The Outpatient Breastfeeding Champion Program Session 2

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Institute for the Advancement of Breastfeeding & Lactation Education

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- The Instructor has no conflicts of interest to disclose
- Continuing medical education credits (CMEs) and continuing education recognition points (CERPs) for IBCLE are awarded commensurate with participation and complete/submission of the evaluation form
- CMEs can be used for nursing credits

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Building Breastfeeding-Knowledgeable Medical Systems & Communities

2

OBC Session 2

- Anatomy and Physiology
- Positioning for breastfeeding
- Infant Latch
- Defining a feeding
- Feeding Frequency and Duration
- Infant and parental signs of Adequate Milk Intake

3

Session 2 Objectives

- Describe breast anatomy and hormones of milk production and release.
- Describe and demonstrate typical positions used when breastfeeding.
- Identify signs that indicate adequate breastmilk intake in the baby and effective feeding in the parent.

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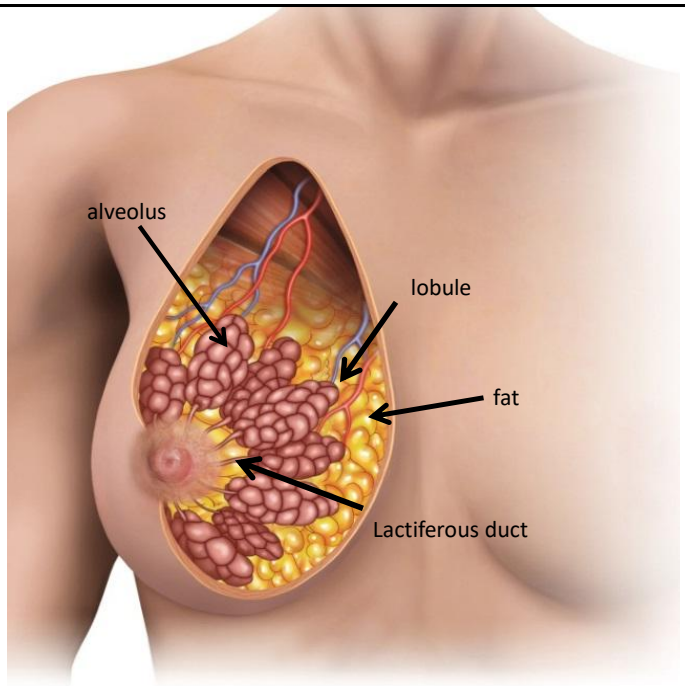
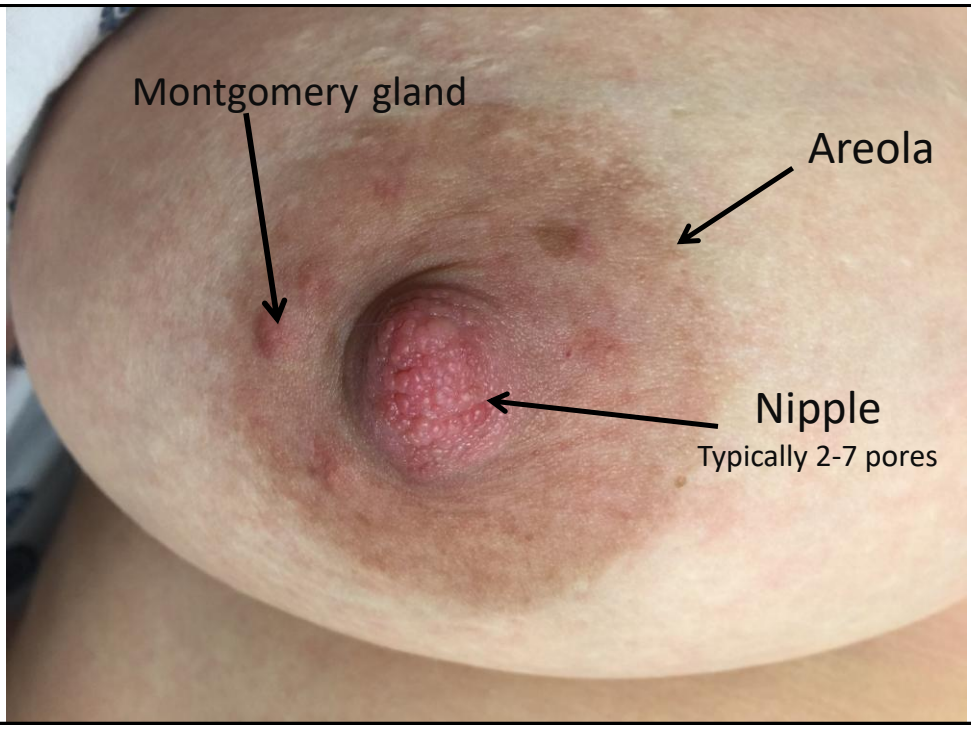

