

# SESSION 3:

## PROMOTING BREASTFEEDING DURING PREGNANCY

### Breastfeeding Promotion and Support

#### A Training Course for Health Professionals

*Adapted from the Baby Friendly Hospital Initiative:  
Revised, Updated and Expanded for Integrated Care (Section 3)  
WHO/UNICEF 2009*



# Session Objectives

**At the end of this session, participants will be able to:**

1. Outline the **information needs** for pregnant women.
2. Explain the **unique of breast milk** to pregnant women.
3. Explain the **breast preparation** during antenatal for breastfeeding.
4. Identify women who need **extra attention**.
5. Discuss **breastfeeding** with a pregnant women

Information needs to be discussed with pregnant women.

## **OBJECTIVE 1**

# Discussion With Pregnant Women

- **The aim is to:**
  - educate women about breastfeeding as early as possible.
  - Identify mothers and babies who may be at risk of breastfeeding difficulties.

# Discussion With Pregnant Women

To make **informed decision**, a woman needs:

- Breastfeeding information is accurate and factual.
- Understanding of the info in her situation.
- Confidence to breastfeed or find replacement feeding method as alternative.
- Support to carry out her feeding decision.

***What do you think  
the main points to include in a group  
discussion/health education  
about  
breastfeeding?***

# Antenatal Education

**STEP 3** of **10 steps** to successful breastfeeding states:

*“Inform all pregnant women of the benefits and management of breastfeeding”*



# Inform all pregnant women the benefits and management of breastfeeding

1. The importance of breastfeeding **to the baby.**
2. The importance of breastfeeding **to the mother.**
3. The importance of **skin-to-skin contact.**
4. The importance of **early initiation of breastfeeding.**
5. The importance of **rooming in 24 hours a day.**
6. The importance of **feeding on demand.**
7. The importance of **feeding frequently.**
8. The importance of **good positioning and attachment.**
9. The importance of **exclusive breastfeeding.**
10. The importance of **continuing breastfeeding after 6 months.**

# 1. The importance of breastfeeding to the baby

## Breast milk:

- Provides ideal nutrition.
- Protects against many infections.
- Reduces risk of allergies.
- Reduces risk of conditions such as juvenile-onset diabetes (*in families with a history of these conditions*)
- Reduction of obesity in later life.
- Prevent some infant deaths.

## *Children who **DO NOT** breastfeed or receive breast milk may be at increased risk of:*

- Infections such as diarrhea and gastrointestinal infections, respiratory infections and urinary tract infections.
- Eczema and other atopic conditions.
- Necrotizing enterocolitis in preterm infants.
- Lower developmental performance and educational achievement.
- Ear Infections (otitis media).



## *Children who **DO NOT** breastfeed or receive breast milk may be at increased risk of:*

- Developing juvenile onset insulin dependent diabetes mellitus
- Higher blood pressure
- Obesity in childhood
- Later heart disease
- Dying in infancy and early childhood



## 2. The importance of breastfeeding to the mother

Women who **DO NOT** breastfeed may increase risk of:

- Breast cancer and ovarian cancer.
- Hip fractures (osteoporosis) in older age.
- Retention of fat deposited during pregnancy which may result in later obesity.
- Frequent pregnancies due to lack of child - spacing effect of breastfeeding.
- Fewer opportunities to be close to their baby.

