

Breastfeeding in Limited Resource Settings: What Every Clinician Needs to Know

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Breastfeeding in the Global Context

Nutrition Presentation for CCIH and SP International Health Forum

Key Facts

- Undernutrition is associated with 45% of child deaths
- Over two-thirds of these deaths occur in the first year of life
- Infants who do not breastfeed are 14 times more likely to die from diarrhea or respiratory infections than babies who are exclusively breastfed in the first six months



Key Facts (cont.)

- Globally in 2012, 162 million children under five were estimated to be stunted and almost 100 million had low weight-for-height, mostly as a consequence of poor feeding and repeated infections
- About 38% of infants 0 to 6 months old are exclusively breastfed.
- About 220,000 child lives could be saved every year with promotion of optimal breastfeeding and appropriate complementary feeding, and the provision of supplements in food-insecure populations.

Key Facts (cont.)

- Infant and Young Child Feeding (IYCF) is a key area to improve child survival and promote healthy growth and development.
- The first 2 years of a child's life are particularly important, as optimal nutrition during this period lowers morbidity and mortality, reduces the risk of chronic disease, and fosters better development overall.
 - First 1000 Days Approach



Policy Initiatives

- International Code of Marketing of Breast-milk Substitutes (1981)
- Baby-friendly Hospital Initiative (1991)
- Global Strategy for Infant and Young Child Feeding (2002)



Current WHO Recommendations

1. Early initiation of breastfeeding with one hour of birth
2. Exclusive breastfeeding for the first six months of life
3. Introduction of nutritionally-adequate and safe complementary (solid) foods at six months together with continued breastfeeding up to two years of age or beyond.



Advantages of Breastfeeding and Disadvantages of Artificial Feeding

Key Terms

- Infant and Young Child Feeding (IYCF)
- Exclusive Breastfeeding (EBF)
- Continued Breastfeeding
- Complementary Feeding
- Early initiation of breastfeeding
- Mixed Feeding
- Breastmilk substitutes
- Pre-lacteal feeds



Advantages of Breastfeeding

Breast milk

- Perfect nutrients
- Easily digested; efficiently used
- Protects against infection



Breastfeeding

- Helps bonding and development
- Helps delay a new pregnancy
- Protects mothers' health

- Costs less than artificial feeding

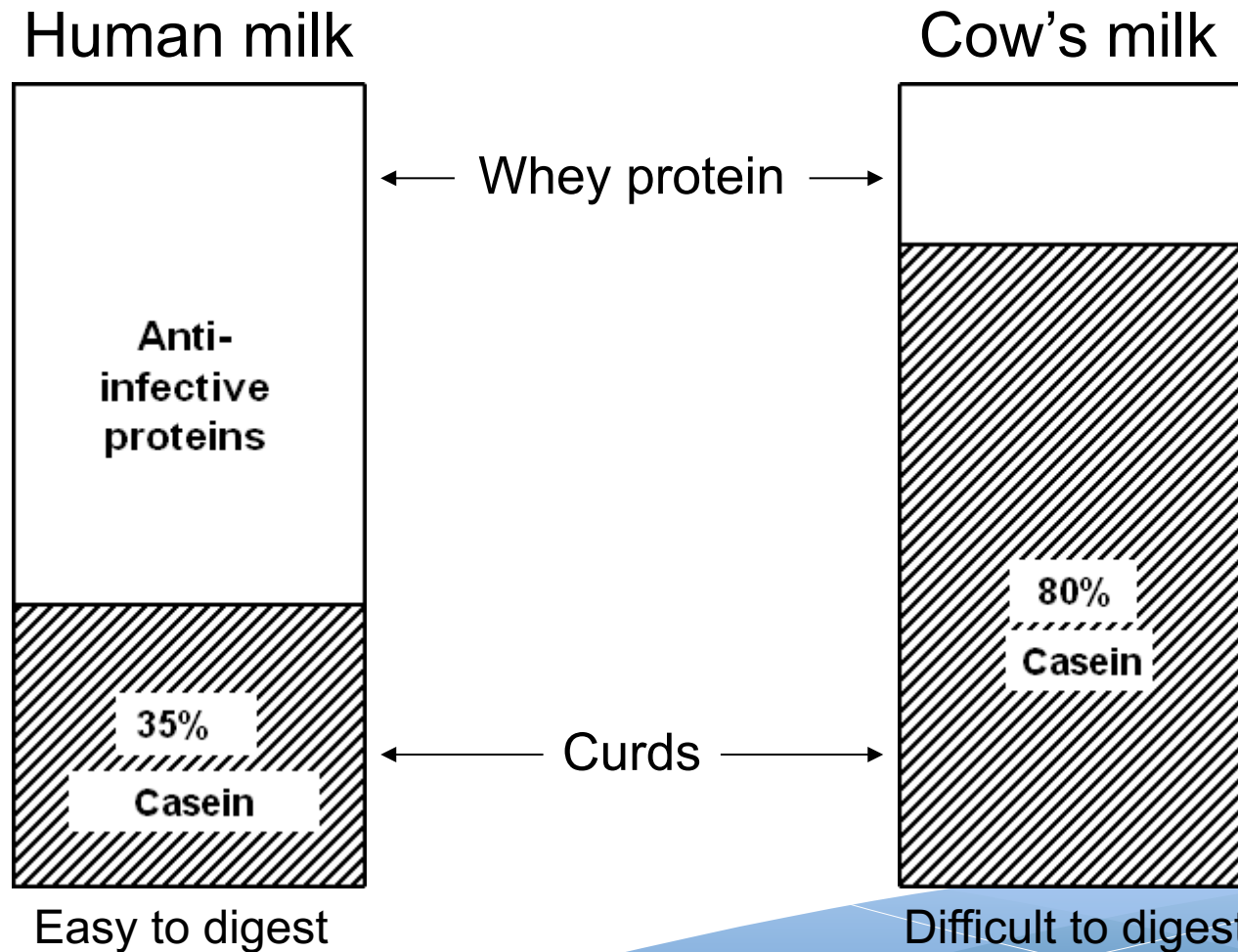
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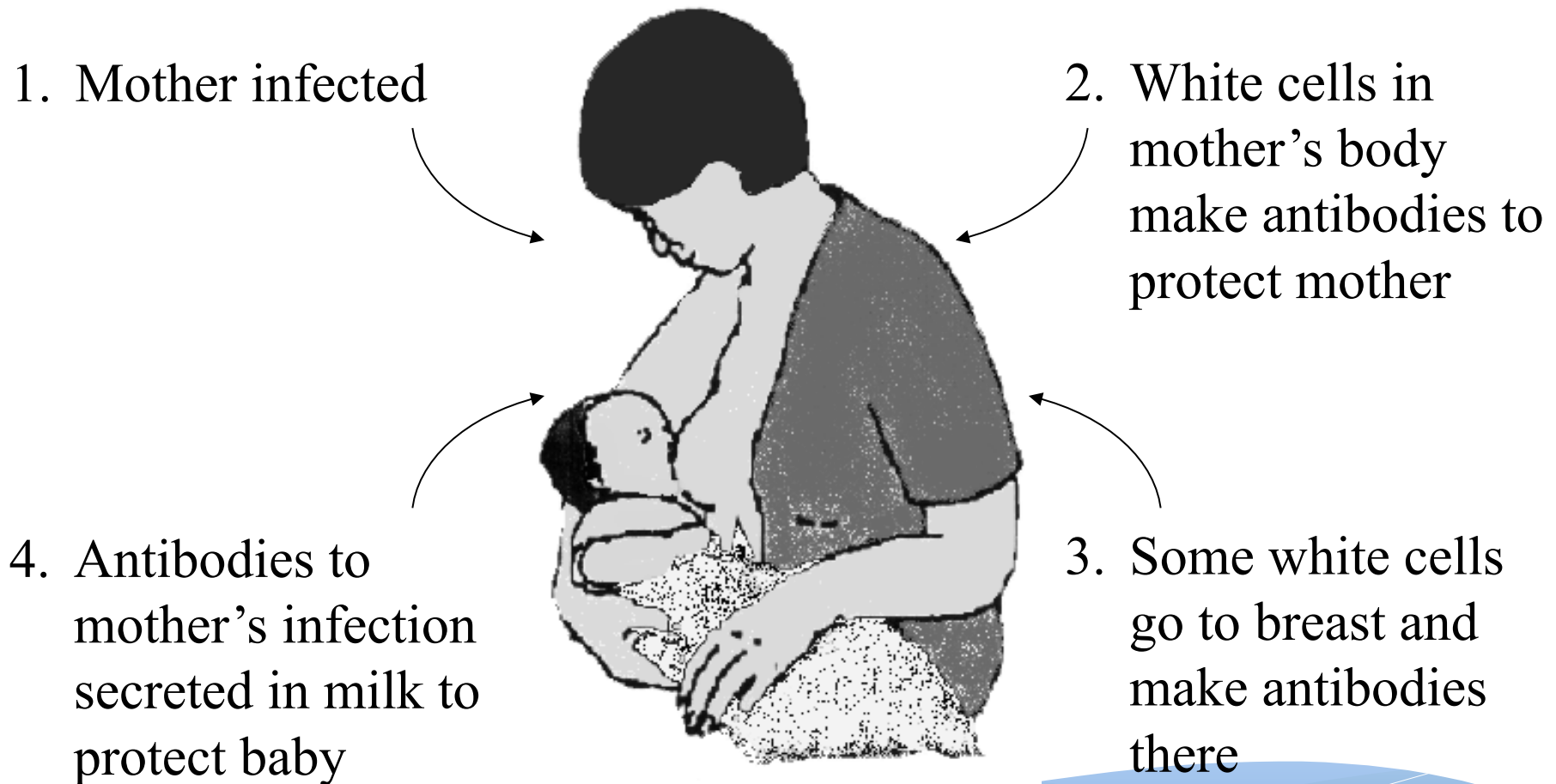
Summary of Differences Between Milks