alveolus
lobule
fat
Lactiferous duct

5


Montgomery gland
Areola
Nipple
Typically 2-7 pores

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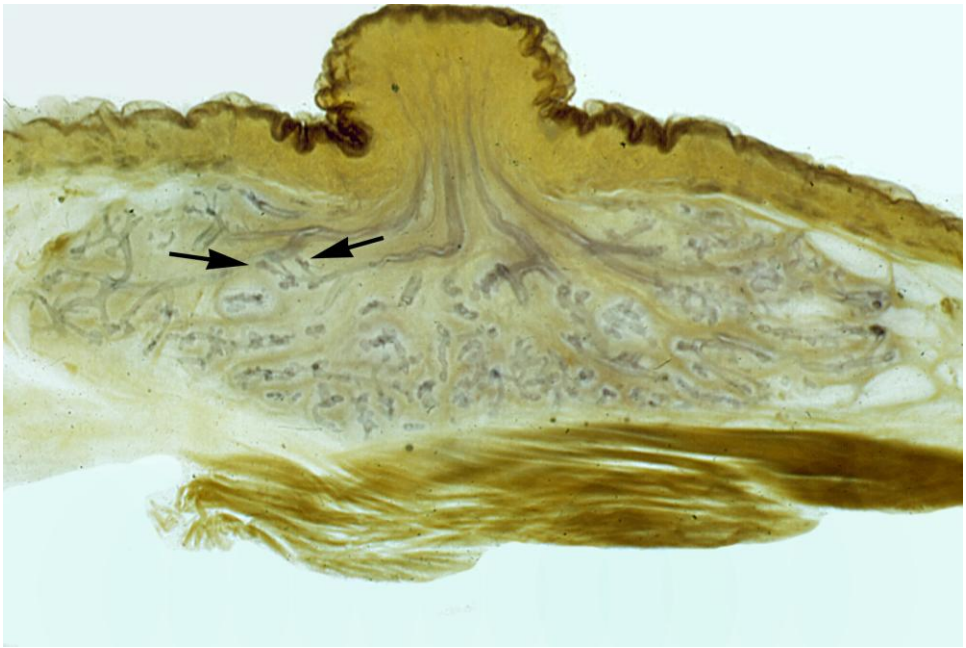

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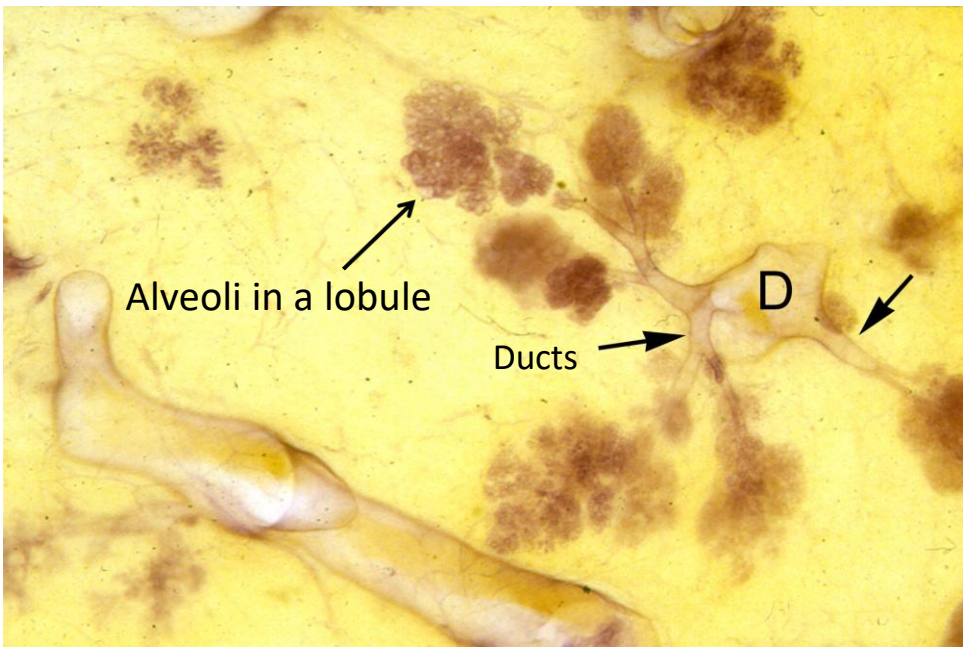

