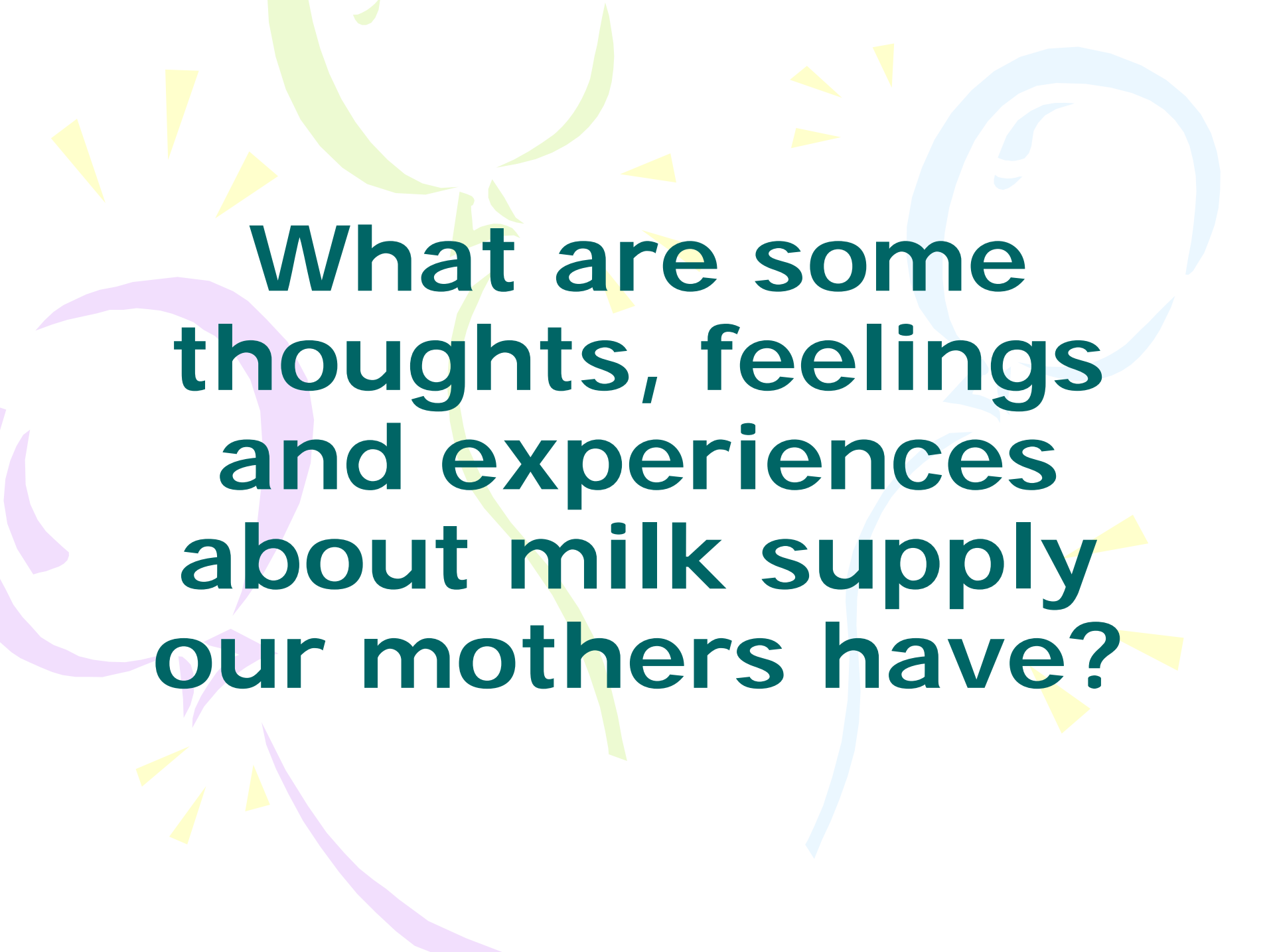


# Making Milk 101 Staff Training Facilitator's Guide



**PHFE-WIC Program**

**This training is available for download  
at [www.phfewic.org/Special.htm](http://www.phfewic.org/Special.htm)**

The background features several large, overlapping, curved shapes in shades of light green, light blue, and light purple. Scattered throughout are numerous small, yellow, triangular shapes, some pointing upwards and some downwards, resembling confetti or starbursts.