	HUMAN MILK	ANIMAL MILK	FORMULA
Bacterial contaminants	none	likely	likely when mixed
Anti-infective factors	present	not present	not present
Growth factors	present	not present	not present
Protein	correct amount easy to digest	too much difficult to digest	partly corrected
Fat	enough essential fatty acids lipase to digest	lacks essential fatty acids no lipase	lacks essential fatty acids no lipase
Iron	small amount well absorbed	small amount not well absorbed	extra added not well absorbed
Vitamins	enough	not enough A and C	vitamins added
Water	enough	extra needed	may need extra

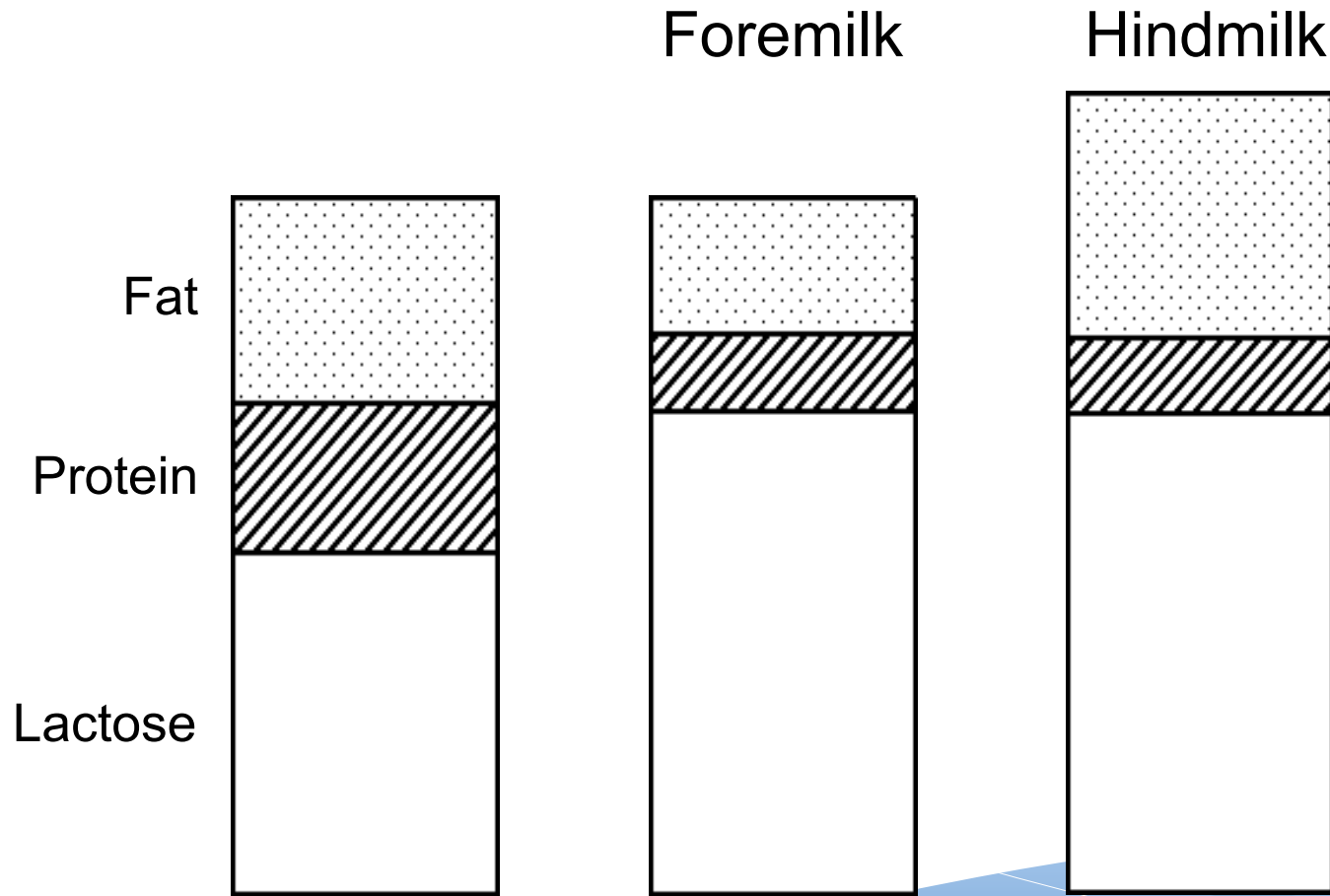
Differences in the Quality of Proteins in Different Milks