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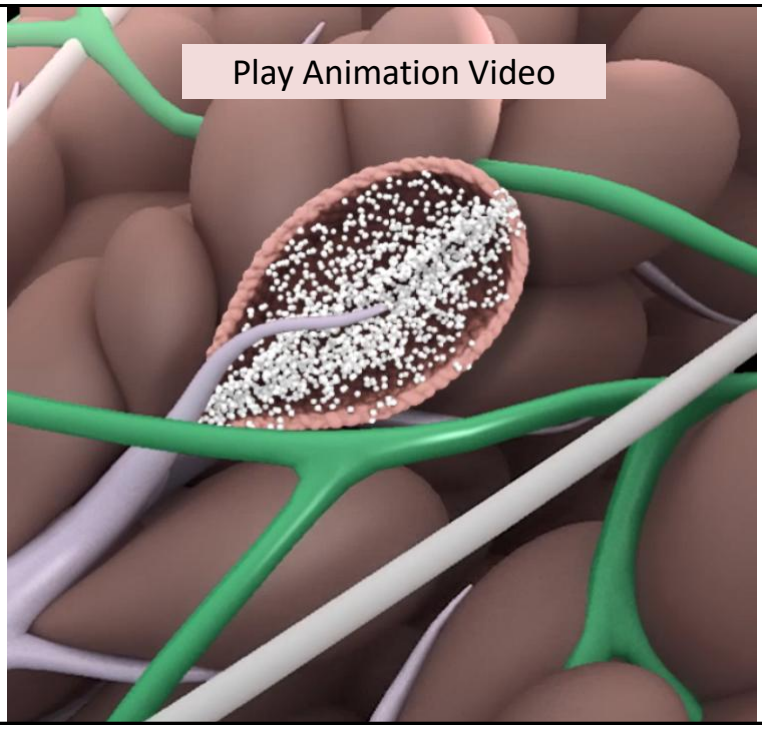

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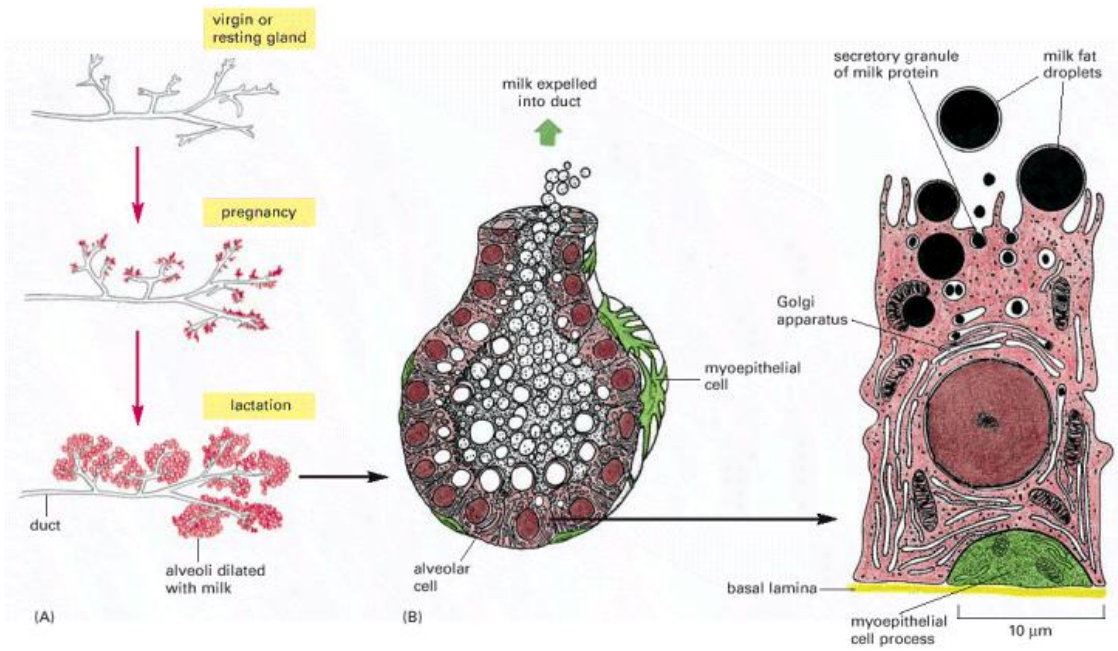

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Hormones Affecting Breast Growth

Thyroid hormone

Estrogen

Parathyroid hormone related protein

Progesterone

Human Placental Lactogen

Insulin-like Growth Factor

Prolactin

Fibroblast Growth Factor

Growth Hormone

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Lactogenesis In Pregnancy

Ache and grow

Breast tissue growth and development

Increase in protein, lactose, Ig, Leaky, Breasts may continue to grow

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After the baby is born, what event triggers the breasts to start making milk?

