 20th century US:
  - breastfeeding and formula feeding continued to be seen as virtually equivalent;
  - representing merely a *lifestyle choice* parents may make without significant health sequelae.

Current attitudes of infant nutrition

- Molded by the manufacturers of human milk substitutes
  - Aggressively created markets for their products
  - Advertise to physicians
  - Advertise directly to the public
    - Ways that are inconsistent with the International Code of Marketing for Human Milk Substitutes ("The Code")



www.ibfan.org/english/resource/who/fullcode.html

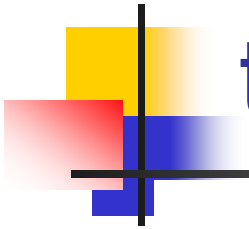
AMERICAN ACADEMY OF PEDIATRICS
SECTION ON BREASTFEEDING

Ten Steps to Support Parents' Choice to Breastfeed Their Baby

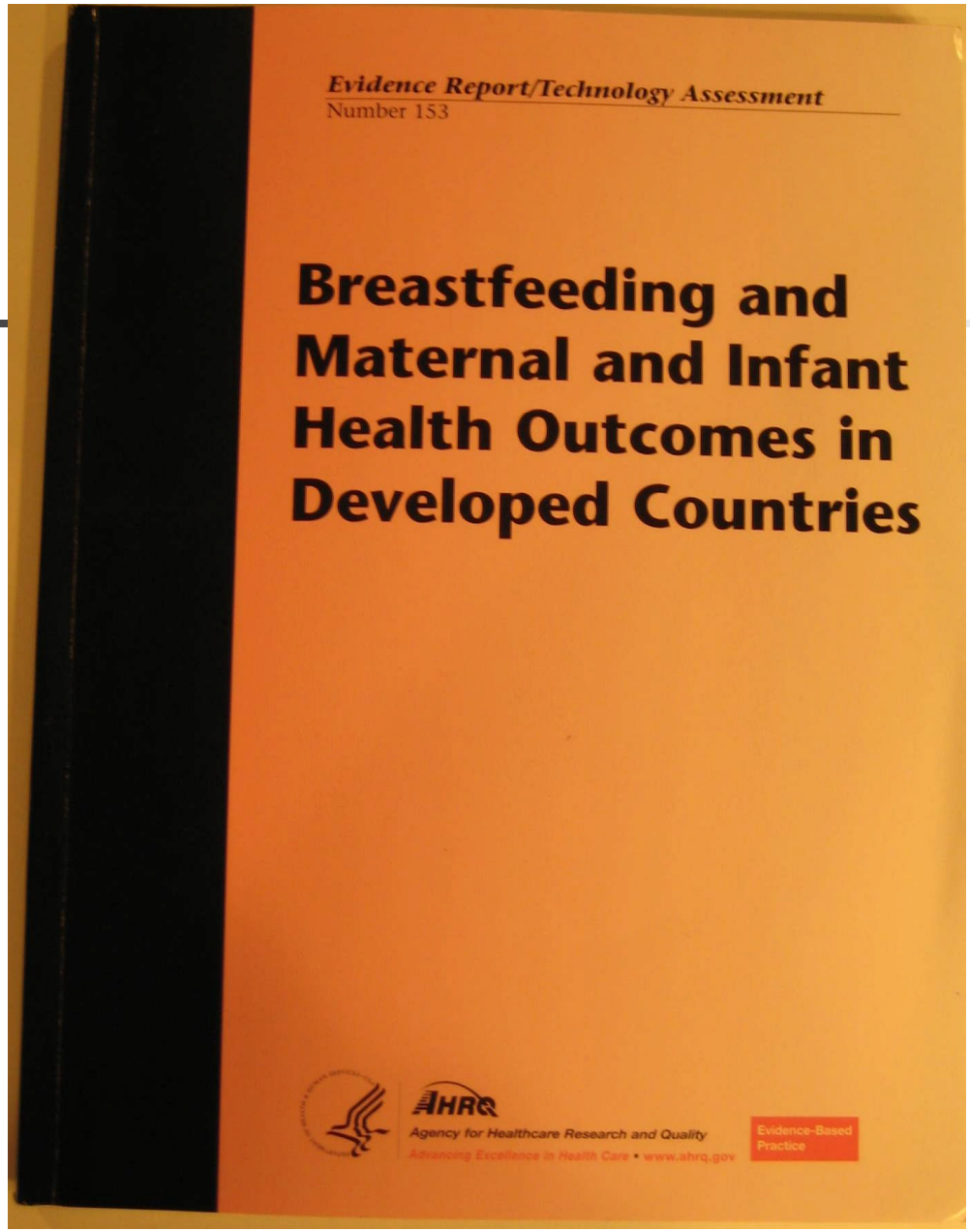
http://www.aap.org/breastfeeding/tenSteps.pdf

"This practice enthusiastically supports parents' plans to breastfeed their baby. We believe that breastfeeding ensures the best possible health, development, and psychosocial outcomes for your baby. In support of this commitment, we…"

Step 1: Make a commitment to the importance of breastfeeding.



- Learn the health benefits associated with breastfeeding, particularly exclusive breastfeeding for about the first 6 months of an infant's life.
- Endorse breastfeeding as an important preventive health care strategy.



Agency for Healthcare Research and Quality
April 2007

http://www.ahrq.gov/clinic/tp/brfouttp.htm

Agency for Healthcare Research and Quality (AHRQ)

- >9000 abstracts screened
  - Infant health—43 primary studies
  - Maternal health—43 primary studies
  - 29 systematic reviews or meta-analyses
    - Covered ~ 400 individual studies
- Conclusions:
  - Hx of breastfeeding associated with reduced risk of many diseases in infants and mothers from ***developed*** countries
  - Observational studies and wide range of quality do not allow inference of causality
  - Suggestions for "cleaner" future studies to help with interpreting outcomes
- **Having knowledge of the "benefits" of (or risks of not) breastfeeding allows you to endorse and advocate as an important preventive health care strategy!**

Infant Health Outcomes in Developed Countries (AHRQ 2007)

- History of breastfeeding significantly associated with reduction in risk of: (odds ratio)
  - Acute otitis media: (ever bf 0.77; exclusive bf 0.50)
  - Non-specific gastroenteritis: (0.36)
  - Severe lower respiratory tract infections: (exclusive bf >4 months 0.28—72% reduction hospitalization)
  - Atopic dermatitis: (with family hx atopy 0.58)
  - Asthma: (young children) (0.74)
  - Obesity: (ever to never bf 0.76; each month bf assoc with ↓4%)
  - Diabetes: ever to never Type 1 (0.56 and 0.75); Type 2 (0.61)
  - Childhood leukemia: (ALL 0.80; AML 0.85 (1 meta-analysis))
  - Sudden infant death syndrome: (ever vs never 0.64)
  - Necrotizing enterocolitis: (0.42)

Infant Health Outcomes in Developed Countries (AHRQ 2007)

