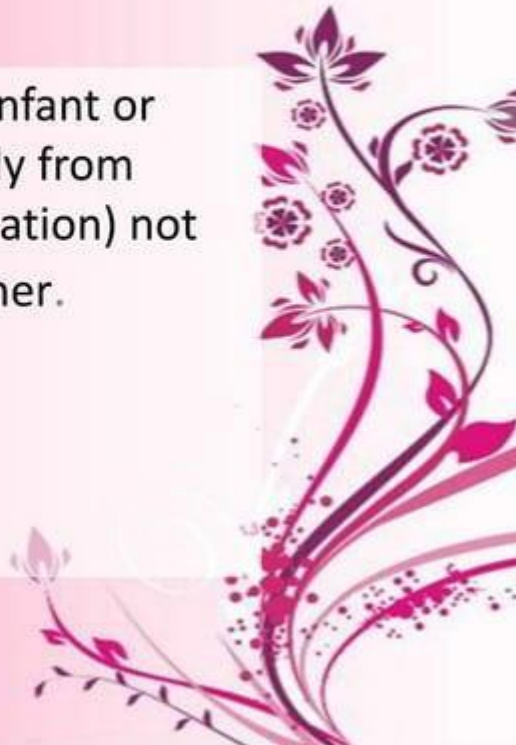


BREASTFEEDING

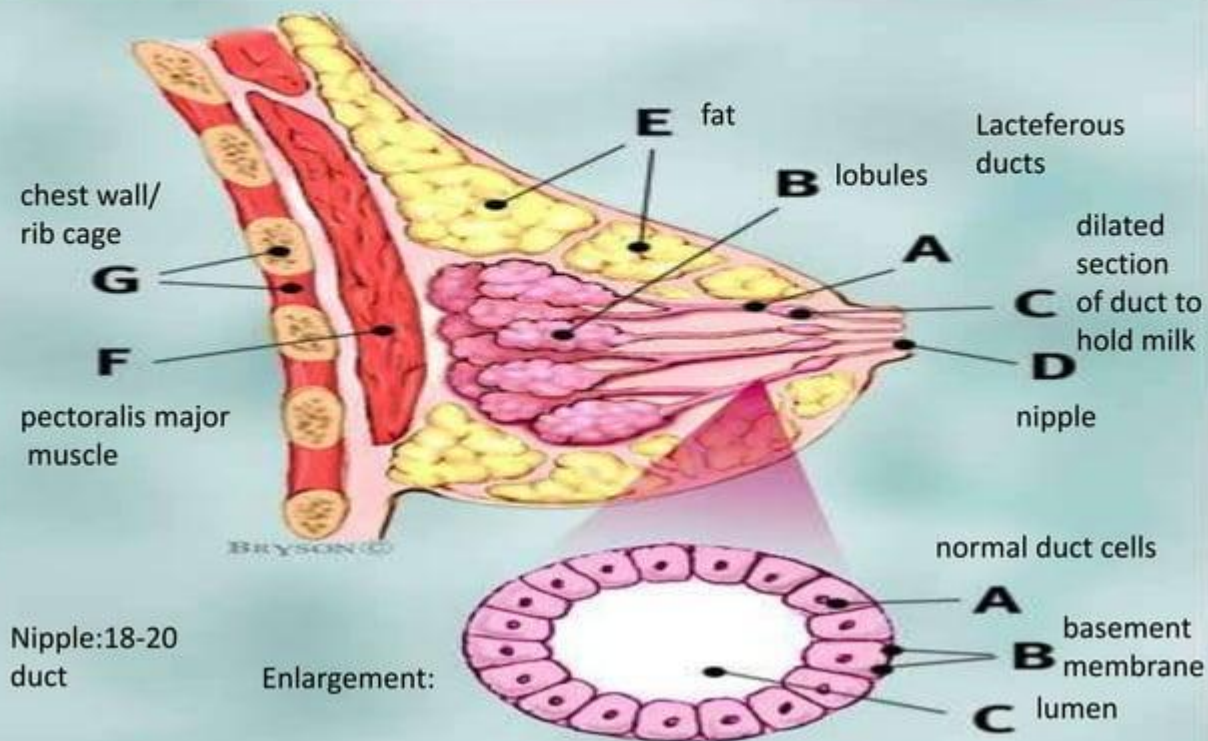


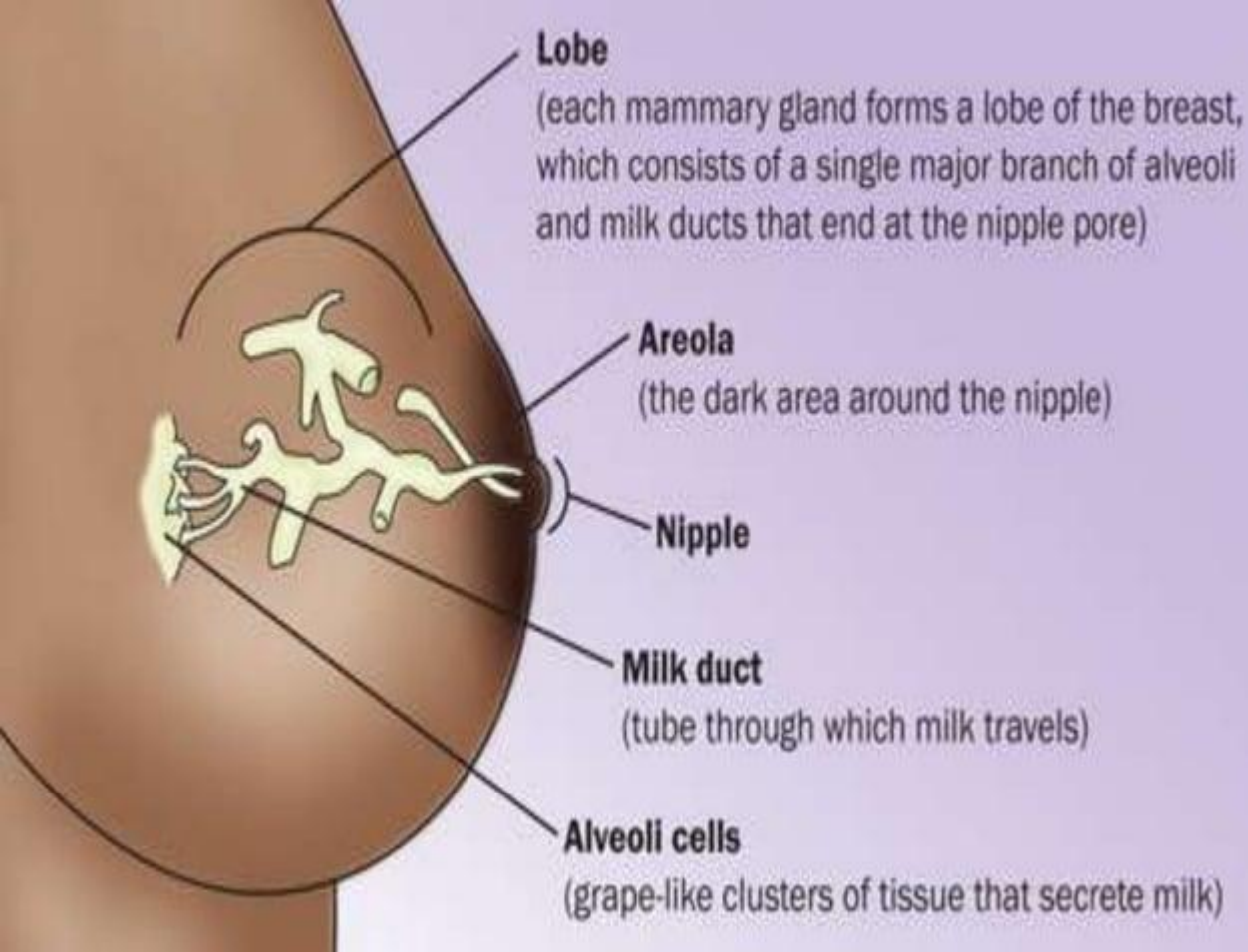
DEFINITION OF BREASTFEEDING

Breastfeeding is the feeding of an infant or young child with breast milk directly from female human breasts (i.e., via lactation) not from a baby bottle or other container.