Protection Against Infection



Differences Between Colostrum and Mature Milk



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Colostrum

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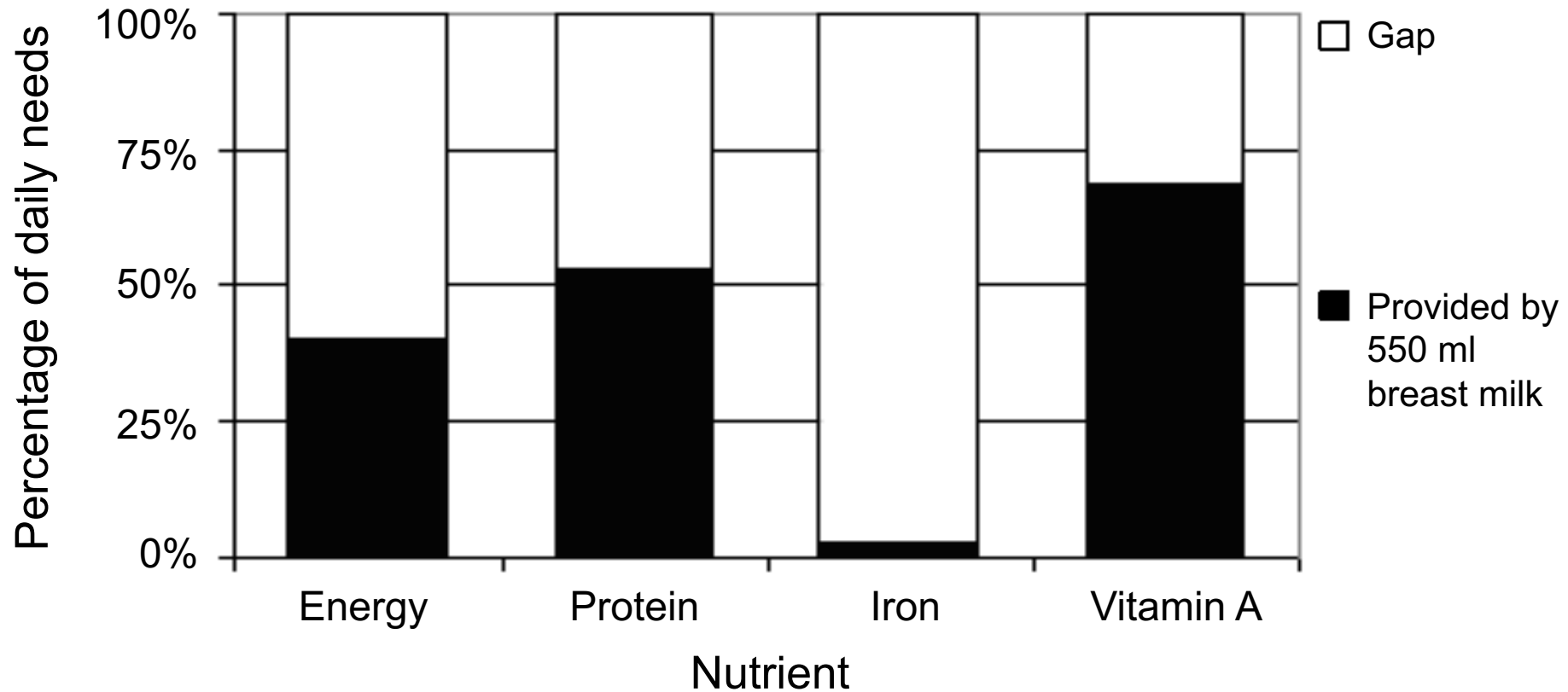
Mature milk

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Colostrum

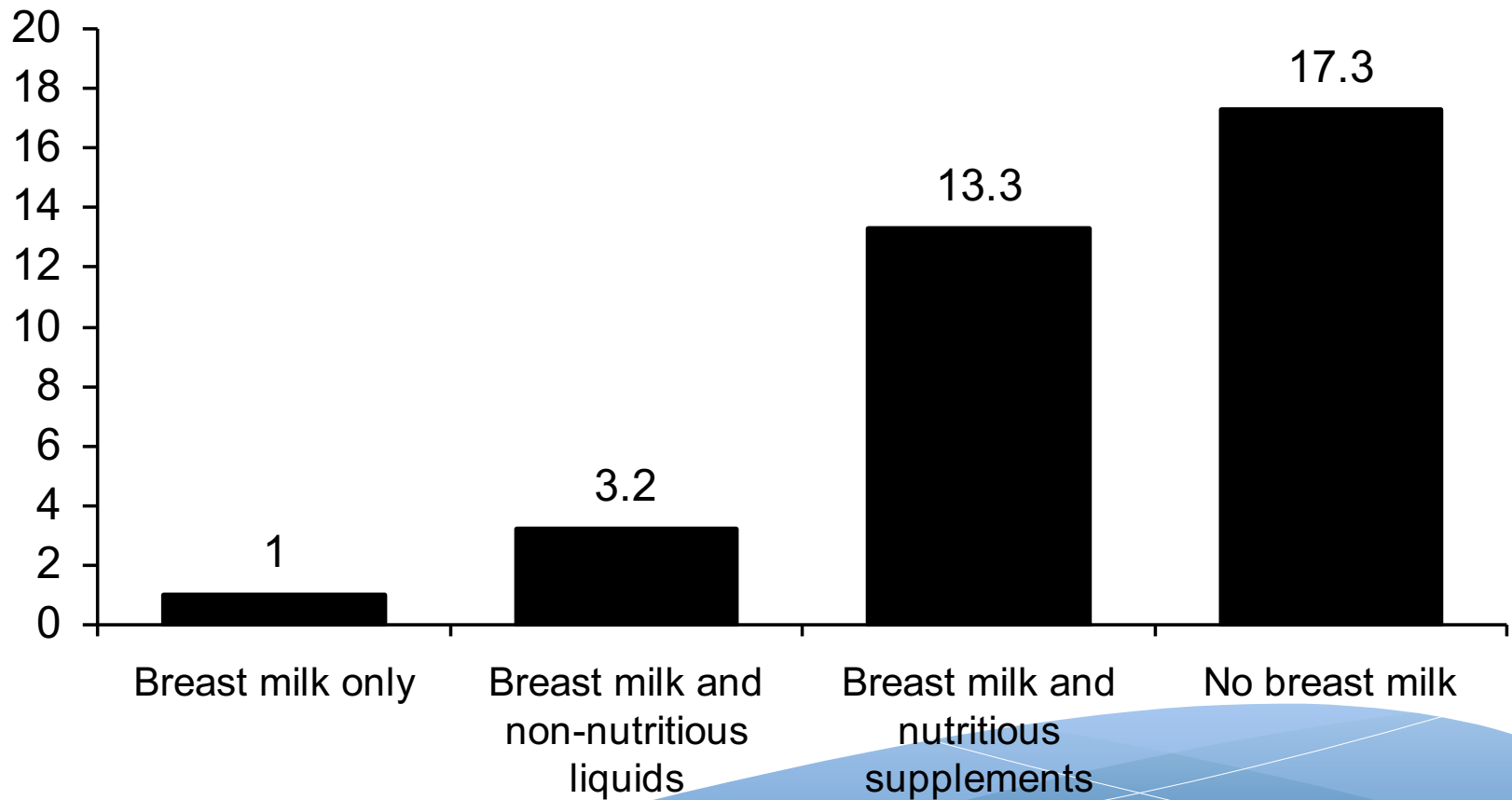
Property	Importance
Antibody rich	Protects against allergy and infection
Many white cells	Protects against infection
Purgative	Clears meconium Helps to prevent jaundice
Growth Factors	Helps intestine to mature Prevents allergy, intolerance
Rich in Vitamin A	Reduces severity of infection

Breast Milk in the Second Year of Life



Risk of Diarrhea by Feeding Method

Philippines, infants aged 0-2 months



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Source: Popkin BM. Breast-feeding and diarrheal morbidity. Pediatrics 1990; 86: 874-82.

Psychological Benefits of Breastfeeding

- Emotional bonding
- Helps to form a close, loving relationship between mother and baby
- Mother more emotionally satisfied
- Mothers often respond to babies in a more affectionate manner
- Baby cries less
- Children perform better on intelligence tests



Lactational Amenorrhea Method (LAM)

- A contraceptive method based on natural infertility
- Must meet 3 criteria:
 1. The woman's menstrual periods have not resumed.
 2. The baby must be exclusively breastfed on demand, frequently, day and night.
 3. The baby must be under 6 months old.