- There was no relationship demonstrated between breastfeeding and:
  - Term infants' cognitive performance
- An unclear relationship was demonstrated between breastfeeding and:
  - Cardiovascular disease
  - Infant mortality in developed countries
    - 1 large study showed 21% reduction in infant mortality (ever vs never), but only subgroup analysis that held was SIDS

Maternal Health Outcomes in Developed Countries (AHRQ 2007)

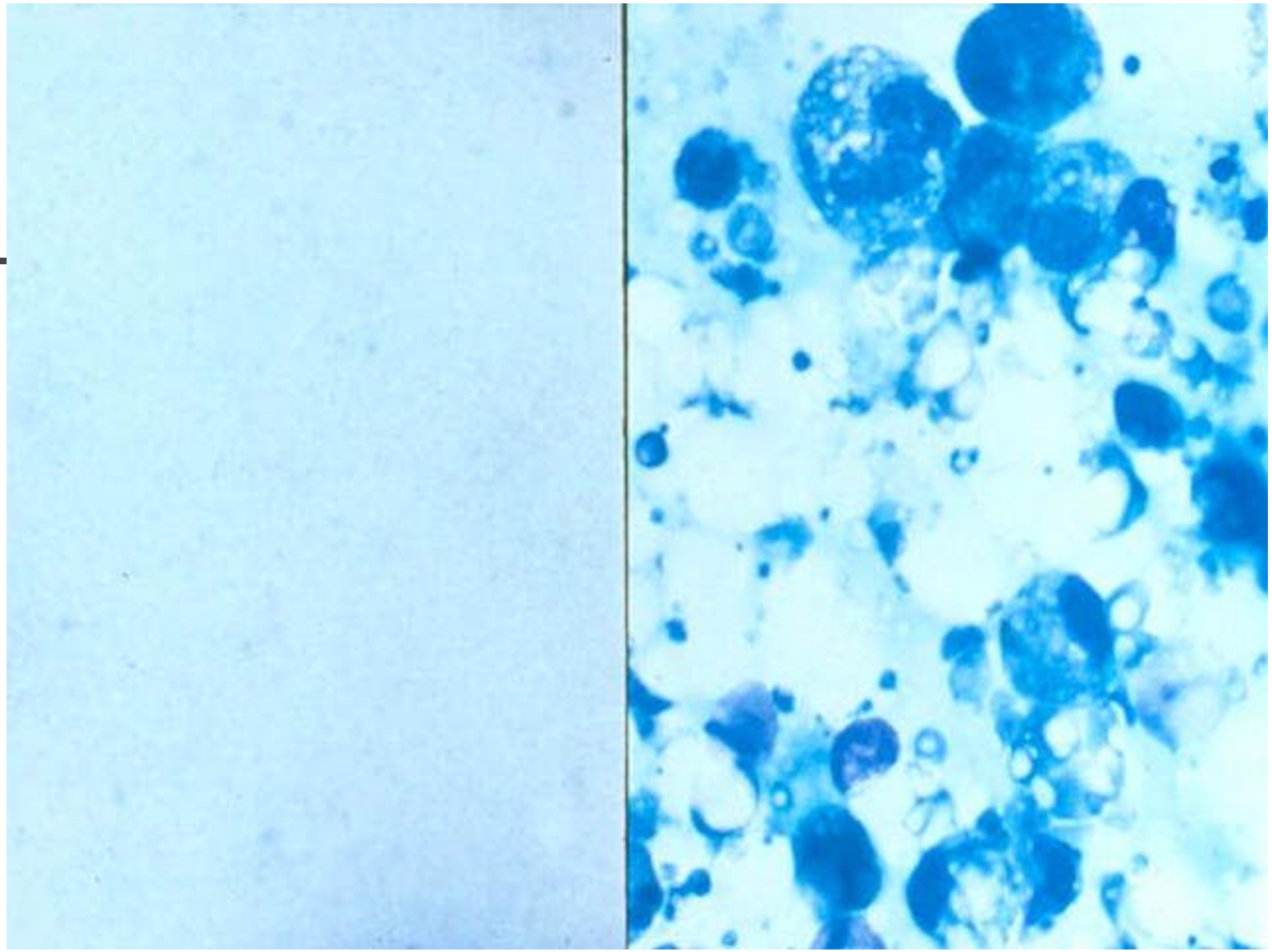
- History of lactation associated with reduction in risk of:
  - Type 2 diabetes (ever to never 0.09; each year of bf ↓ 0.84)
    - If had GDM, no decrease risk associated with lactation)
  - Breast (4.3% reduction/yr bf); and ovarian cancer (NS <12 months; >12 months 0.63)
- Early cessation or not breastfeeding associated with increased risk of:
  - Post partum depression
- No relationship shown with risk of:
  - Osteoporosis
- Effect negligible on:
  - Return to pre-pregnancy weight
- Unclear effect on:
  - Post partum weight loss

Photo © Amy Kotler, MD, FAAP

Step 1: Make a commitment to the importance of breastfeeding.

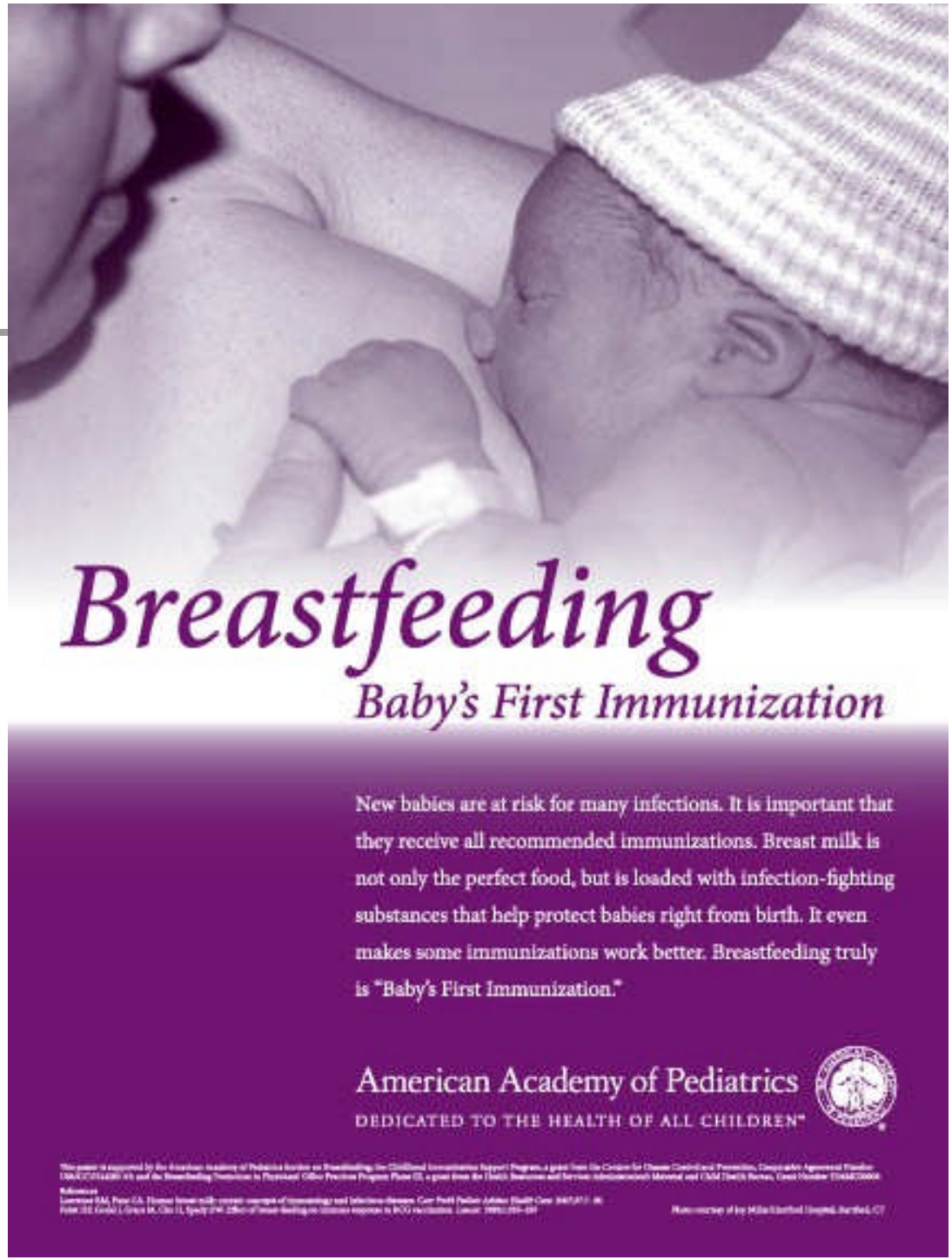
- Understand that breastfeeding functions as a baby's first and ongoing immunization.