ANATOMY AND PHYSIOLOGY OF BREAST





CON'T...

- Nipple and areola enlarge and darken during pregnancy.
- Small bump on areola called Montgomery gland.
montgomery gland:
- To soften the nipple
(prepare the nipple for
breastfeed)





The milk ejection reflex

The Prolactin Reflex

1. (Long arrow) Nerve impulses from sucking go to brain
2. (Short arrow) The pituitary gland releases prolactin into the blood
3. (Breast) This causes the alveolar cells to secrete milk and swells the alveoli



The Milk Ejection Reflex

1. (Long arrow) Nerve impulses from sucking go to the brain
2. (Short arrow) The pituitary gland releases oxytocin into the bloodstream
3. (Breast) This causes muscles around the alveoli in the breast to squeeze milk to the nipple

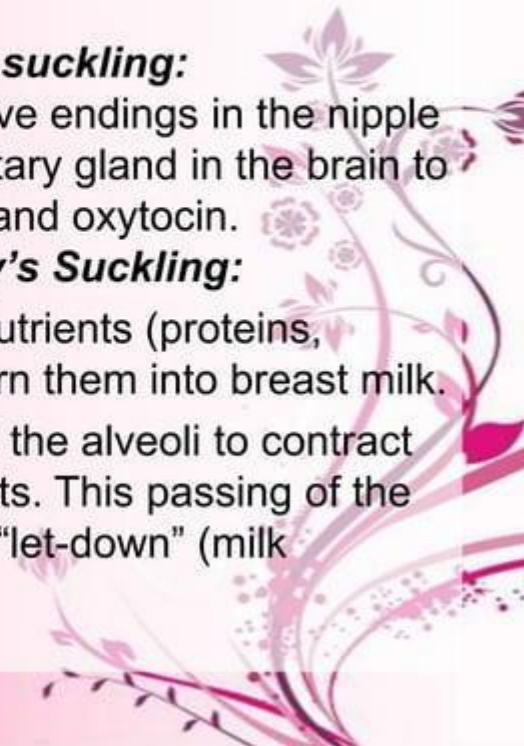
HOW BREAST MILK IS PRODUCED

- **The let-down reflex**

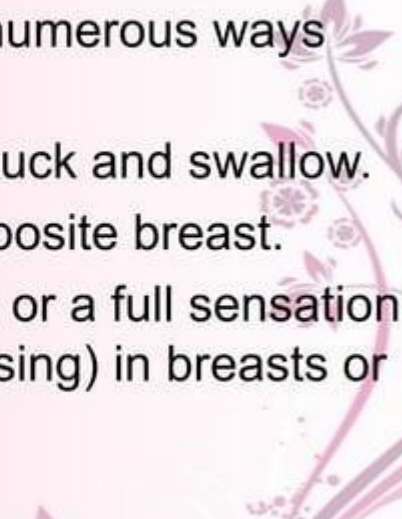
- ***How body responds to baby's suckling:***

Infant suckling stimulates the nerve endings in the nipple and areola, which signal the pituitary gland in the brain to release two hormones, prolactin and oxytocin.