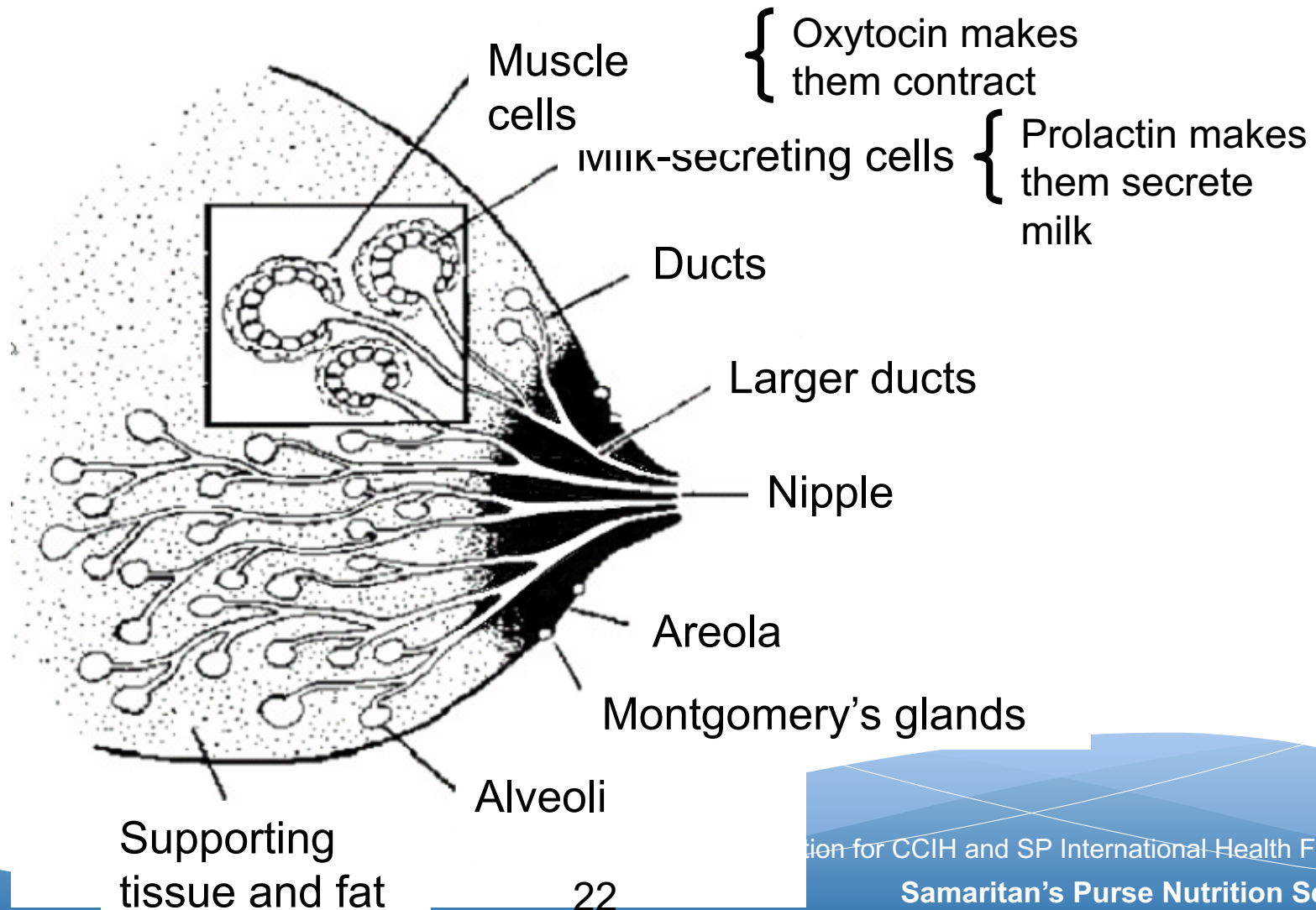
Disadvantages of Artificial Feeding

- Interferes with bonding
- More diarrhea and persistent diarrhea
- More frequent respiratory infections
- Malnutrition; Vitamin A deficiency
- More allergy and milk intolerance
- Increased risk of some chronic diseases
- Obesity
- Lower scores on intelligence tests
- Mother may become pregnant sooner
- Increased risk of anemia, ovarian cancer, and breast cancer in mother

How Breastfeeding Works

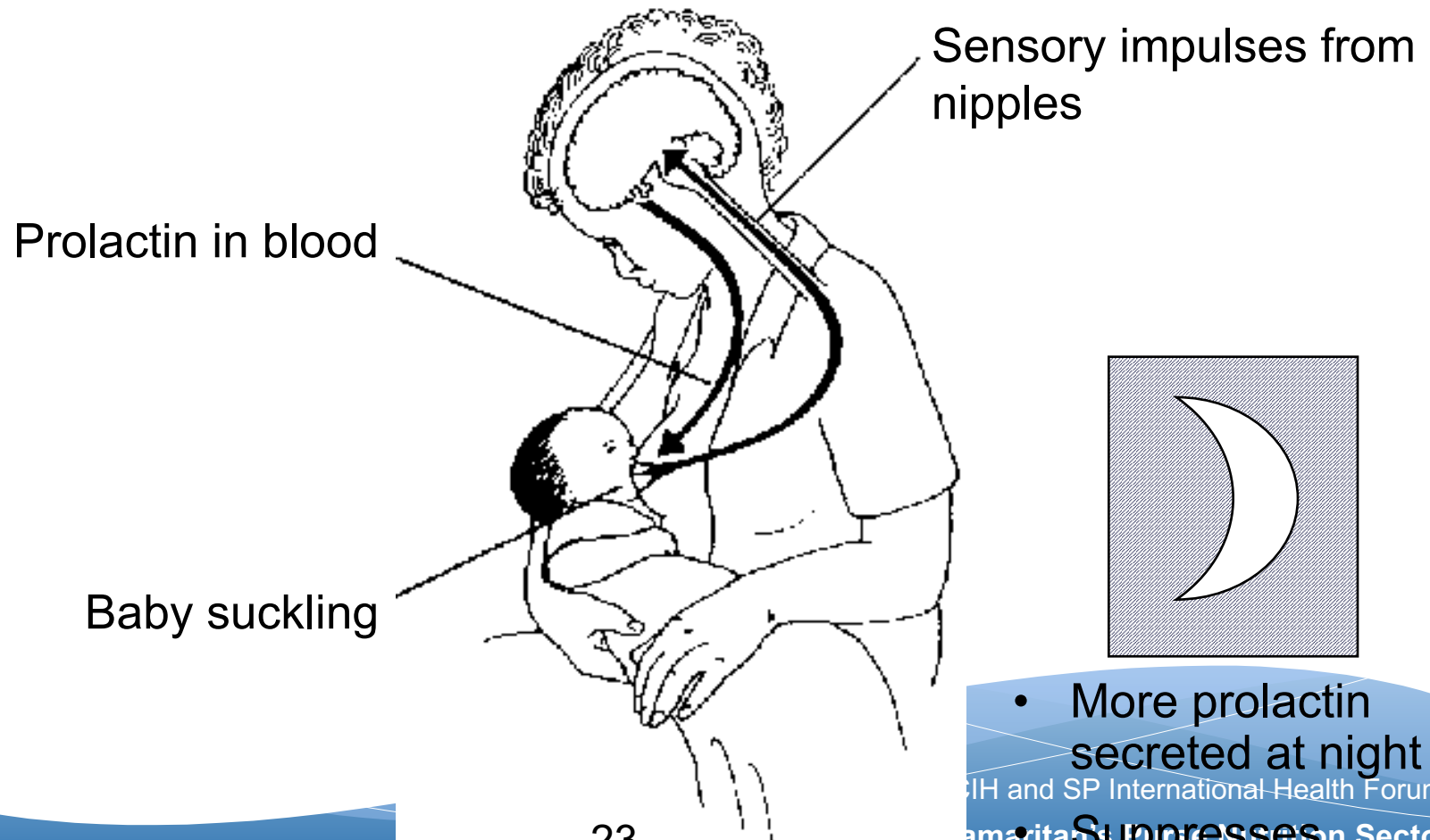
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Anatomy of the breast