	Preterm colostrum	Term colostrum
Total protein (g/L)	0.43 ± 1.3	0.31 ± 0.05
IgA (mg/g protein)	310.5 ± 70	168.2 ± 21
IgG (mg/g protein)	7.6 ± 3.9	8.4 ± 1
IgM (mg/g protein)	39.6 ± 23	36.1 ± 16
Lysozyme (mg/g protein)	1.5 ± 0.5	1.1 ± 0.3
Lactoferrin (mg/g protein)	165 ± 37	102 ± 25
Total cells	6794 ± 1946	3064 ± 424
Macrophage	4041 ± 1420	1597 ± 303
Lymphocyte	1850 ± 543	954 ± 143
Neutrophil	842 ± 404	512 ± 178



Formula magnified

Breastmilk magnified



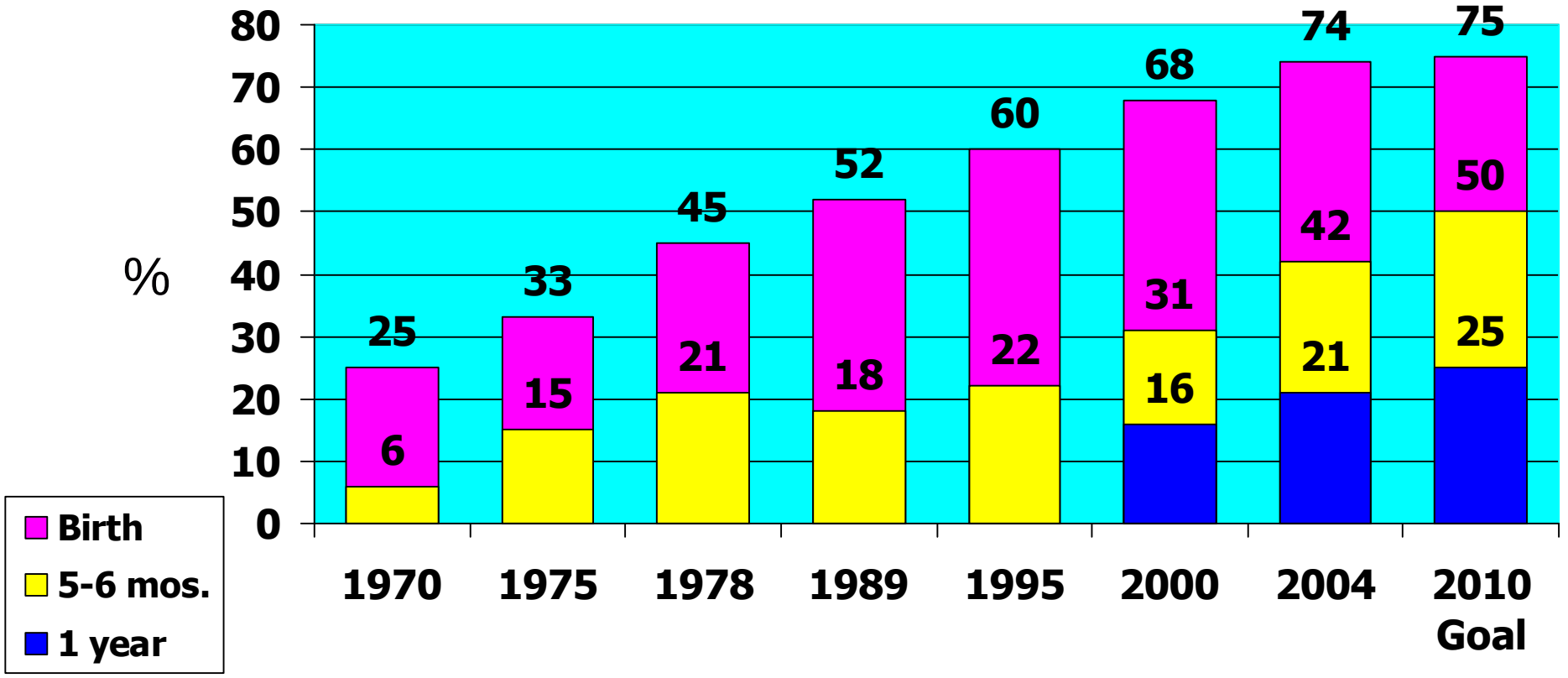
www.aap.org/breastfeeding/healthProf.cfm

Step 1: Make a commitment to the importance of breastfeeding.

- Work toward achieving the Healthy People 2010 national breastfeeding goals.

- 75% initiation in the early postpartum period
- 50% at 6 months of age
- 25% at 1 year of age
- Exclusivity
  - 30% at 3 months
  - 17% at 6 months

% Breastfed US Babies



Martinez 1979; Ryan 1991, 1997, Ross Mother's Study 2002; CDC 2007; Healthy People 2010

So, how are we doing in CT?