**What are some  
thoughts, feelings  
and experiences  
about milk supply  
our mothers have?**

# Normal Behaviors that Worry Breastfeeding Mothers

- Infant wanting to feed frequently
- Infant crying/fussy between feeds
- Breasts are soft or seem “empty”
- Sleeps for a relatively short period of time (<2hrs.) between feeds
- Milk appearance is watery or “thin”
- Mother tries to pump & she pumps what she thinks is a small amt of milk

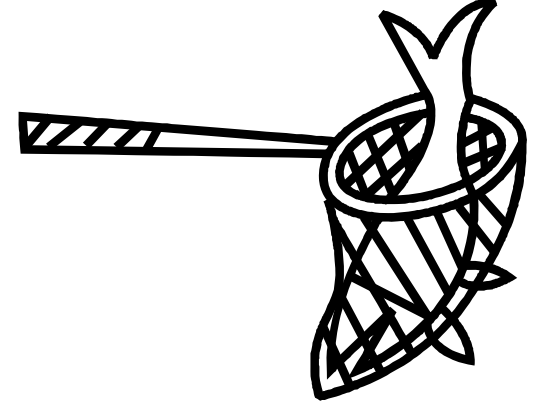


# Welcome to Milk Making 101!

- How Mom's Body Makes Milk
- The Let-Down Reflex
- Different Days, Different Amounts
- Early Feedings
- Poop is Precious!
- Newborn Stomachs...Revisited!
- Work the Breasts!
- Milk Production: Fast or Slow?
- When is enough, ENOUGH?



# Our Purpose

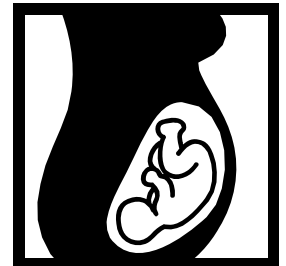


Our goal is that you understand the milk making process. This will help you share the concept with participants.



# When does a mother have breastmilk?

- Breastmilk is available as soon as the baby is born (or even before!).
- Breastmilk production occurs in small volumes (as colostrum) during the 2nd trimester beginning at 16-22 weeks. (Lactogenesis I)



# When does a mother have breastmilk?...cont.

Breastmilk production is very limited until ...

Placenta is delivered and it no longer produces hormones like progesterone



Progesterone levels in mom's body drop because no longer produced by the placenta