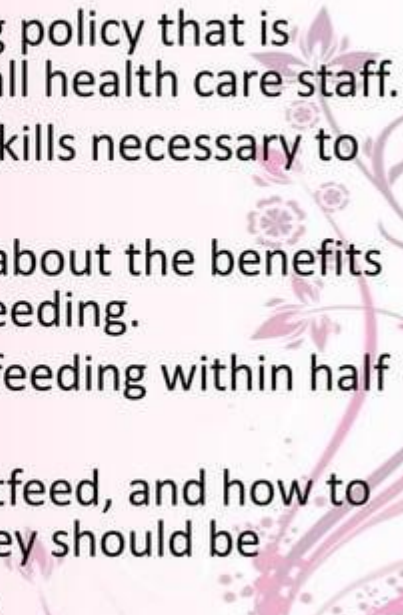
How Breast Responds to Baby's Suckling:

- Prolactin causes alveoli to take nutrients (proteins, sugars) from blood supply and turn them into breast milk.
 - Oxytocin causes the cells around the alveoli to contract and eject milk down the milk ducts. This passing of the milk down the ducts is called the "let-down" (milk ejection) reflex.
- 
- A decorative graphic on the right side of the slide featuring stylized pink and purple flowers, leaves, and swirling vines.

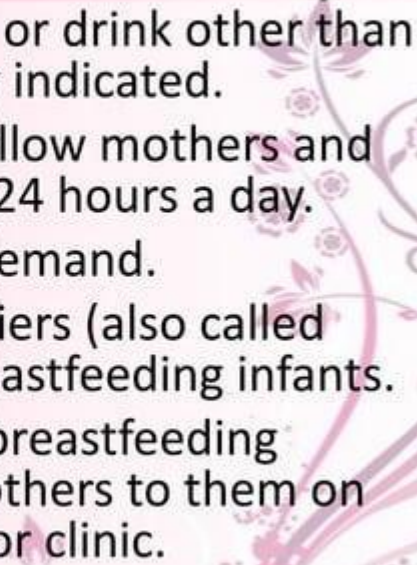
CON'T...

- Let-down is experienced in numerous ways including:
 - Infant begins to actively suck and swallow.
 - Milk may drip from the opposite breast.
 - Mother may feel a tingling or a full sensation (after the first week of nursing) in breasts or uterine cramping.
 - May feel thirsty.
- 
- A decorative graphic in the bottom right corner of the slide. It features a dark pink, swirling vine-like line that curves upwards and to the right. Along this line are several stylized floral elements, including small buds, larger blossoms with multiple petals, and clusters of tiny dots, all in shades of pink and magenta.

10 Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
 2. Train all health care staff in skills necessary to implement this policy.
 3. Inform all pregnant women about the benefits and management of breastfeeding.
 4. Help mothers initiate breastfeeding within half an hour of birth.
 5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling vines.

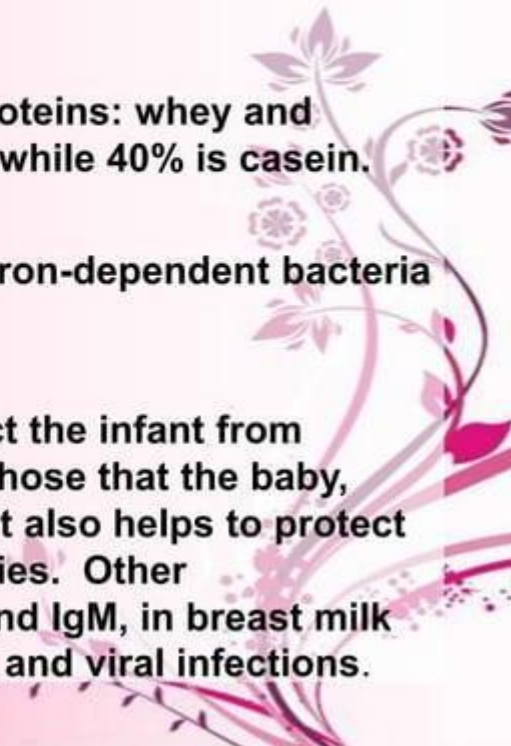
CONT...

6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
 7. Practise rooming-in - that is, allow mothers and infants to remain together - 24 hours a day.
 8. Encourage breastfeeding on demand.
 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling vines.


BREAST MILK CONTENTS

Proteins

Human milk contains two types of proteins: whey and casein. Approximately 60% is whey, while 40% is casein.