	Ever Breastfed (%)	BF at 6 months (%)	BF at 12 months (%)	Exclusive at 3 months (%)	Exclusive at 6 months (%)
HP 2010	75	50	25	40	17
US	73.8	41.5	20.9	30.5	11.3
CT	79.5	44.6	23.7	35.6	10.1

CDC, *National Immunization Survey*, 2004 Births, DHHS, 2007

Process Indicators

	% live births @ BFHI	# IBCLC/ 1000 live births 2007	# LLL groups/ 1000 live births	# state Health Dept FTE dedicated to BF	BF in public state law	BF in work place state law	Active statewide BF coalition	State-wide coalition web site
US	3.31	2.12	0.35	80.66	46	15	42	33
CT	12.4	3.76	0.67	1.00	Yes	Yes	Yes	Yes

CDC, *National Immunization Survey*, 2004 Births, DHHS, 2007

Step 3: Inform women and families about the benefits and management of breastfeeding

- Offer prenatal visits for expectant parents and discuss infant feeding practices, promoting the advantages of breastfeeding.
- Provide current breastfeeding educational resources to expectant parents.

AAP Breastfeeding Initiatives Health Professionals

- **Breastfeeding Information**
- Breastfeeding and the Use of Human Milk, AAP Policy Statement 2005
- Baby Friendly Hospital Initiative*
- CDC State Breastfeeding Report Card
- The American College of Obstetricians and Gynecologists special report titled, "Breastfeeding: Maternal and Infant Aspects"2007*
- The American Academy of Family Physicians Breastfeeding Policy Statement (revised 2007)
- The CDC Guide to Breastfeeding Interventions*
- HHS Blueprint for Action on Breastfeeding* [PDF]
- National Immunization Survey - Breastfeeding Rates
- Pharmacology and Breastfeeding
- US Breastfeeding Committee Benefits of Breastfeeding*[PDF]
- DHHS Indian Health Service Breastfeeding Resources*
- **Other Resources**
- Bilitool*
- Breastfeeding Basics - A Short Course on the Fundamentals of Breastfeeding*
- Breastfeeding Pharmacology*
- The Centers for Disease Control Breastfeeding Resources
- Drugs and Lactation Database (LactMed)*
- Medline Plus Breastfeeding Page*
- National Breastfeeding Awareness Campaign: Babies Were Born To Be Breastfed!
- **Supporting Mothers and Babies**
- Breastfeeding: Baby's First Immunization Poster
- Supporting Breastfeeding Mothers as They Return to Work
- Ten Steps to Support Parents' Choice to Breastfeed Their Baby
- Investing in Maternal and Child Health: An Employer's Toolkit
- **AAP Resources**
- Breastfeeding Handbook for Physicians
- Breastfeeding and Lactation: The Pediatrician's Guide to Coding
- Breastfeeding Support and Promotion Speaker's Kit
- Breastfeeding Your Baby: Answers to Common Questions
- New Mother's Guide to Breastfeeding
- AAP Grand Rounds Subspecialty Collection
- **AAP Policy Statements, Technical Reports, Clinical Practice Guidelines, and Clinical Reports**
- *Breastfeeding and the Use of Human Milk*, AAP Policy Statement 2005
- *An Evidence-Based Review of Important Issues Concerning Neonatal Hyperbilirubinemia* AAP Technical Report 2004
- *Management of Hyperbilirubinemia in the Newborn Infant 35 or More Weeks of Gestation AAP Clinical Practice Guideline 2004*
- *Prevention of Rickets and Vitamin D Deficiency: New Guidelines for Vitamin D Intake*, AAP Clinical Report 2003
- **ABM Protocols**

www.aap.org/breastfeeding/healthProf.cfm

When do parents make feeding choice decisions?

- Most feeding decisions were made prior to delivery
- Decision to breastfeed was positively associated with:
  - education
  - knowledge of nursing score
  - (other studies also SE status, race/ethnicity)
  - knowledge of other family members or friends who had breastfed (grandmother)
  - support of decision by infant's father

Marinelli, Page, Burke, 1998

How early to start discussions of breastfeeding?

- As early as those initial "well child exams" in early puberty when girls are first beginning to develop breasts…
- … and continue in subsequent "well" exams as girls continue to mature

Jim Craigmyle / Corbis stock, http://www.msnbc.msn.com/id/20643036/

"You look great! We've talked about breast development before, and you are quite mature now. If you choose to have children someday, you will be all set to feed them your own milk!"

AAP Policy Statement

- Pediatricians should provide complete, current information on the benefits of breastfeeding and promote breastfeeding as a cultural norm.
- A decision to choose ***not*** to breastfeed should occur only after the family has been fully informed.

Photo © Roni M. Chastain, RN

AAP Policy Statement Caution:

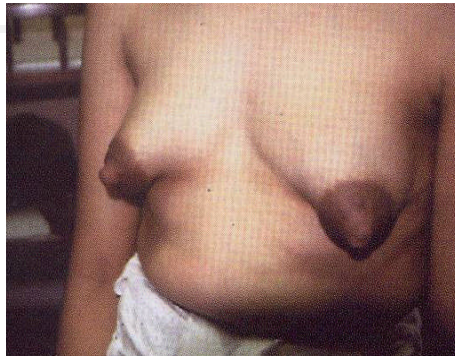
- Before advising against breastfeeding or recommending premature weaning, weigh the benefits of breastfeeding against the risks of not receiving human milk.
- Don’t jump to offer formula if breastfeeding problem noted!

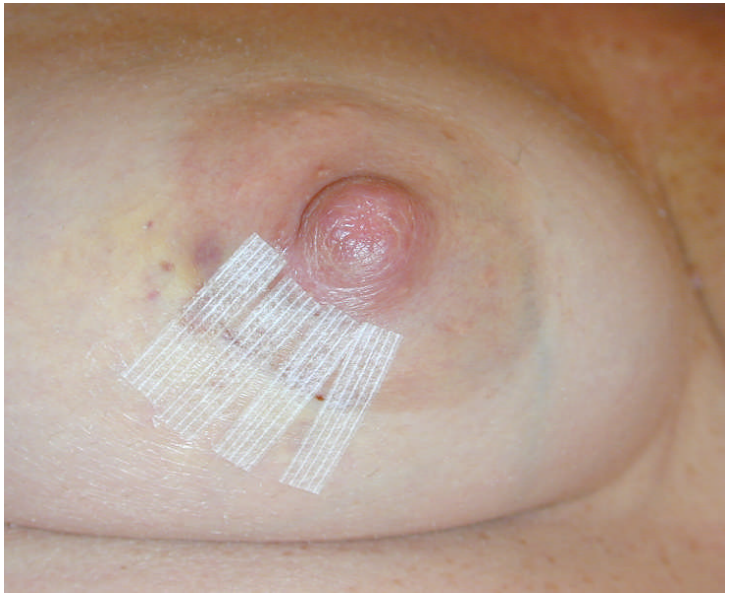
AAP Policy Statement

- Direct breastfeeding is best.
- Expressed breastmilk, fortified when appropriate for premature infants, is next best.
- Donor Milk
- Artificial formulas

Factors to support successful breastfeeding outcomes

- (#3) Work with maternity care professionals in the area to identify patients with potential lactation risk factors;
  - flat or inverted nipples
  - previous breast surgery
  - no change in breast size during pregnancy
  - Hypoplastic breasts
  - Intact neuroendocrine reflex
    - Previous surgery
- recommend appropriate interventions;
- encourage early follow-up after delivery





Pituitary releases
Prolactin (ant. Pit.) and oxytocin (post. Pit)

Hormones travel via bloodstream to mammary gland to stimulate milk production and milk ejection reflex (let-down). {Brain, uterus}

Infant suckles at the breast.