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Placenta is delivered → Placental hormones diminish → Pituitary & Breast tissue seize control

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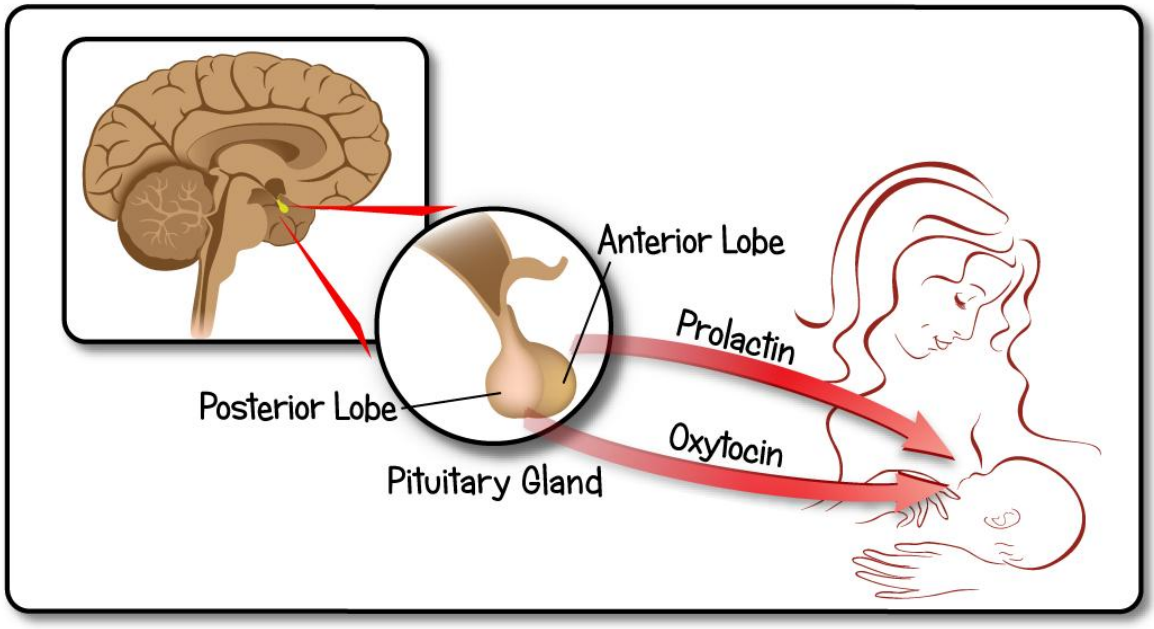

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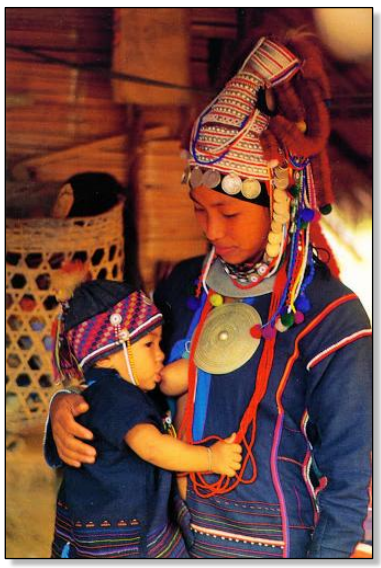
Prolactin

- Released from anterior pituitary
- Stimulates breasts to produce milk
- Requires **nipple stimulation**
- The level drops about an hour after nursing
  - Frequent nursing maintains a high level to sustain milk production
- Prolactin level ≠ Amount of milk



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Oxytocin

- Released by posterior pituitary gland
- Stimulates milk ejection
- Several let-downs occur during a nursing session
- Tingly/tight sensation
- Most first-time moms don't feel their letdown in the first several months

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The Multiple Triggers of Milk Letdown by Oxytocin

Seeing the baby

Thinking about the baby

Hearing the baby

Holding/touching the baby

Smelling the baby

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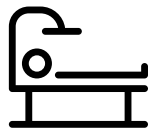
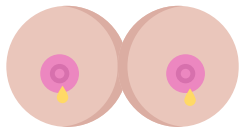
Red Flags for Breastfeeding Problems

No Breast Growth During Pregnancy



History of Breast Radiation

History of Breast Surgery (Esp Reduction)



History of Low Production

Certain Meds Known to Impair Production

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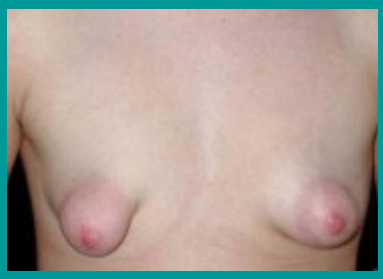

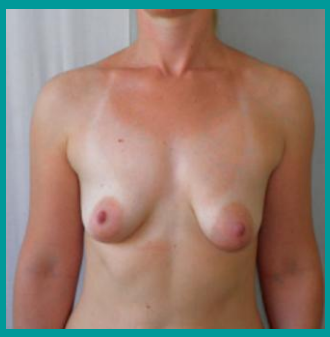

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Positioning at the Breast is KEY for:

- Deep Latch
- Maternal Comfort
- Effective Milk Transfer

Why would positioning be important for a deep latch?