Prolactin

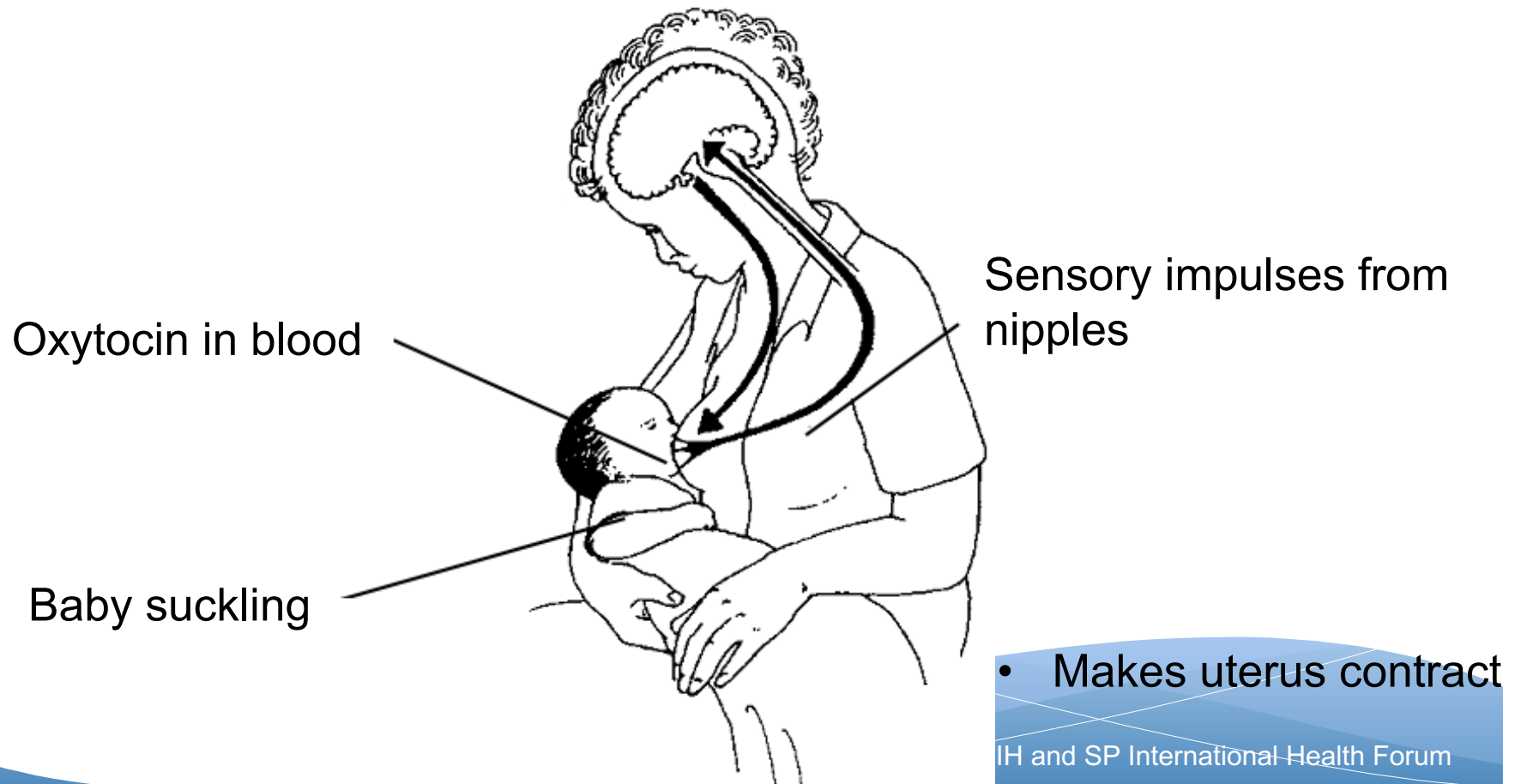
- Secreted *during* and *after* feed to produce *next* feed



- More prolactin secreted at night
- Suppresses ovulation

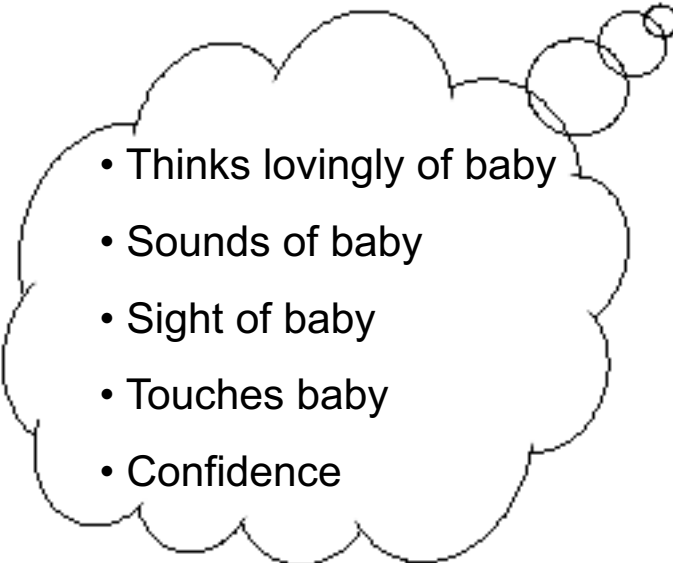
Oxytocin Reflex

- Works *before* or *during* feed to make milk flow



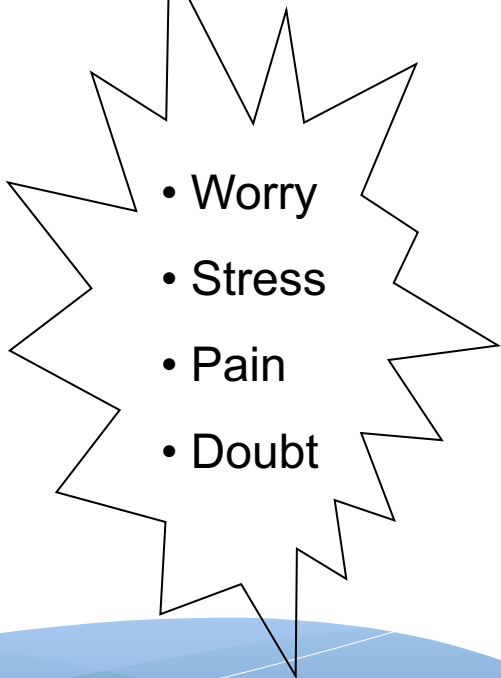
Helping and Hindering of Oxytocin Reflex