Stimulation of nerve endings in mother's nipple/areola sends signal to mother's hypothalamus/ pituitary.

Nutrition During Lactation

Renoir

- Generally healthy diet
  - Additional 300-500 calories
- Drink fluids to thirst
  - Do not need to drink cow's milk to produce human milk!
- Adequate protein and calories
- Calcium source
  - Vitamin D
- Multivitamin supplement
- Breastfeeding women do **not** have food restrictions!!

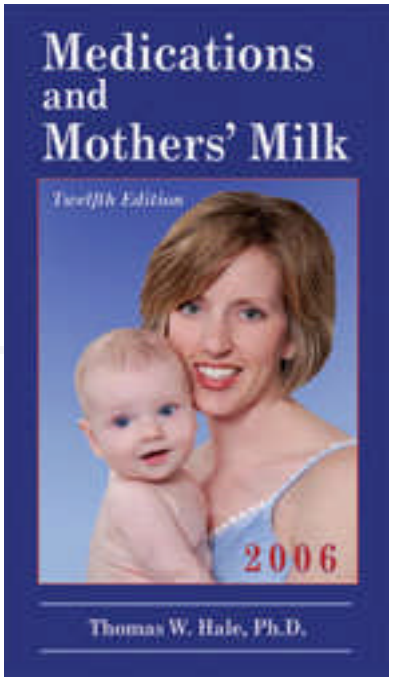
Maternal Medications

- Most are compatible with breastfeeding
- Medication use in pregnancy is ***not*** the same as medication use in lactation
- General rule of thumb: <1% of the maternal dose found in the baby
- Weigh benefits against risks

Maternal Medications

- Choose the safest drug available
- Prescribe medications for the shortest length of time appropriate
- Use short-acting formulations
- Administer just after breastfeeding
- Monitor infant for side effects
- Report adverse effects to the proper authorities
- **PDA is the worst reference for breastfeeding!!**

Maternal Medications References



- AAP Committee on Drugs
  - The Transfer of Drugs and Other Chemicals Into Human Milk, Pediatrics 108(3);2001:776-789
- Hale: *Medications and Mothers' Milk, 2006*
- *Tom Hale's web site: http://neonatal.ttuhsc.edu/lact/*
- Lawrence and Lawrence: *Breastfeeding: A Guide for the Medical Profession, 2005*
- Briggs, Freeman, and Yaffe: *Drugs in Pregnancy and Lactation*
- Lactation Study Center Drug Data Bank, University of Rochester, NY (585-275-0088)
- LactMed http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT

Breastfeeding Counseling

- Advise moderation in caffeine intake
- Avoid alcohol
  - Passes readily into milk
  - However occasional drink not shown to be harmful
  - Avoid breastfeeding for 2 hours after ingestion of alcohol
- Encourage smoking cessation or limited use
  - Benefits outweigh risks of exposure

Step #2: Train all staff in skills necessary to support breastfeeding

- Develop skill and comfort in evaluating breastfeeding through culturally relevant history and physical assessment.
- Develop knowledge and skills in the management of common breastfeeding problems.
- Know the medical contraindications to breastfeeding.

Medical Contraindications to Breastfeeding

- Galactosemia
- Phenylketonuria
  - Partial; breastmilk low in phenylalanine
- HIV
- Tuberculosis (?)
- Human T-cell Leukemia Virus Types I and II
- Drugs
  - Drugs associated with reduced milk production: estrogens, bromocriptine, ergotamine
  - Some chemotherapeutic agents--but may be able to "pump and dump" intermittently around doses
  - Drugs of Abuse
    - cocaine, heroin
  - Radioactive drugs--discontinue briefly
  - Radioactive I-131

Step #5: Encourage mothers to breastfeed on demand

- Teach infant feeding cues to breastfeeding mothers.
- Explain the importance of frequent feedings (including nighttime feedings) to help establish and maintain an adequate milk supply.
- Recognize and work with cultural beliefs, practices, and values regarding lactation, colostrum consumption, let-down techniques, and maternal food preferences.

AAP Policy Statement Recommended Breastfeeding Practices

- Initiate in the first hour
- Keep newborn and mother together in recovery and after
- Avoid unnecessary oral suctioning
- Avoid traumatic procedures
- Skin to skin care immediately after delivery


2004 8 23

Transition: Cot vs Skin-to-Skin Care

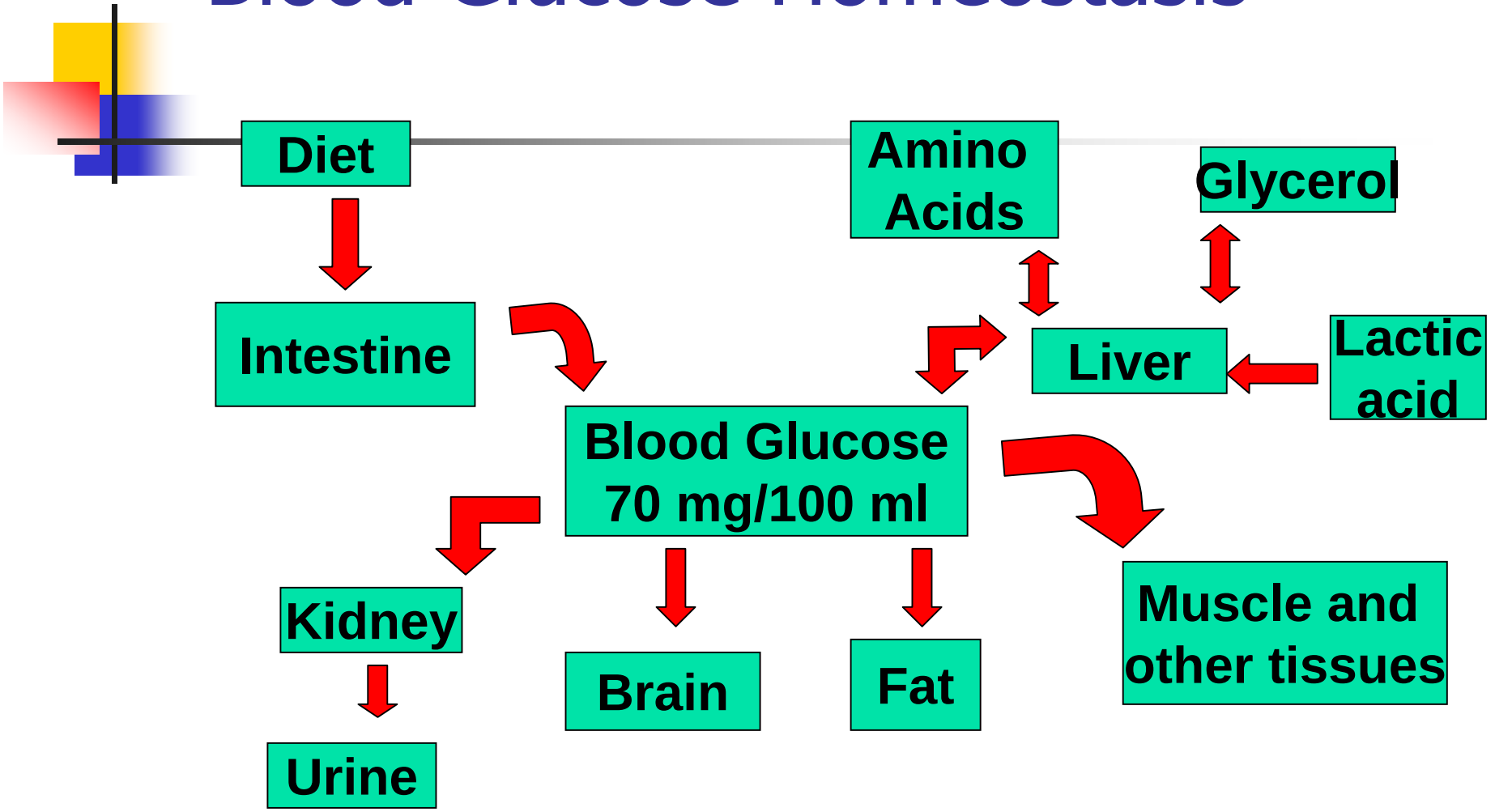
- RCT of immediate post-partum care of 50 term healthy newborns during first 90 minutes
- Skin-to-skin intervention improves:
  - Axillary and skin temperature
  - Blood glucose levels
  - Recovery from negative base deficit
  - Infant crying