Source: United States Breastfeeding Committee

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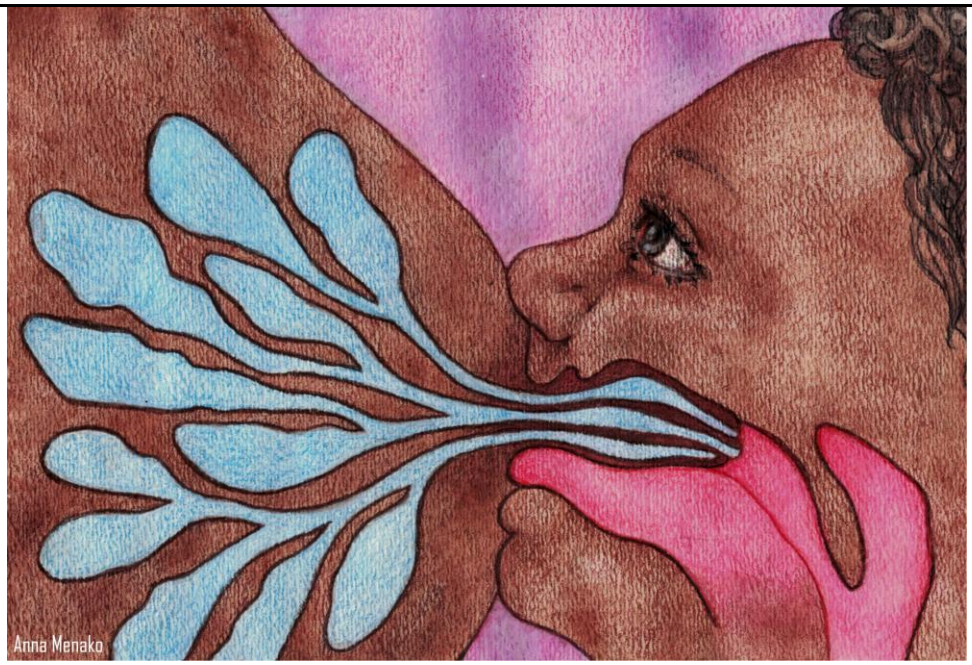

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Positioning Tips for Optimal Latch

- Firm, Secure Hold
- Proper Alignment
- Maternal Comfort and Support
- Mouth Wide Open
- Nose to Breast

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Firm Secure Hold

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Proper Alignment

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Maternal Comfort and Support

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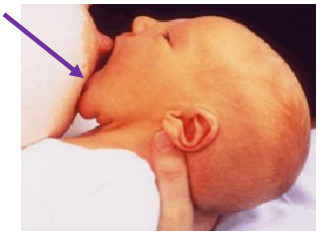
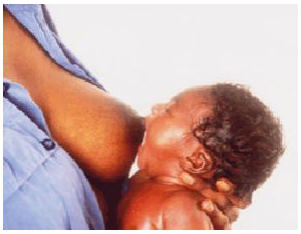
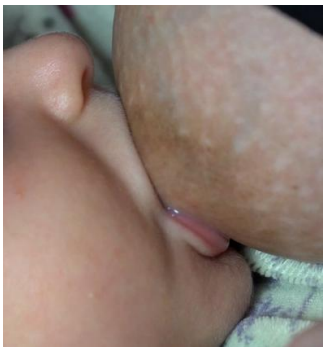
Mouth Open Wide







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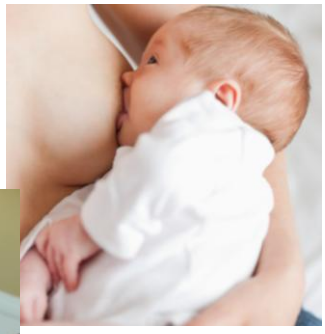
Nose to Breast



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Sitting in Lap Facing Mom; Mom is using a C-Hold

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Semi-Reclined (laid back) Positioning

Global Health Media

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Let's Practice Positioning

- Cradle
- Cross Cradle
- Football
- Laid-back
- Side lying
- Sitting Upright

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Asymmetric Latch

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35

What is a Feeding?

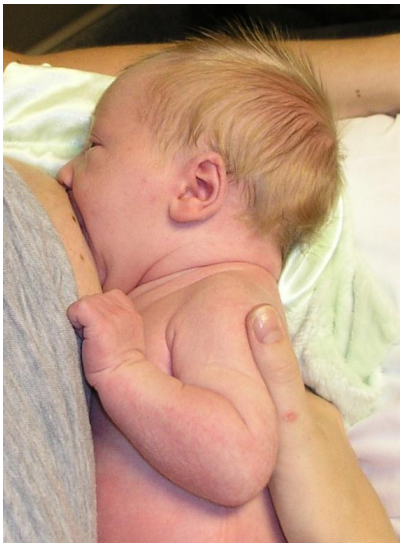
- The baby latches on and nurses
  - Transfer of milk
- Easy to fool everyone
  - Some infants sleep at the breast
- Proof is in the weight gain

36

Teach Parents to Understand a Feeding
Nutritive vs Non-nutritive Feeding

- Nutritive feeding transfers milk
  - Swallows are seen/heard
  - Slower (~1 suck per second), rhythmic
  - Wider jaw excursions
- Non-nutritive
  - Faster
  - Smaller jaw excursions
  - NO swallowing

Best Feedings Include Swallows!!