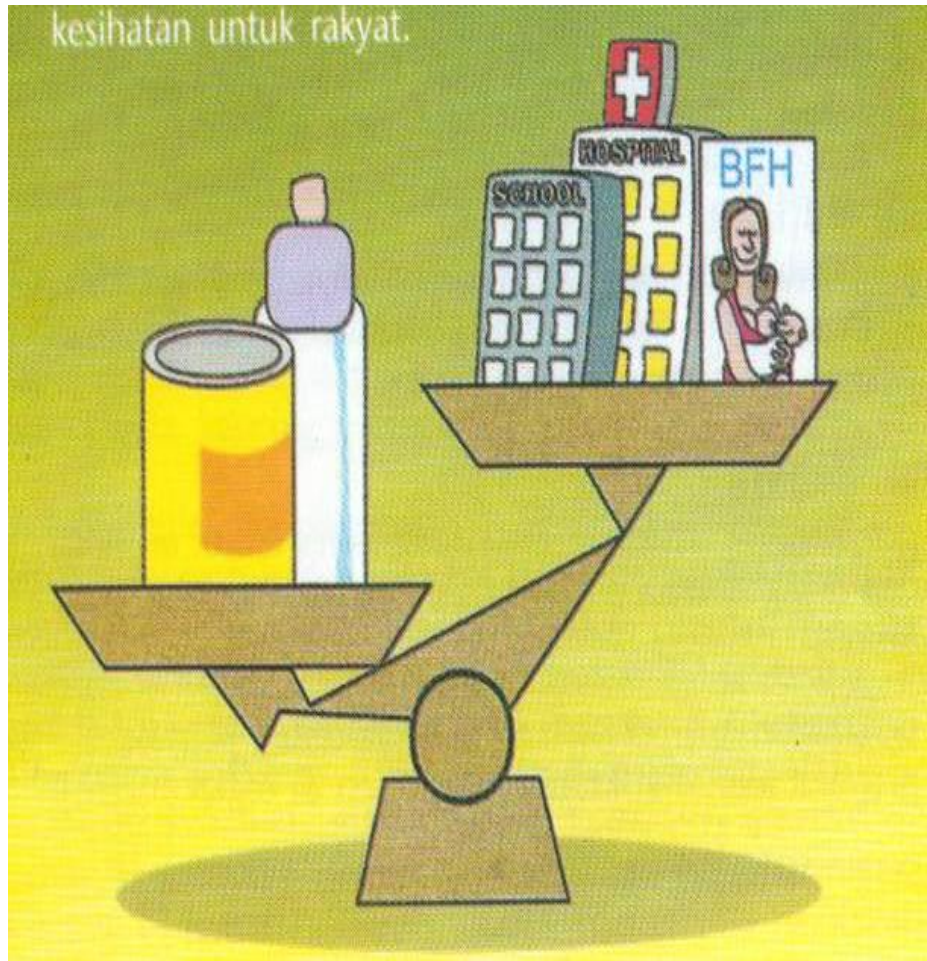


# Other Benefits Of Breastfeeding

- If a baby is **NOT** breastfed:
  - Need to buy replacement milk
    - *expensive*
  - Need time to prepare milk
  - Need to keep feeding equipment clean
  - Loss of income through absence from work to care for ill child



# *Other Benefits Of Breastfeeding*



- Economic.
- Readily available
- Simple; with no equipment or preparation needed

### 3. The importance of skin-to-skin contact

- Keeps baby warm and calm.
- Promotes bonding and helps breastfeeding get started.
- Help the baby learn that the breast is a safe place.
- Enables colonization of the baby's gut with the mother's normal body bacteria gut.
- Assists with metabolic adaptation and blood glucose stabilization in the baby.



## 4. The importance of Early Initiation of Breastfeeding



- To ensure the success of exclusive breastfeeding.
- To ensure baby get enough colostrum.

## 5. The importance of Rooming-in 24 Hours a Day

- Babies sleep better and cry less.
- Mother-baby sleep/awake rhythm would be disrupted if separated.
- Breastfeeding is well established, continues longer and baby gains weight quickly.
- Feeding in response to a baby's cues.
- Mother becomes confident.
- Mother can observe their baby all the time.
- Baby get fewer infections compare to stay in a nursery.
- Promotes bonding between mother and baby.



## 6. The importance of feeding on demand or baby-led feeding

- Babies get more immune-rich colostrum.
- Faster development of milk supply.
- Faster weight gain.
- Less neonatal jaundice.
- Less breast engorgement.
- Mother learns to respond to her baby.
- Easy establishment of breastfeeding.
- Less crying – less temptation to supplement.
- Longer breastfeeding duration.



## 7. The importance of feeding frequently

To ensure baby will get enough milk:

- Feed on demand and not the clock.
- Nurse every chance mother have.
- Express milk after feeding the baby.
- Get enough rest, calories and fluids.
- For working mothers, nurse baby the last thing in the morning and the first thing in the evening.



## 7. The importance of feeding frequently

To ensure baby will get enough milk:

- Do not use pacifiers.
- If possible, use double pump.
  - Pump on one side while feeding baby on the other .
  - Pump more at work.
- Spend weekends by direct feeding child fully. Especially for re-lactating.
- Co-sleep at night.



## 8. The importance of good attachment and positioning

### Position for Mother

- Comfortable.
- Back, feet and breast supported (as needed).



### Position for baby

- Body in line.
- Close to mother's body, facing breast and nose opposite nipple.

(Baby brought to breast, not breast to baby)

- Head and shoulders need to support (premature baby the whole body need to support)

## 9. The importance Exclusive Breastfeeding

- Provides all the nutrients and water that a baby needs to grow and develop in the **first six months**.
- First 6 months means:
  - to the end of **6 completed months** or **28 weeks** or **180 days** (not the start of 6 months).
  - **NO** drinks or food given to baby other than breastmilk.
- Most exclusively breastfed young infants feed at least eight to twelve times in 24 hours, including night feeds.
- Vitamins, mineral supplements or medicines **can be given if needed**.

# ***Exclusive breastfeeding for First 6 months***

## **Any of these will interfere:**

- If baby is given:
  - any drinks or foods other than breast milk.
  - Given pacifier/dummy/soother.
- Limits placed on number of breastfeeds.
- Limits placed on sucking time/length of breastfeed.



# *Exclusive breastfeeding for First 6 months*

## **Few points why it is important:**

- Reduce diarrhea and infectious diseases
- Reduce risk of respiratory infection for baby.
- Reduce infant deaths.
- Get the right antibodies to protect baby from illness.
- Develop jaw, teeth and speech development.