- "Keeping the baby skin-to-skin with the mother preserves energy and accelerates metabolic adaptation and may increase the well-being of the newborn"
- Similar RCT of skin-to-skin by fathers after C-section showed significant benefit of skin-to-skin

AAP Policy Statement: Recommended Breastfeeding Practices

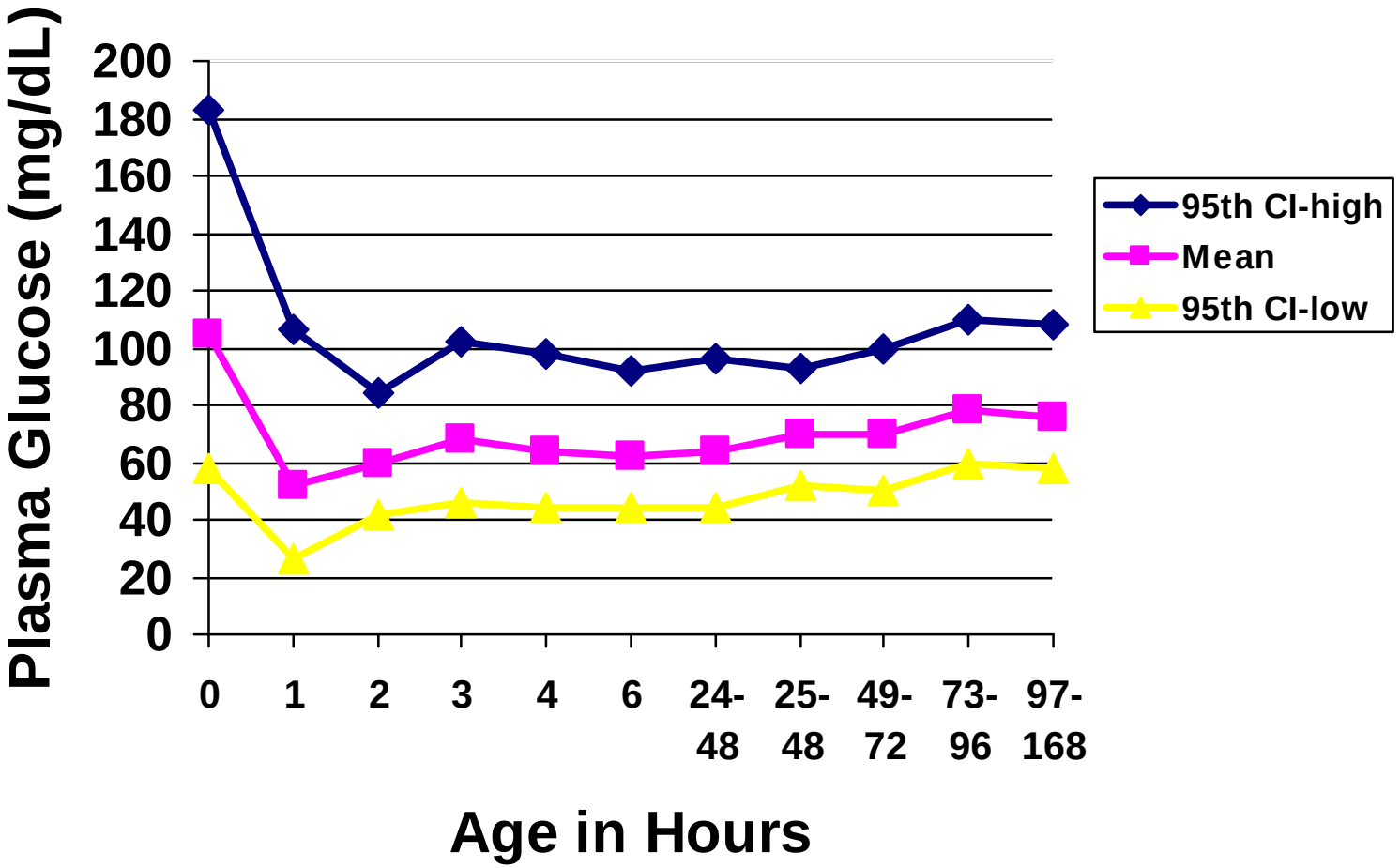
- Continuous rooming-in
- Respond to early breastfeeding cues
  - Rooting
  - Fist to mouth
  - Early arousal
- Crying is a late hunger sign
- Nighttime feedings

Blood Glucose Homeostasis



Normal Pattern of Glucose Levels

Srinivasan G, Pildes RS, Cattamanchi G, et al. Plasma glucose values in normal neonates: A new look. J Pediatr 1986; 109:114-117