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Awake and Effective Infant at the Breast

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Sleepy Infant at the Breast

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Young Infant at the Breast

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Step 4- Watch for Signs of Satiation

41

Sit with Parents to Teach Nutritive and Non-Nutritive Sucking

- Watch the infant feed on the first breast, and point out swallows
- As the infant relaxes, and there have been NO swallows for 3-4 minutes, switch infant to the other breast. No need to wait for the infant to unlatch on their own
- Point out swallows on the second side
- Once swallows are done for 3-4 minutes on the second side, OK to take infant off the breast
- If infant is still hungry, start the process over on the first, then the second breast
- Nursing on both sides twice is called Switch Nursing

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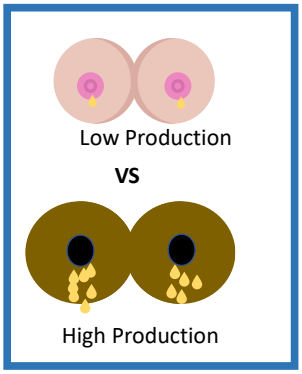
Duration of Feeding at the Breast, in the Early Weeks, is Determined by:


Infant wakefulness


Infant maturity/strength



Slower Feeding When:
- ✓ Sleepy
- ✓ Premature
- ✓ Weak
- ✓ Low/slow flow such as with low production

Faster Feeding When:
- ✓ Awake
- ✓ Alert
- ✓ Strong
- ✓ Fast flow, such as with high production

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Infants Feed Very Frequently in the First Several Weeks

- Every 2-3 hours until back to birthweight
  - Wake to feed
- OK to feed ad lib when:
  - Back to birth weight
  - Gaining well
  - Wakes up to eat on their own

45

What factors do you think determine how often an infant feeds (once feeding is well established)?

46

What Determines How Often an Infant Feeds? (After the First Few Weeks, When Gaining Well)

Infant Hunger	✓ A hungry infant may feed more often ✓ Feeding frequency drives production
Parental Response to Cues	✓ Parent may or may not identify early cues ✓ Sleep training reduces night time feeds ✓ Parents may not wake up infant for daytime feeds
Volumes Taken at Feeds	✓ High milk production allows larger feeds less often ✓ Infants' feeding volume preferences vary
Infant Behavior	✓ Infant may nurse for comfort, when upset/tired/ill

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Cluster Feeding Happens for Many Reasons

- Normal behavior in first 3-4 mo
  - Very often in evening
  - When babies are most awake
- Infant illness
  - Seeking comfort
  - Taking less volume/feeding
- Low production
  - Cluster feeding will increase production

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Typical Feeding Frequency and Duration

Age (mo)	Frequency (~)	Duration
1-3 mo	1.5-3 hours	20-30+ minutes
4-6 months	2-5 hours	5-15+ minutes
6-9 months	3-5 hours	5-15+ minutes
9-12 months	4+ times a day	5-10+ minutes
Toddlers	Anyone's guess	Less than 10+ min

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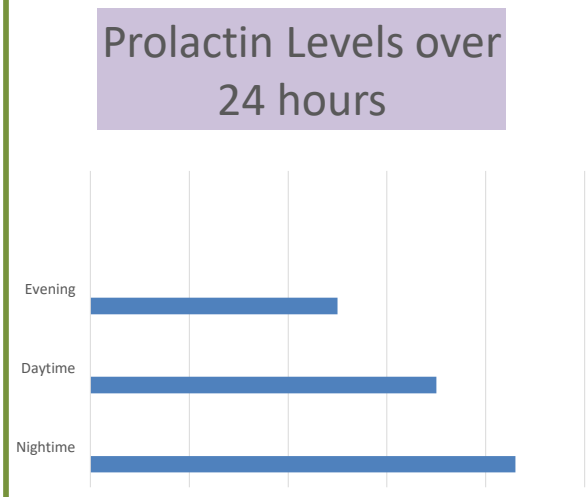
Daytime Variation in Milk Production

- Highest production overnight
  - prolactin rises overnight
- Lowest in the evening
  - May lead to evening supplementation



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Growth Spurts

- Classic at 3,6,12 wks
- Characterized by:
  - Demanding for attention and food
  - Not sleeping as well
  - Very frequent feeding
  - Little to no stool for the preceding few days