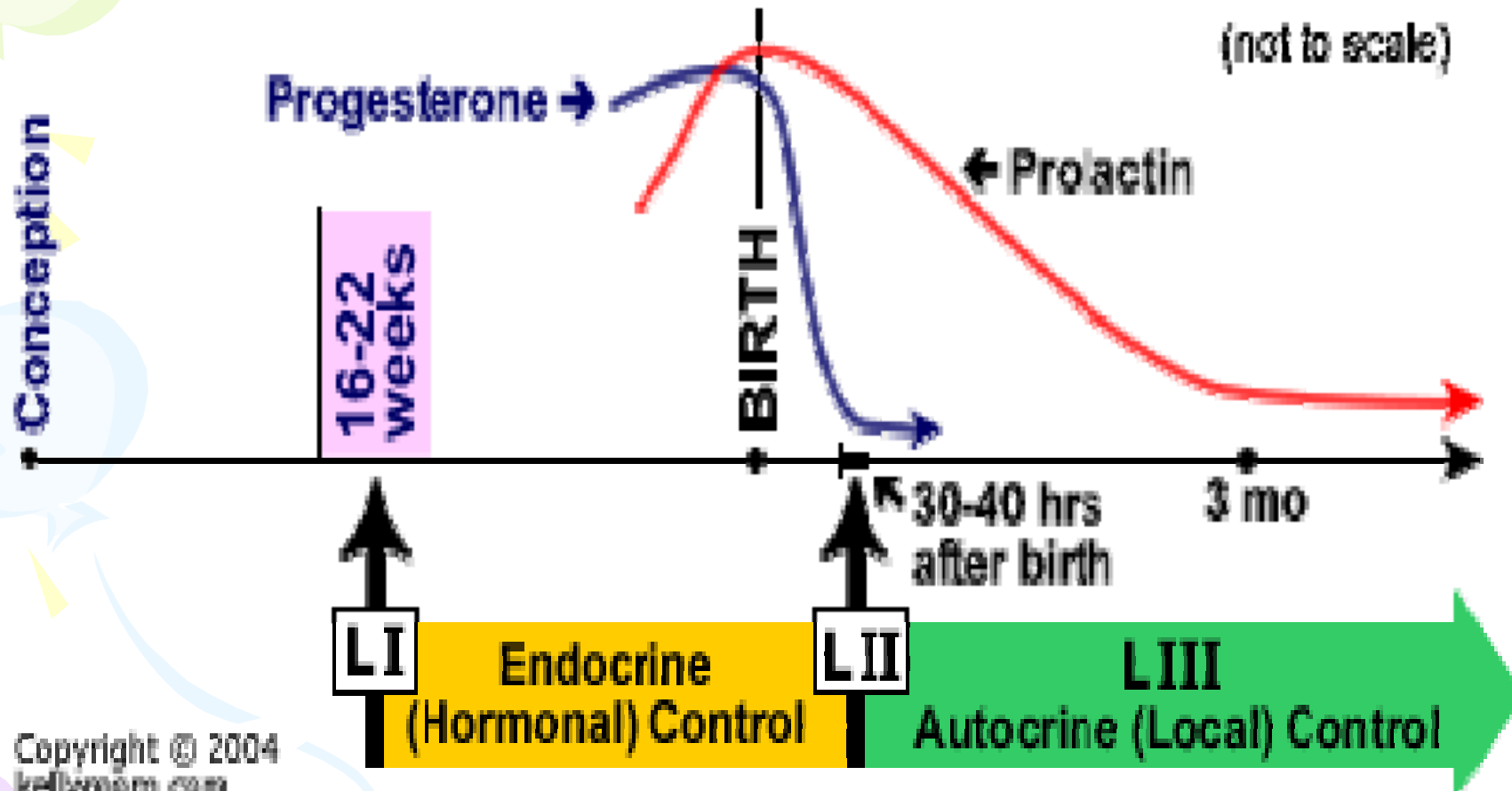


This allows mom's body to increase the volume of milk around 48-72 hours later



# Milk Production and Milk Maintenance

- Around 48-72 hours postpartum mom's body begins to produce an increased volume of milk. (Lactogenesis II)
- Women refer to it as their milk "coming in", but it is actually just an increase in milk supply.
- If a mother stimulates her breasts consistently and adequately over the next week the milk continues to change into mature milk and the volume continues to increase. Mother enters the maintenance phase. (Lactogenesis III)



**LI: Lactogenesis I, LII: Lactogenesis II, LIII: Lactogenesis III**



# The Let-Down Reflex: The Body's Response to the Baby's Suckling

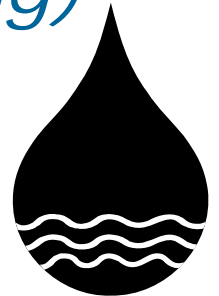
**Infant suckling stimulates the nerve endings in the nipple and areola**

This signals the pituitary gland in the brain to release two hormones:

- **Prolactin** causes your alveoli to take nutrients (proteins, sugars) from your blood and turn them into breast milk.
- **Oxytocin** tells the cells around the alveoli to contract and eject your milk down the milk ducts.

# The Let-Down Reflex...cont.

- The passing of the milk down the ducts is called the "**let-down**" reflex.
- Let-down is demonstrated in numerous ways including:
  - *The infant begins to rapidly suck and swallow.*
  - *Milk may drip from the opposite breast.*
  - *The mother may feel a tingling or a full sensation (after the 1st wk of nursing) in her breasts or uterine cramping.*
  - *Mothers may feel thirsty.*





# More on Let-Downs...

There may be many let-downs during a feeding, of which a mother may or may not be aware.

- Some mothers do not feel their let-downs at all

- Mothers can have numerous let-downs in 1 feeding

(we've counted up to 6-7!)