Metabolic Adaptation in the First Week

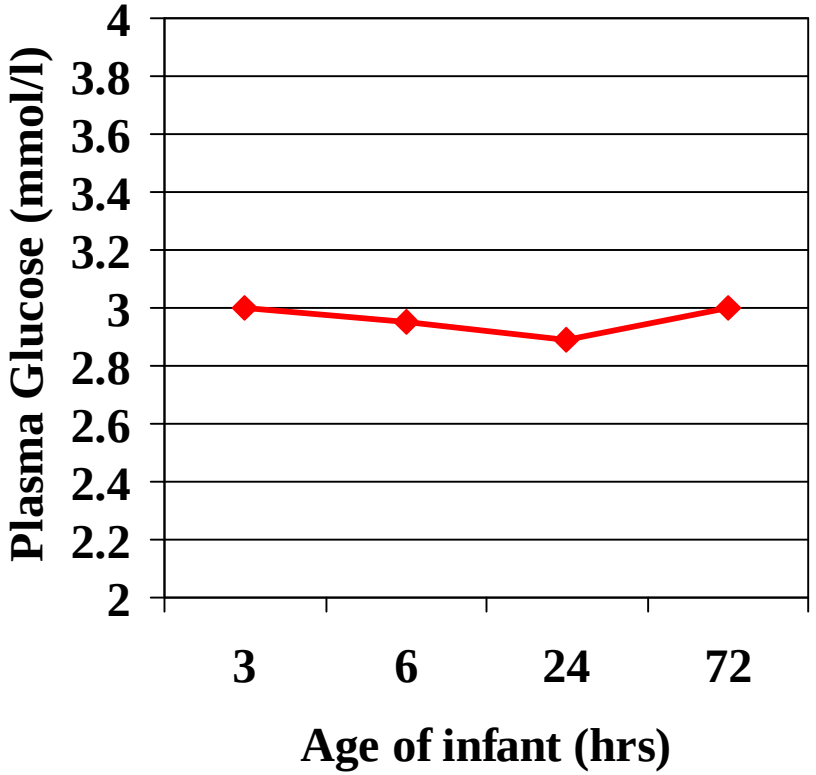
Hawdon et al. Arch Dis Child 1992; 67:357-365

- Major determinant of blood glucose was interval between feeds
- Intervals up to 8 hours NOT associated with hypoglycemia
- Breastfed infants had lower glucose levels, but higher ketone bodies (alternative brain fuel) and were asymptomatic
- Factors other than absolute blood glucose levels important

Plasma glucose levels in term infants who are appropriate size for gestation & exclusively breast fed

Diwaker KK, Sasidhar MV. Arch Dis Child Fetal Neonatal Ed 2002; 87:F46-F48

- No significant difference in glu at any sampling points
- Parity, mode of delivery, and time since last feed did not affect plasma glu
- Normal levels, even when unfed up to 6 hrs after birth



Williams A. Hypoglycemia of the newborn: Review of the Literature. Geneva, Bulletin for the World Health Organization, 1997

- Early and exclusive breastfeeding meets the nutritional requirements of healthy, full-term newborn infants.
- Healthy, full-term infants do not develop symptomatic hypoglycemia simply as a result of underfeeding.

Breastfed Infants: Glucose & Ketone Bodies

Cornblath et al. Pediatrics 2000; 105(5):11411145
Hawdon et al. Arch Dis Child 1992; 67:357-365
Swenne et al. Acta Paediatr 1994; 83:915-919

- Breastfed term infants have:
  - lower blood glucose and
  - higher ketone bodies

  than formula-fed infants.
- Those infants who lose the most weight postnatally have the highest ketone body concentrations.
- Which suggests:
  - Provision of alternate fuels constitutes a **normal adaptive response** to transiently low nutrient intake during the establishment of breastfeeding.
  - Breastfed infants may well tolerate lower plasma glucose levels without any significant clinical manifestations or sequelae.

To Prevent/Minimize Hypoglycemia

- Assess Hx, PE for risk factors for ↓ Glu
- Very selective glucose screening
- Mother and infant continuously together
- Early and frequent breastfeeding - nurse within 30-60 minutes of birth

See ABM Protocol #1 Guidelines for Glucose Monitoring and Treatment of Hypoglycemia in Breastfed Neonates (http://www.bfmed.org/ace-files/protocol/hypoglycemia.pdf)

Treatment of **Asymptomatic** Hypoglycemia

- Continue breastfeeding q1-2 hrs or feed expressed breastmilk or breastmilk substitute (approx 5-15 ml)
- Recheck blood glucose before subsequent feedings until value is stable in the normal range
- If neonate is unable to suck, avoid intragastric feeding and begin intravenous therapy. Such an infant is **not normal** and requires careful examination and evaluation.
- If enteral feeding is not tolerated, begin IV glucose

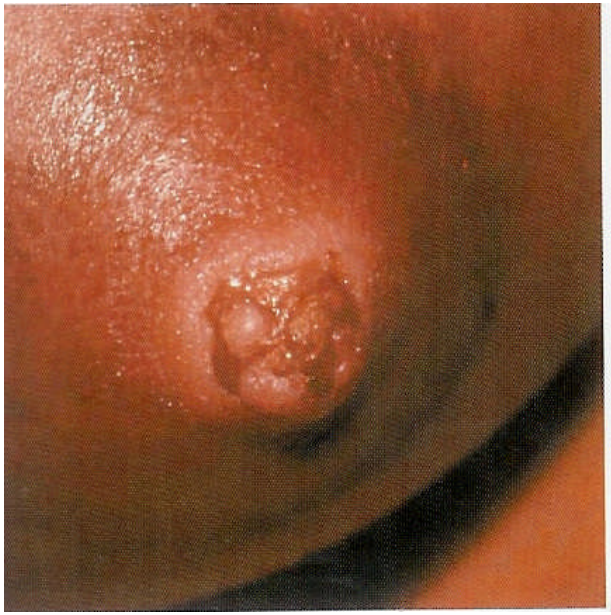
AAP Committee on Fetus and Newborn,

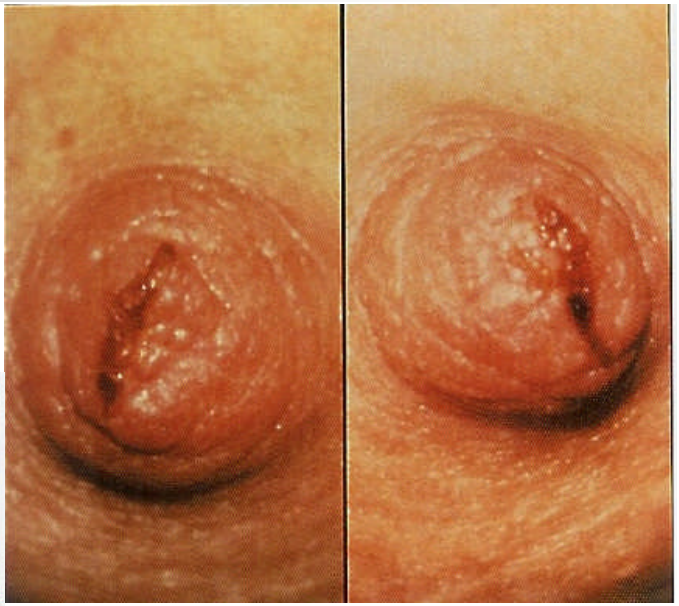
Pediatrics 1993; 92(3): 474-476

"However, no study has shown that treatment of a transiently low blood glucose level offers a better short-term or long-term outcome than the outcome resulting with no treatment.... Furthermore, there is no evidence that asymptomatic hypoglycemic infants will benefit from treatment."