These *help* reflex

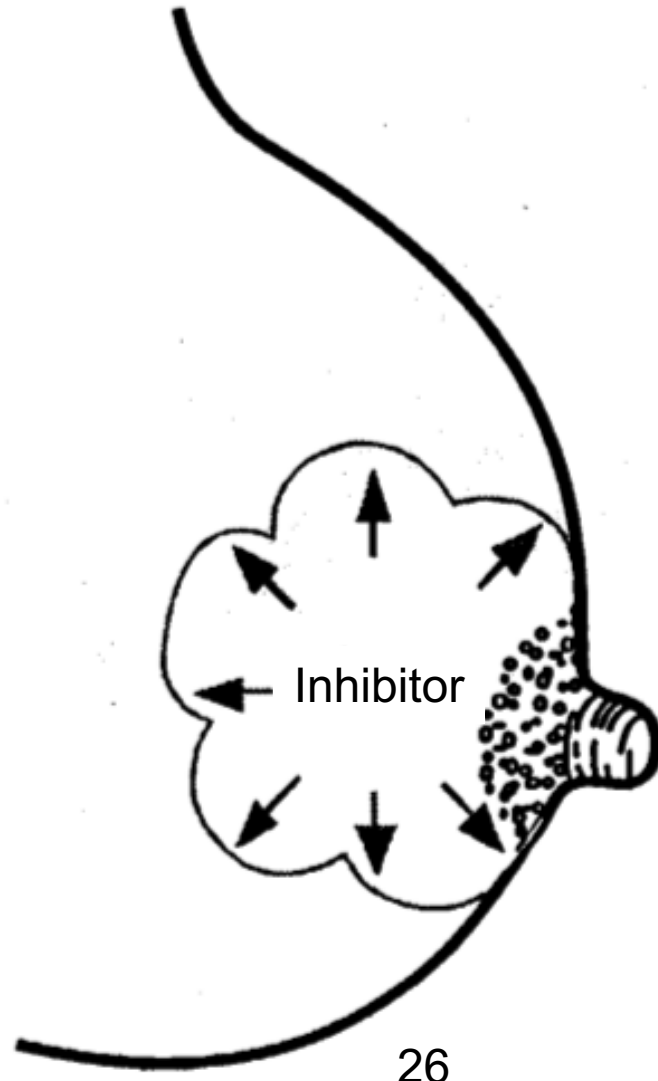
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- Thinks lovingly of baby
 - Sounds of baby
 - Sight of baby
 - Touches baby
 - Confidence



These *hinder* reflex

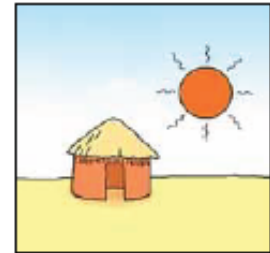
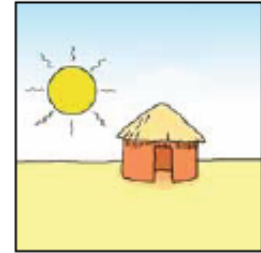
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- Worry
 - Stress
 - Pain
 - Doubt

Inhibitor in Breast Milk



If breast remains
full of milk,
secretion stops

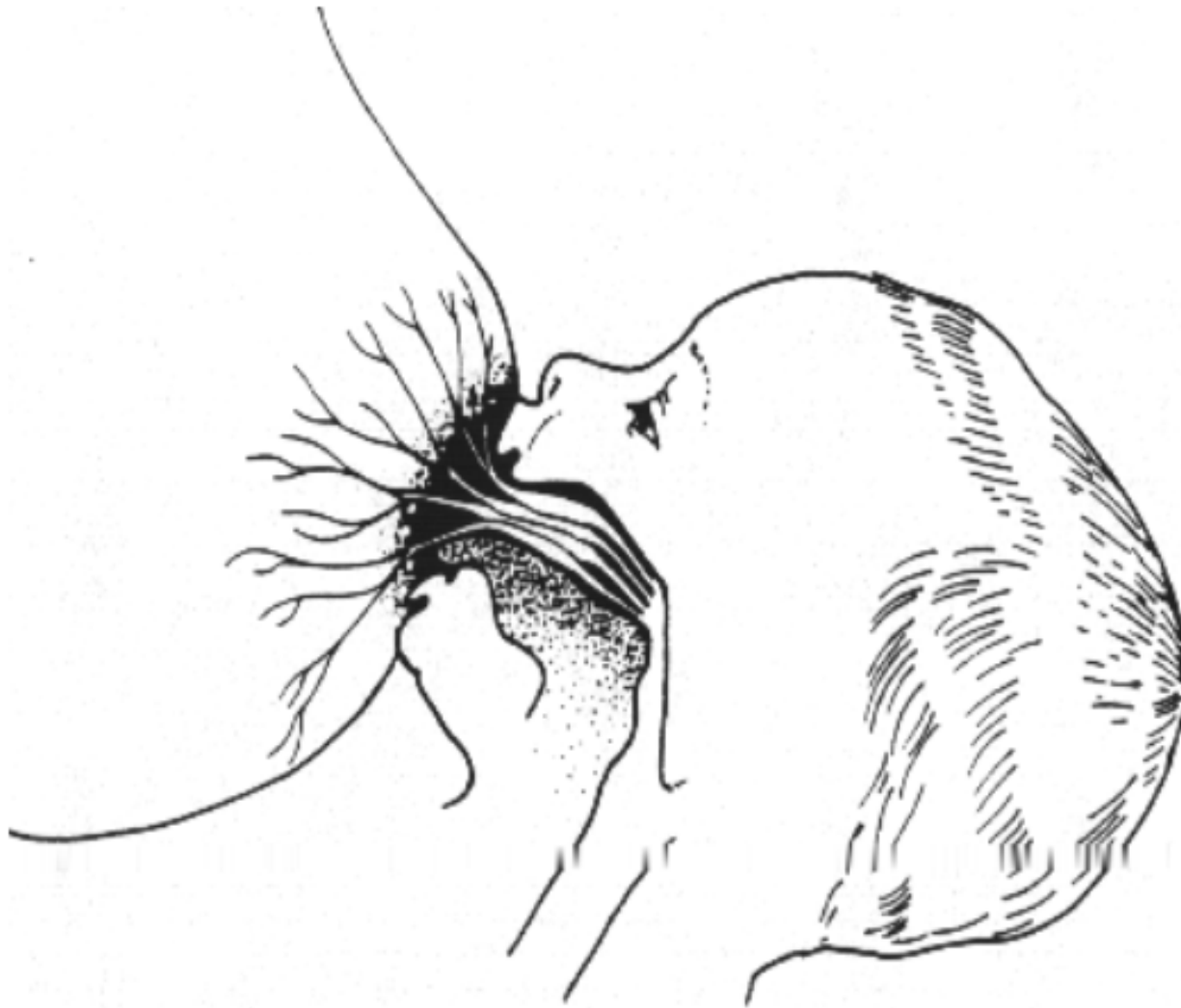
Feeding on Demand



Proper Attachment

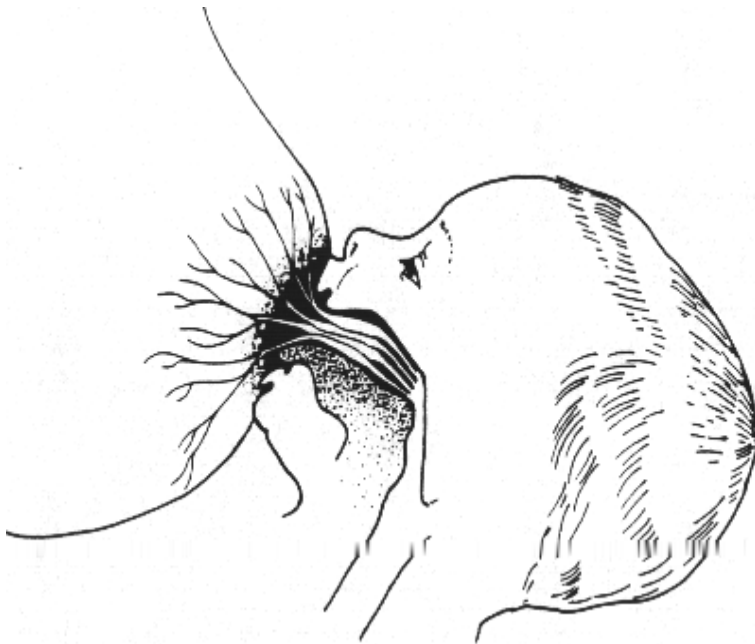
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Attachment to the Breast



Good and Poor Attachment

- What differences do you see?