- Lactoferrin inhibits the growth of iron-dependent bacteria in the gastrointestinal tract.
 - Secretory IgA also works to protect the infant from viruses and bacteria, specifically those that the baby, mom, and family are exposed to. It also helps to protect against E. Coli and possibly allergies. Other immunoglobulins, including IgG and IgM, in breast milk also help protect against bacterial and viral infections.
- 
- A decorative graphic on the right side of the slide, featuring a stylized pink and purple floral vine with leaves and small flowers, extending from the bottom right towards the top right.

BREAST MILK CONTENTS

- Lysozyme is an enzyme that protects the infant against E. Coli and Salmonella. It also promotes the growth of healthy intestinal flora and has anti-inflammatory functions.
 - Bifidus factor supports the growth of lactobacillus that protects the baby against harmful bacteria by creating an acidic environment where it cannot survive.
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling lines.

CONT'

Fats

- It is necessary for brain development, absorption of fat-soluble vitamins, and is a primary calorie source.
 - Long chain fatty acids are needed for brain, retina, and nervous system development. They are deposited in the brain during the last trimester of pregnancy and are also found in breast milk.
- 
- A decorative graphic on the right side of the slide, featuring a stylized pink and purple vine with leaves and small flowers, extending upwards and outwards.

CONT'

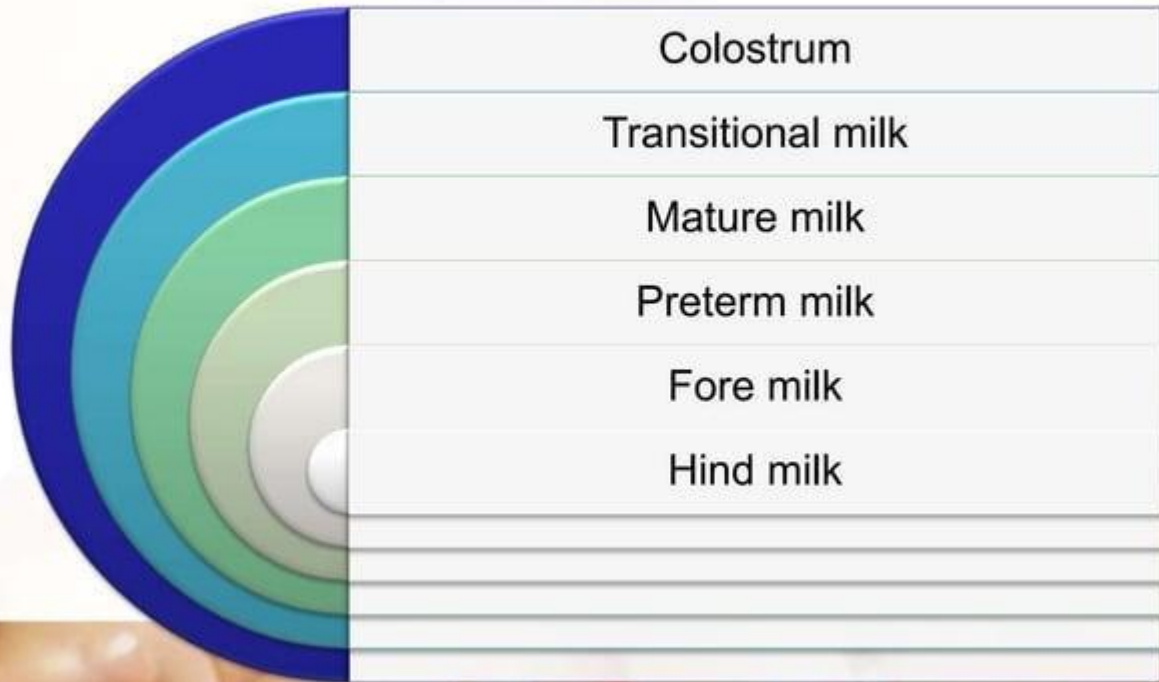
Vitamins

- The amount and types of vitamins in breast milk is directly related to the mother's vitamin intake. Fat-soluble vitamins, including vitamins A, D, E, and K, are all vital to the infant's health. Water-soluble vitamins such as vitamin C, riboflavin, niacin, and panthothenic acid are also essential.