# Different Days, Different Amounts

You won't see it and you can't measure it,  
however, research confirms that:

		<b>BREASTS</b>	
<b>CRITICAL PERIOD FOR MILK DEVELOPMENT</b>	Day 1	2 oz	SOFT
	Day 2	3-4 oz	SOFT
	Day 3-5	14-18 oz	FULL
	Day 7-10	20-24 oz	SOFT-FULL
	Day 14	24-30 oz	SOFT
	Day 40	30 oz	SOFT
	Twins	50 oz	SOFT

# Importance of Early Stimulation of the Breast

- Frequent stimulation of the breast early on is critical for the baby & the development of future milk supply.

– *Lactation hormones are produced*

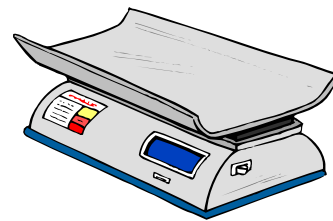
– *Reduces mother's blood loss*

– *Increased rate of milk production*

– *Baby loses less weight*

– *Stimulates digestion & expels meconium*

– *Attachment & bonding are enhanced*





# Impact of Early Bottles

- Decrease in mother's milk supply
- Nipple confusion &/or Flow Preference
- Changes in the gut flora of the baby's intestines
  - The GI tract of babies who receive a formula bottle in the 1<sup>st</sup> 7 days may never fully recover (See "Just One Bottle" by Marsha Walker)
- Greater chance of allergies or digestive problems

The background features several large, overlapping, colorful swirls in shades of green, purple, and blue. Scattered throughout are numerous small, yellow, starburst-like shapes, some pointing towards the text and others pointing away, creating a dynamic and celebratory feel.

**Breastmilk...**

**You can't see it,  
can't measure it...**

**So, how do you  
know it is there?**



# Poop Is Precious!

- Days 1-2: 1-2 black, tar-like stools
- Days 3-4: 3-4 green transitional stools
- Days 5+: 4 or more yellow seedy stools
- Days 40+: 3-4 yellow seedy stools\*
- \*baby may skip a day or two during growth spurt



# Newborn Stomach Sizes...Revisited!



- The first day of life the stomach is the size of a marble and walls of the stomach are stiff and are not able to stretch much.
- Stomach emptying is slow and there can be regurgitation if the baby is fed too much.
- During the next few days it increases slowly in size as it begins to stretch more and therefore it can handle an increasingly larger volume.

# The Milk-Making Factory

- The breasts are NEVER empty!
- Even the most efficient and milk-guzzling baby is unable to remove more than 60-70% of the milk available in the breast at any one time.



# Time to Workout!

**What needs to happen so I can keep the milk flowing?**

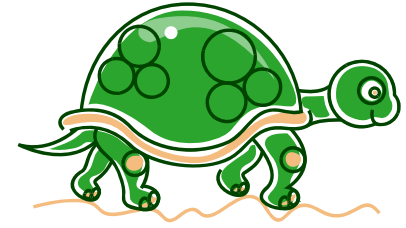
*Work those breasts!*



- Breasts fill back up to the degree that milk was removed.
- 9-12 feedings/24 hrs are needed to keep the breast stimulated.



# Fast or Slow?



- The speed of breastmilk production depends on how much milk is in it.
- Milk collects in mom's breasts between feedings.
- A full breast produces milk more slowly.

What are some real life examples where this concept is true?

# How to Increase Milk Supply

- Remove milk from the breasts more frequently (by nursing more often and/or adding pumping sessions between nursing sessions)
- Remove milk thoroughly from the breasts at each session.

## ***To better remove milk from the breasts:***

- Make sure baby is nursing efficiently.
- Use breast massage and compression.
- Offer both sides at each nursing; wait until baby is finished with the first side *before offering the second.*



# When is enough, ENOUGH?

*Whenever diaper counts and weight gain are appropriate for age.*

## ***WHY?***

What goes in gets used up, if there is any left it becomes a poop.

### ***We Expect:***

Stools 3-4/day

Wet diapers 6-8/day

# Normal Behaviors that Worry Breastfeeding Mothers

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# Application Questions

- When do mom's need to know this information and how will they get it from us?
- Consider the difference between mom not having enough milk vs. baby not removing or receiving milk.
- What would be some of the **red flags** that indicate an exclusively BF baby IS NOT getting enough milk?