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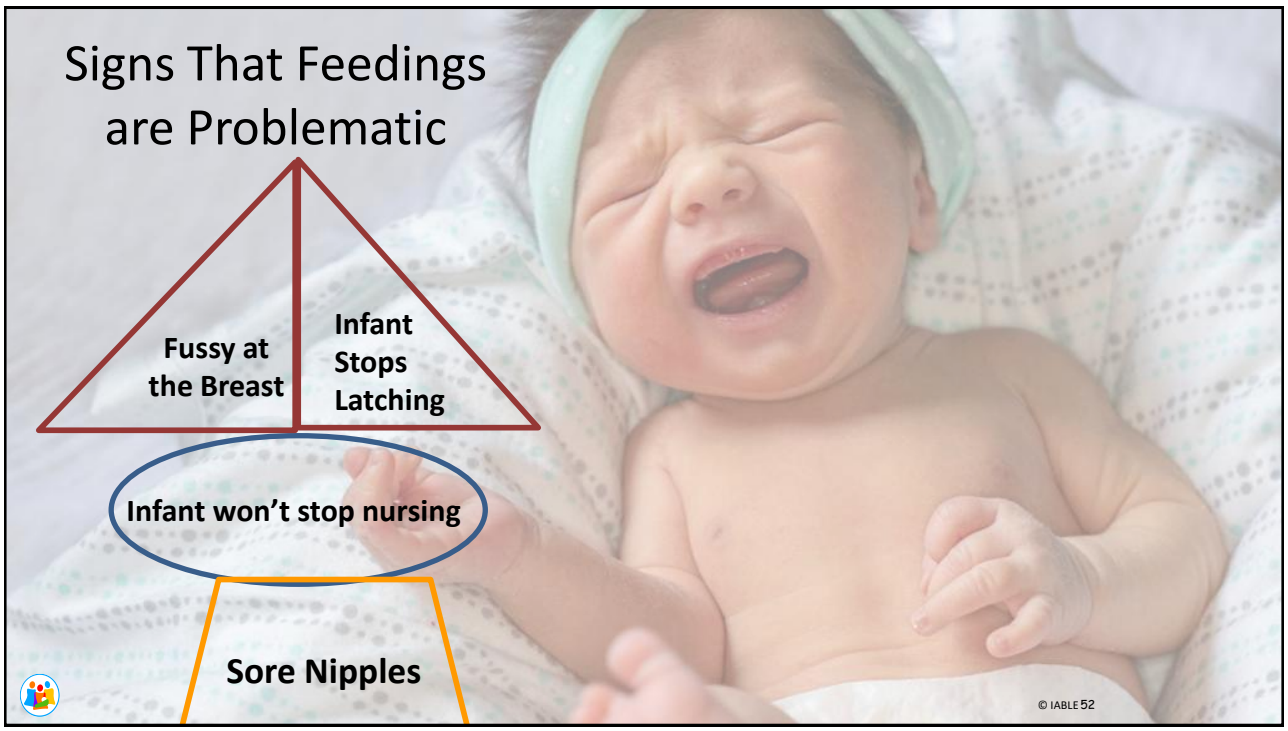
Signs That Feedings are Problematic



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Triage Tool – Infrequent Stools Group 1

53

- You are a first-time parent
- Your baby is 3 weeks old, and has not stooled for 3 days
- The baby seems hungry and wants to nurse all the time
- You are worried about the infrequent stools. You have read that a drop in the number of stools can be a sign of not having enough milk.

54

Infant Infrequent Stools

(Name of baby) is now '__' (DAYS/WEEKS/MONTHS) old.

Is the baby is under 2 weeks old?

No

Yes

Recommendation:

The baby needs to see their physician for a visit and weight check.

Are all of the following true?

- **Has the baby been eating well?**
- **Is the baby content after feedings?**
- **Has the number of wet diapers stayed the same?**
- **Is the baby nursing at their normal frequency or more often?**

Yes → Advise that a decrease in stools at 2-3 weeks, 5-6 weeks, and at around 12 weeks is common before a growth spurt. Usually the baby is hungrier than usual during these times. Recommend a weight check to verify adequate weight gain.

No

If No to any of the above, the baby should come in for a weight check. The concern is that infrequent stools in a breastfed infant can indicate insufficient breastmilk intake.

55

Counseling the Parent Who Calls about Infrequent Stools

- Does the parent have concerns that could lead to weaning?
- What are ways to reassure this parent that the infrequent stools is not a problem?