Carbohydrates

- Lactose is the primary carbohydrate found in human milk... Lactose helps to decrease the amount of unhealthy bacteria in the stomach, which improves the absorption of calcium, phosphorus, and magnesium. It helps to fight disease and promotes the growth of healthy bacteria in the stomach.

TYPES OF BREAST MILK



COLOSTRUM

- Is milk secreted during first week after delivery
- Yellow, thick, has more antibodies and WBC
- Secreted in small quantity
- High protein
- NEVER BE DISCARDED

TRANSITIONAL MILK

- Milk secreted during two weeks
- Contain immunoglobulin and low protein content
- Increase fat and sugar content



MATURE MILK

- Follows transitional milk
- More thinner and watery
- Contains all essential nutrients for growth of the baby

PRETERM MILK

- Is breast milk of a mother who delivers prematurely
- High quantity proteins, sodium, iron and immunoglobulins



FORE MILK


- Milk secreted at the start of a feed
- Watery, rich in proteins, sugar, vitamins, minerals, water
- Satisfied the baby's thirst

HIND MILK

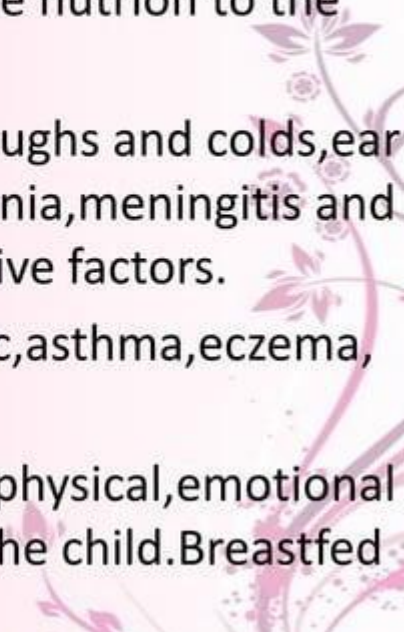
- Comes later towards the end of a feed
- Richer in fat content
- Provides more energy, satisfies baby's hunger
- For optimal growth baby needs both fore and hind milk
- Baby be allowed to empty one breast fully first
- Baby receives only foremilk cry excessively



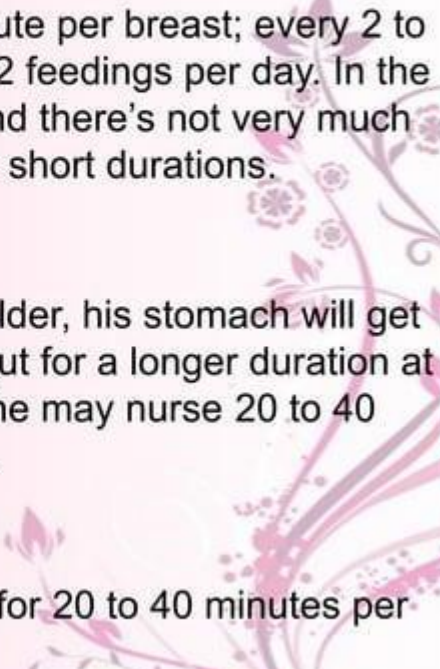
BENEFITS OF BREASTFEEDING TO MOTHER

1. This promotes mother and child bonding.
 2. It prevents uterine bleeding in the mother after delivery.
 3. This is a natural form of Family Planning.
 4. This reduces the risks of breast and ovarian cancer in the mother.
 5. This saves time and precious expenses need not be used for buying milk powder and health care.
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling vines.