1

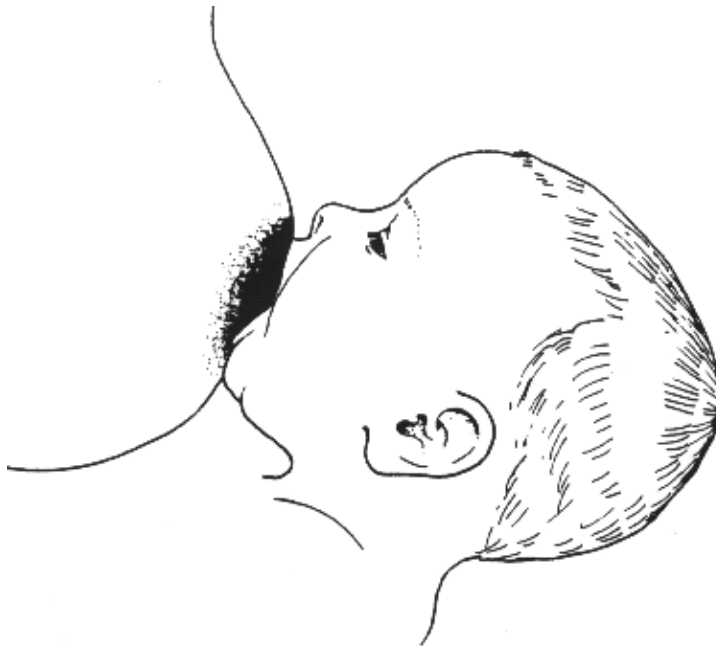
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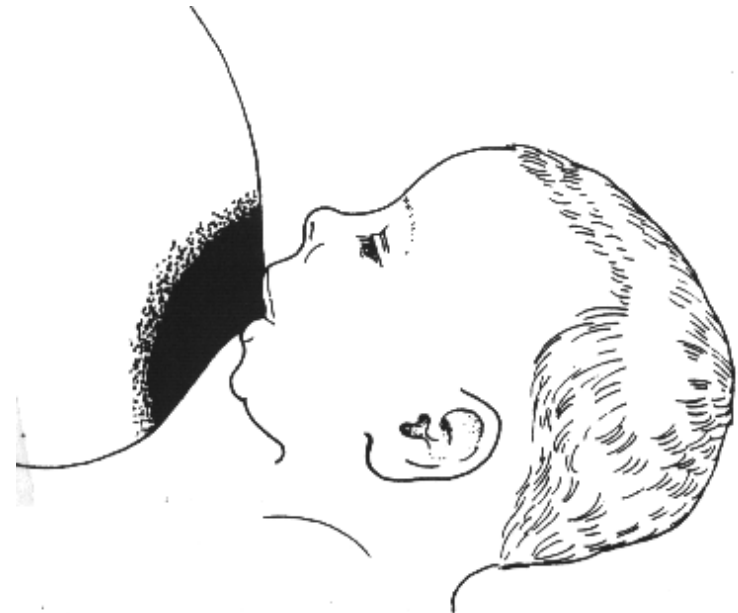
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Attachment (outside appearance)

- What differences do you see?



1



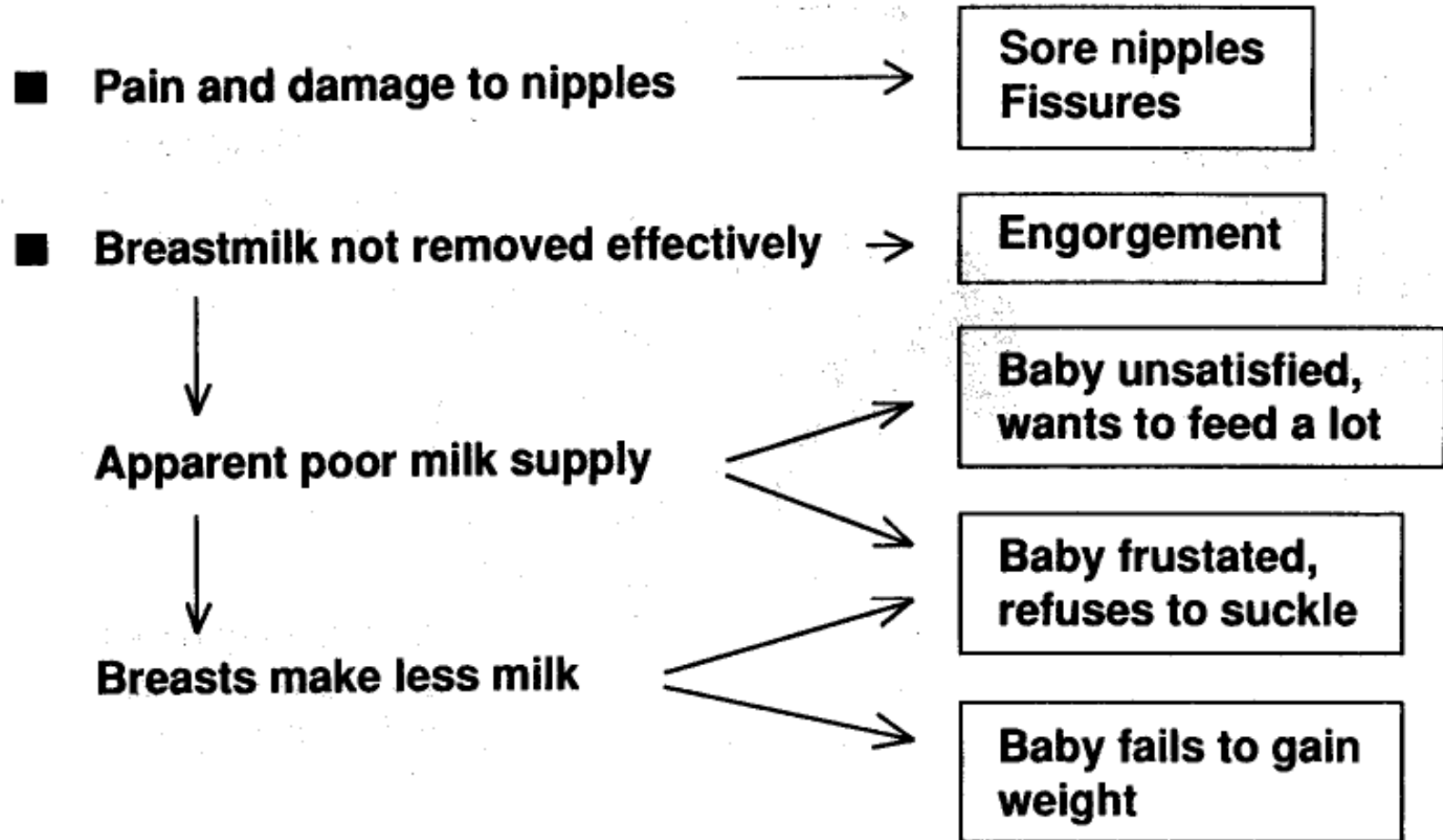
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Results of Poor Attachment



Causes of Poor Attachment

Use of feeding bottle

- before breastfeeding established
- for later supplements

Inexperienced mother

- first baby
- previous bottle feeder

Functional difficulty

- small or weak baby
- breast poorly protractile
- engorgement
- late start

Lack of skilled support

- less traditional help and community support
- doctors, midwives, nurses, not trained to help