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Nipple Concerns

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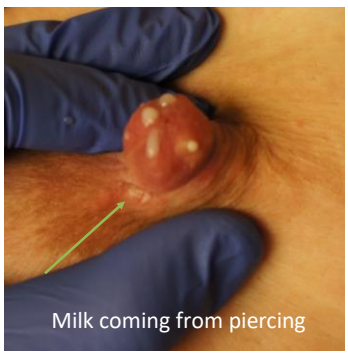

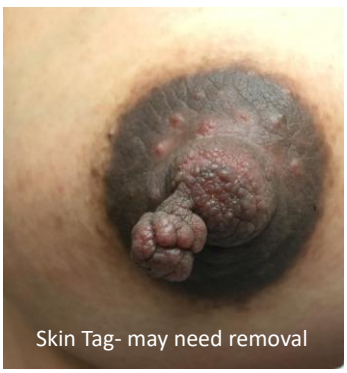

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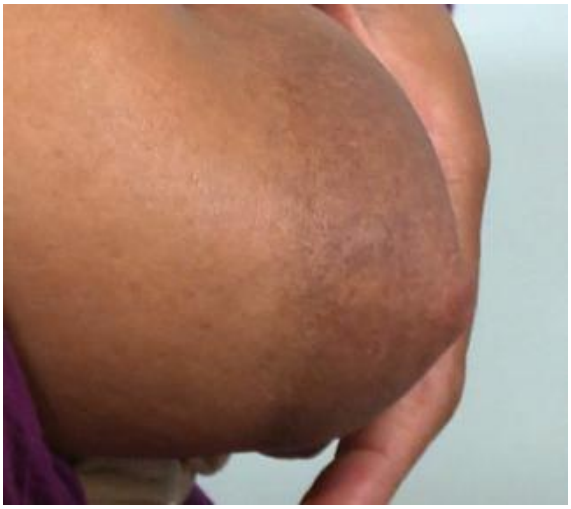

Flat Nipples Do Not Need Special Preparation

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Conclusions- Session 2

- Understanding basic anatomy and physiology of breastfeeding and lactation helps with problem solving.
- There are several nursing positions, and all have in common an appropriate alignment for an ideal latch.
- Infants are individuals with different feeding patterns. Parents need help identifying feeding patterns that are successful.

60

An overweight pregnant woman reports that her breasts didn't grow during pregnancy. You advise:

A. She should be followed carefully postpartum to make sure that her milk production becomes established.
B. She has a high likelihood of not making enough milk. She may want to consider not nursing.
C. Her breasts probably didn't grow because she has not gained much weight in pregnancy. She should be fine.
D. B&C

61

A pregnant person expresses concern about chestfeeding because 1 nipple is inverted. You advise:

A. The individual should start rolling out their nipple on a regular basis.
B. Usually babies latch without difficulty despite an inverted nipple.
C. It might be hard for the baby to latch, so they should bring a nipple shield to the hospital.
D. A&C

62

You are counseling a first-time pregnant mom at 24 weeks and ask about her breast changes thus far. She has not noticed much. You advise:

A. Let's wait and see how things go. Please make sure that your baby is followed closely for weights during the first week.
B. There is a very likely chance that you won't make enough milk. It is best to assume that you will need to give formula.
C. Maybe your breasts are not done growing yet.
D. A&C

63

A pregnant person is leaking colostrum during the 8th month of pregnancy. You advise:

A. Good for you, it means that you will have plenty of milk.
B. I hope you don't leak too much and lose all of your colostrum before the baby is born.
C. This is normal, use pads as needed.
D. A&C

64

Mom calls concerned about her 4 week old baby. He is popping on and off the breast and will only feed for only a short time. You advise:

A. The baby might be uncomfortable. Try to switch positions. Call us back if this does not help.
B. Please bring the baby in for a weight check, and to be seen by a knowledgeable professional for a feeding assessment.
C. It sounds like your production is low, give a bottle of formula after nursing.

65

Mom calls at 3 weeks to say that her 100% human milk-fed baby is 'constipated', no stool for 3 days. The baby has been feeding often, a little fussy, no other illness symptoms. Possible reasons include:

A. Insufficient milk intake
B. Bowel obstruction
C. Growth spurt
D. It is common, the baby needs karo syrup.
E. A&C

66

A pregnant mom has a history of breast cancer and radiation to the R breast. She can safely be told that she should not expect much milk from the R breast.

A. True
B. False

67

You are seeing a 5 week old infant who is nursing well, and gaining weight well. Mom is concerned that the infant constantly feeds in the evening, and she wonders if she should supplement because her breasts feel empty in the evening. You advise:

A. Start with a cows- milk based formula, and supplement after the baby is done nursing.
B. It is common for the milk production to be lower in the evening than am. Try pumping after the first 1 or 2 morning feeds and refrigerate the milk for evening supplementation as needed.
C. Your baby is just fussy, give the baby a pacifier or try other means to calm the baby.

68

Mom calls and is worried because their 10-day old baby won't nurse for more than about 8 minutes on each side. She is worried that the baby is not getting enough calories. You advise:

A. Come in to be seen for a weight check, so that we can watch the baby nurse.
B. She should pump after feeding and supplement the baby with expressed breastmilk.
C. As long as the baby is happy with at least 5 stools a day and wet diapers, nothing to worry about.
D. The baby sounds weak and should be seen ASAP.

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