BENEFITS BREASTFEEDING FOR BABY

1. This provides the best possible nutrition to the young child.
 2. It reduces the incidence of coughs and colds, ear infections, bronchitis, pneumonia, meningitis and diarrhoea through its protective factors.
 3. It protects the child from colic, asthma, eczema, nose and food allergies.
 4. It is essential for the optimal physical, emotional and mental development of the child. Breastfed child are also smarter.
- 
- A decorative graphic on the right side of the slide, featuring a pink and purple floral design with swirling vines and small flowers.

HOW LONG TO BREASTFEED

- **Newborns** can nurse for 5 to 10 minute per breast; every 2 to 3 hours. This comes to about 10 to 12 feedings per day. In the beginning, there is only colostrum, and there's not very much of it, so be ready to feed often but for short durations.
 - **One month or more:** as baby gets older, his stomach will get larger. He will nurse less frequently but for a longer duration at each feeding session. For example, he may nurse 20 to 40 minute per breast every 3 to 4 hours.
 - **By 6 months**, Baby may breastfeed for 20 to 40 minutes per breast; 3 to 5 times per day.
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling lines.

CONTRAINDICATION TO BREASTFEEDING

- Active /untreated TB
- Mom takes radioactive compound(cancer for chemo)
- Mom take illegal drug
- HIV infection



THE PROPER WAY TO BREASTFEED

- Stimulate the baby mouth to open by touching the nipple.
- Let the baby open the mouth wider.
- Bring the baby near to the breast
- Latch the baby to the breast



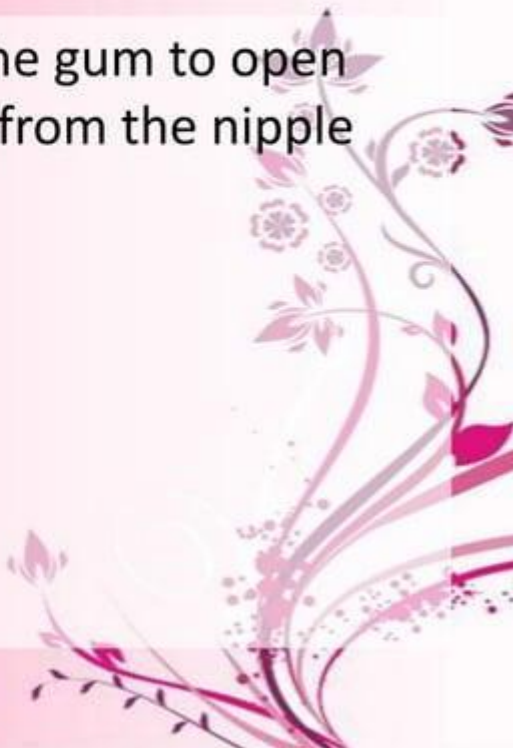
PROPER LATCH-ON

1. Baby open the mouth wider.
2. The chin touching the breast
3. The chick looked flatulent.
4. The lip are flanged out.
5. The breast looked full and round
6. Can hear the sound suck and swallow
7. The nipple looked long and round after breastfeed.



DISLATCH BABY AFTER BREASTFEEDING

- Used little finger press on the gum to open the baby mouth to dislatch from the nipple