Maternal Trouble Signs

- Not normal:
  - Nipple pain
  - Nipple trauma
- Correct the latch!





Barbara Wilson-Clay,
Kay Hoover
2002

Maternal Trouble Signs

- Engorgement
  - Inadequate milk removal
  - Can inhibit milk production
  - Prevent by frequent feedings or expression
  - Cool or warm compresses, analgesics

Step #6: Show mothers how to breastfeed and how to maintain lactation when they will be away from their babies

- Develop skill in explaining optimal breastfeeding practices and demonstrating correct breastfeeding technique to mothers and families.
- Use sample breastfeeding aids (eg, infant slings, nursing footstools, nursing pillows, breast shells, breast pumps) when instructing new mothers.
- Recognize and make modifications and/or adjustments to meet the literacy and language needs of mothers.

Infant Assessment: Breastfeeding Evaluation

- Proper positioning at the breast
  - Ear, shoulder and hip in straight line
- Proper latch and lip closure
  - Sufficient areola in infant's mouth
- Tongue extends over lower gums
- Adequate jaw excursion with suckling
- Effective swallowing motion
- Coordination of suck-swallow-breathe

Latch

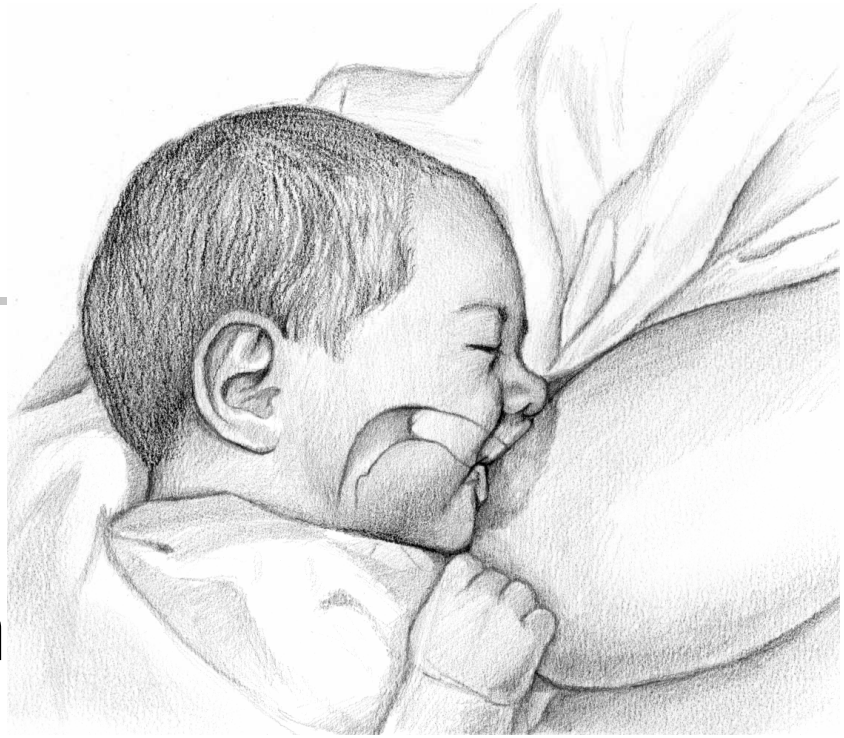


Illustration by Tony LeTourneau

- Stimulate rooting reflex
- Take sufficient areola into mouth
- Flange lips around the breast—"fish lips."
- Have wide angle at corner of mouth.

Infant Assessment: Feeding Pattern

- Encourage at least 8–12 feedings per day
  - Colostrum contains a laxative agent
- Not timed
- Alternate the breast that is offered first
- Allow infant to nurse on at least one side until infant falls asleep or comes off the breast to increase fat and calorie consumption

Infant Assessment
Infant Weight

- Weight Loss
  - Average loss of 5% first 3–4 days.
  - Loss greater than 7% mandates careful evaluation of breastfeeding
    - Not necessarily reason to begin formula supplements (learning; milk supply)
- Weight Gain
  - Begins with increase in mother's milk production by at least day 4–5
  - Expect gain of 15–30 g/day (1/2 to 1 oz per day) through the first 2–3 months of life

Infant Assessment: Infant Weight

- Problem: Poor infant weight gain
  - Inadequate milk supply or milk transfer
  - Organic problem (much rarer)
- Solution
  - Weigh infant, feed infant, weigh again
  - Evaluate infant at the breast
  - Correct latch and positioning
  - Improve milk production and transfer
  - Increase frequency and duration of feeding (Breast emptying)
  - Need for lactation referral?

Infant Assessment: Elimination Pattern

- Meconium gone by day 3-4
- 6–8 pale or colorless voids/day and 4-5 loose yellow stools by day 5
- Loose, yellow, curd-like stools after most feedings through first month
- Constipation unusual in the first month—may indicate insufficient milk intake
  - Infrequent stools are common after the first month in the healthy breastfed infant

AAP Policy Statement: Recommended Breastfeeding Practices

- Avoid pacifiers in early weeks until breastfeeding is well established (>3-4 weeks)
  - Potential nipple confusion
  - Encourage optimal milk production
  - Ensure that feeding cues result in infant placed on breast
- Avoid supplemental bottles, unless medically indicated (ABM Protocol # 3 Supplementation; www.bfmed.org)
- Excessive pacifier use may be marker of breastfeeding problems

Medical Indications for Supplementation

- Breastmilk/donor milk not available
- Very low birth weight or some premature infants
- Hypoglycemia that does not respond to breastfeeding
- Severe maternal illness
- Inborn errors of metabolism
- Acute dehydration not responsive to routine breastfeeding or excessive weight loss
- Maternal medication use incompatible with breastfeeding

Adapted from Powers NG, Slusser W. *Pediatr Rev.* 1997;18:147–161

AAP Policy Statement: Recommended Breastfeeding Practices

- Formal evaluation of breastfeeding in first 24–48 hours and again at 3–5 days and 2–3 weeks of age
- Assess
  - Infant weight
  - General health
  - Breastfeeding
  - Jaundice
  - Hydration
  - Elimination pattern

Why are hospitals marketing baby formula?

Give the Bag the Boot!

Massachusetts Breastfeeding Coalition

www.massbfc.org

Hospitals should market health, and nothing else.

Cast Your Vote For Breastfeeding Within the AAP!

- Join the AAP Section on Breastfeeding
- 600 members currently benefit from:
  - an informative listserv
  - yearly member benefits (have included a breastfeeding handbook, posters, fact sheets, and coding pocket guides)
  - AAP staff and executive committee assistance with breastfeeding information
  - opportunity to publish articles in the Section Newsletter, apply for the yearly Section Lectureship Grants ($1000 each), and submit an abstract on breastfeeding for the AAP National Conference and Exhibition
  - Yearly dues are only $35!
- For more information or to join please go to www.aap.org/breastfeeding or email lactation@aap.org.

Thank you!!

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