Reflexes in the Baby

Rooting Reflex

When something touches lips, baby opens mouth, puts tongue down and forward

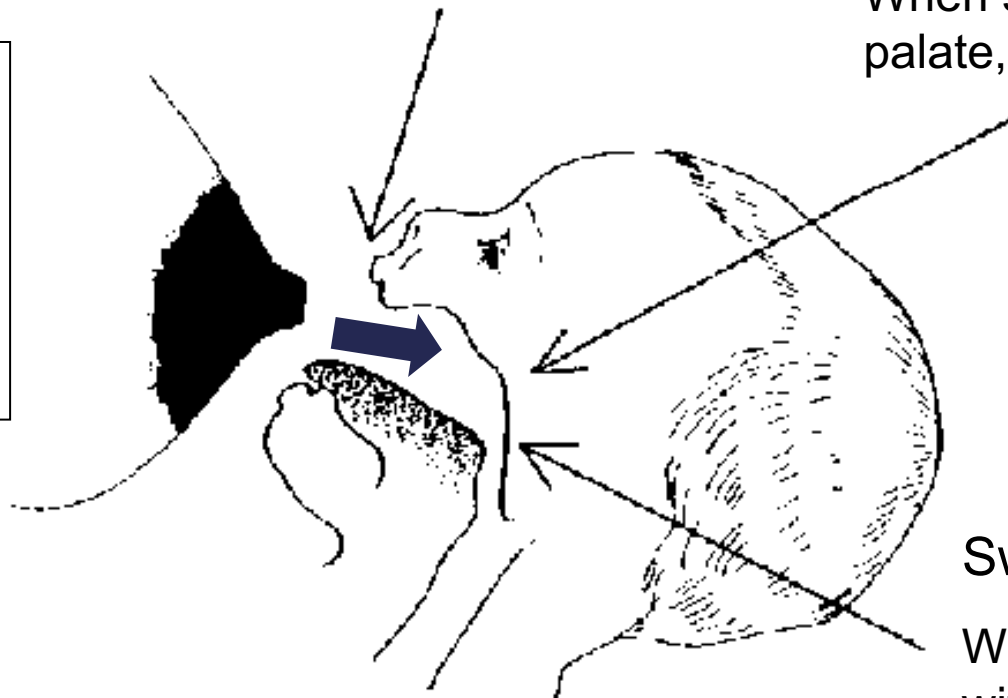
Sucking Reflex

When something touches palate, baby sucks

Skill

Mother learns to position baby

Baby learns to take breast



Swallowing Reflex

When mouth fills with milk, baby swallows

Proper Positioning in Breastfeeding

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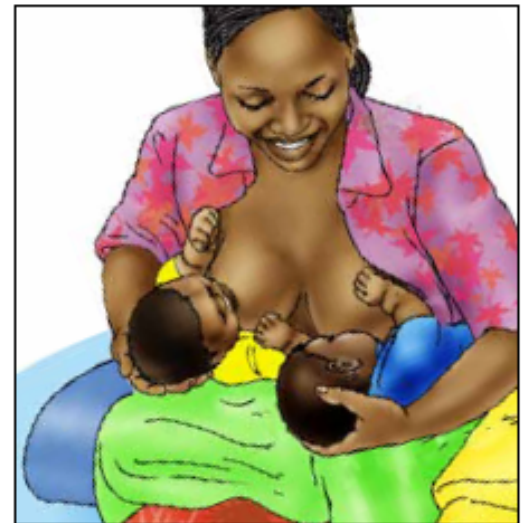
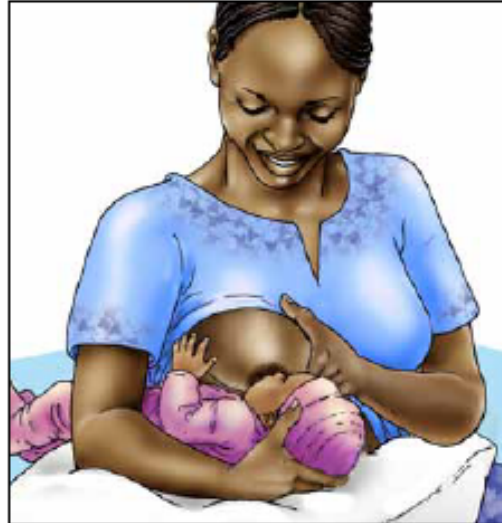




Fig.24 a. A mother holding her baby in the underarm position

Useful for:

- twins
- blocked duct
- difficulty attaching the baby



b. A mother holding her baby with the arm opposite the breast

Useful for:

- very small babies
- sick babies



Fig.25 A mother breastfeeding her baby lying down

Breastfeeding While Sitting Down

4 Key Points:

1. The baby's head and body should be in a straight line.
2. His face should face the breast, with his nose opposite the nipple.
3. His mother should hold his body close to hers.
4. If her baby is newborn, she should support his bottom, and not just his head and shoulders.



Breastfeeding While Sitting Down (cont.)

Show her how to support her breast:

- with her fingers against her chest wall below her breast;
- with her first finger supporting the breast;
- with her thumb above.

Her fingers should not be too near the nipple.

Explain or show her how to help the baby to attach:

- touch her baby's lips with her nipple;
- wait until her baby's mouth is opening wide;
- move her baby quickly onto her breast, aiming his lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment. If the attachment is not good, try again.

Providing Breastfeeding Support in the Clinic

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Baby Friendly Hospital Initiative

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.

Baby Friendly Hospital Initiative (cont.)

6. Give infants no food or drink other than breast-milk, unless medically indicated.
7. Practice rooming in - allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.

How to Help a Mother with an Early Breastfeed

- Avoid hurry and noise.
- Ask the mother how she feels and how breastfeeding is going.
- Observe a breastfeed.
- Help with positioning if necessary.
- Give her relevant information.
- Answer the mother's questions.



What to do Before a Mother Leaves a Maternity Facility

- Find out what support she has at home.
- If possible, talk to family members about her needs.
- Arrange a postnatal check in the first week, to include observation of a breastfeed (in addition to a routine check at 6 weeks).
- Make sure that she knows how to **contact** a health worker who can help with breastfeeding if necessary.
- If there is a breastfeeding support group in her neighborhood, refer her to that.



Sources of Help for Breastfeeding Mothers

- Supportive family and friends
- An early postnatal check, within 1 week of discharge from hospital
- A routine postnatal check at 6 weeks
- Continuing help from health care services
- Help from community health workers
- A breastfeeding support group



Build Confidence and Give Support

- Accept what a woman thinks and feels
- Recognize and praise what a woman is doing right
- Give Practical Help
- Give a Little Relevant Information
- Use Simple Language
- Make 1 or 2 suggestions, not commands



Breastfeeding Success

Breastfeeding will be successful in most cases if:

- The mother feels good about herself
- The baby is well attached to the breast so that he/she suckles effectively
- The baby suckles as often and for as long as he/she wants
- The environment supports breastfeeding



Formative Research

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Formative Research

- Formative Research helps tailor messaging to the local context

Discussion—Ask these questions about people in your communities:

- Who are key influencers in the community?
- How do they affect a woman's decision to EBF?
- Are they included in your program?
- What are some other barriers to EBF?
- What are some EBF beliefs or myths?



Some possible barriers to EBF

- Workload
- Cultural beliefs about children needing other foods
- Lack of family support
- Maternal depression
- Lack of knowledge about the importance of EBF
- Self-efficacy
- Marketing of formula companies



Any Questions?