POSITIONING OF BREASTFEEDING



Side lying position



Football hold position



Cradle hold position



Cross cradle hold position




Saddle Hold



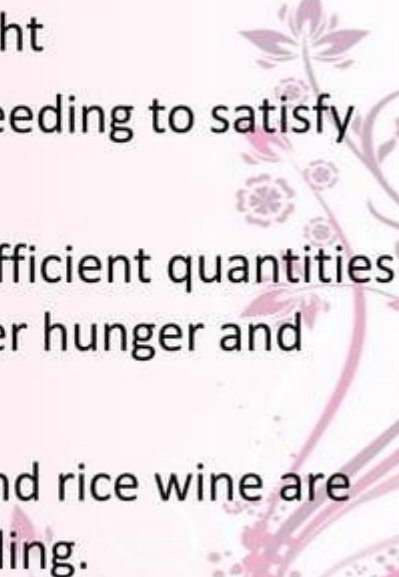
Twin Football Hold



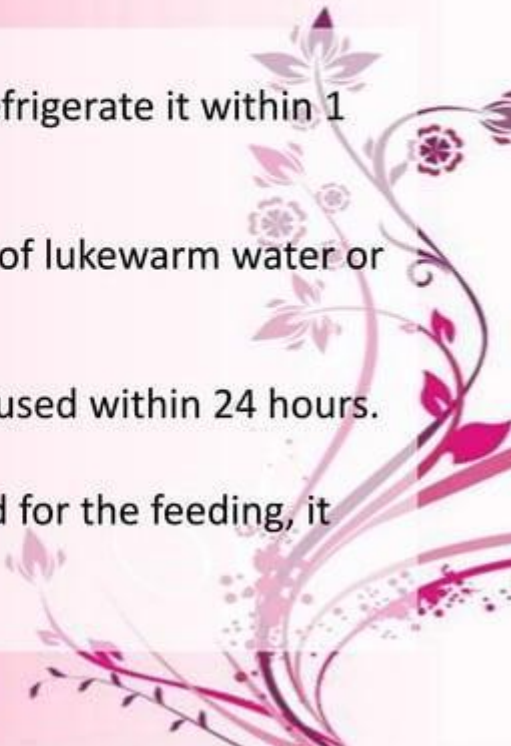
SIGNS THAT THE BABY IS GETTING ENOUGH BREAST MILK

1. He is contented for 1-2 hours after a feed
 2. He passes clear dilute urine 5-6 times a day
 3. He passes bright yellow watery stools 6-8 times a day
 4. He regains birth weight after 2weeks
- 
- A decorative graphic on the right side of the slide, featuring stylized pink and purple flowers and swirling lines.

BREAST MILK SUPPLY CAN BE INCREASED BY:

1. Frequent feeds day and night
 2. Allowing unlimited breastfeeding to satisfy baby's suckling needs
 3. Mother to eat and drink sufficient quantities to satisfy baby's suckling her hunger and thirst
 4. Cultural foods like ginger and rice wine are compatible with breastfeeding.
- 
- A decorative illustration of a pink and purple vine with leaves and flowers, located on the right side of the slide.

BREAST MILK STORAGE/THAWING:

- ☐ Unless being used immediately, refrigerate it within 1 hour.
 - ☐ Thaw/warm the milk in container of lukewarm water or running water.
 - ☐ Once milk is thawed, it should be used within 24 hours.
 - ☐ Once milk is warmed and not used for the feeding, it should be discarded.
- 
- A decorative graphic on the right side of the slide, featuring a stylized pink and purple floral design with leaves and flowers, set against a background of soft, overlapping pink circles.

Place of storage	Temperature		Maximum storage time
In a room	25°C	77°F	Six to eight hours
Insulated thermal bag with ice packs			Up to 24 hours
In a refrigerator	4°C	39°F	Up to five days
Freezer compartment inside a refrigerator	-15°C	5°F	Two weeks
A combined refrigerator and freezer with separate doors	-18°C	0°F	Three to six months
Chest or upright manual defrost deep freezer	-20°C	-4°F	Six to twelve months

COMPLICATION

- ❖ Breast Pain
- ❖ Biting
- ❖ Too much milk
- ❖ Mastitis
- ❖ Breast abscess
- ❖ Breast engorgement
- ❖ Sore nipple



CONT'

Sore, Cracked Nipples

The causes of sore and/or cracked nipples includes :

- Improper latching on by the baby
- Thrush
- Dry skin
- Dermatitis
- Biting



NUTRITION WHILE BREASTFEEDING:

- Eat a well-balanced, varied diet
- Breastfeeding mothers burn 500+ calories daily
- Check with doctor about taking a multivitamin with iron
- Drink eight glasses of fluid (eight ounces each) daily
- Avoid or limit caffeinated drinks to one to two cups daily
- Avoid alcohol or limit to one serving (six ounces of wine or 12 ounces of beer) on a special occasion





Thank you