# 10. The importance of continuing breastfeeding after 6 months

## After 6 months:

- Children should receive **complementary food** and continue to breastfeed
- Breastmilk continue to be important, providing 1/3 to ½ the calories for the child at 12 months
- Should be continued **up to 2 years and beyond.**



How breastmilk is unique

## **OBJECTIVE 2**

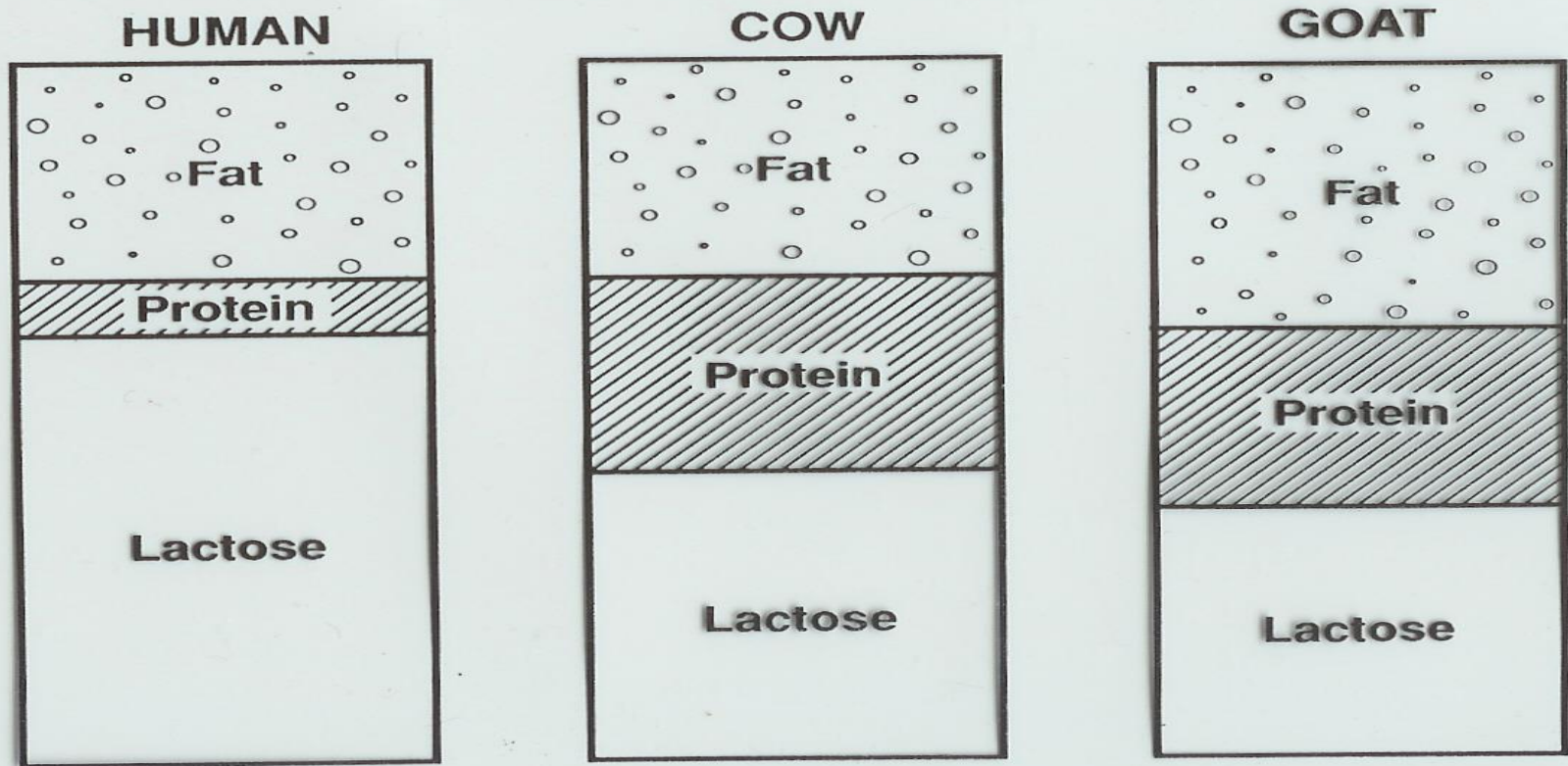
# Superiority of Breastmilk

- Human milk is the "gold standard" for preterm and term infants.
  - Most complete form of nutrition for infants.
  - Protects against bacteria.
  - All breastmilk contents changes time to time.
  - A mother's milk has just the right amount of
    - Fat
    - Carbohydrate
    - Protein
    - Minerals
    - Vitamins
    - Water
- For baby's growth and development

# Composition of Breastmilk

Source	Breast milk	Formula milk
Contaminants	Absent/minimal	High risk
Anti-infective factors	present	Absent
Growth factors	present	absent
Protein	1%-low quality	1.5%-poor quality
Casein	low	high
Fat	Adequate (4%) good quality, has enzymes	Inadequate, no enzymes
Iron	Adequate	Adequate
Vitamin	Adequate	Adequate
Water	Adequate	Adequate

# What can you say about the differences between these milk?

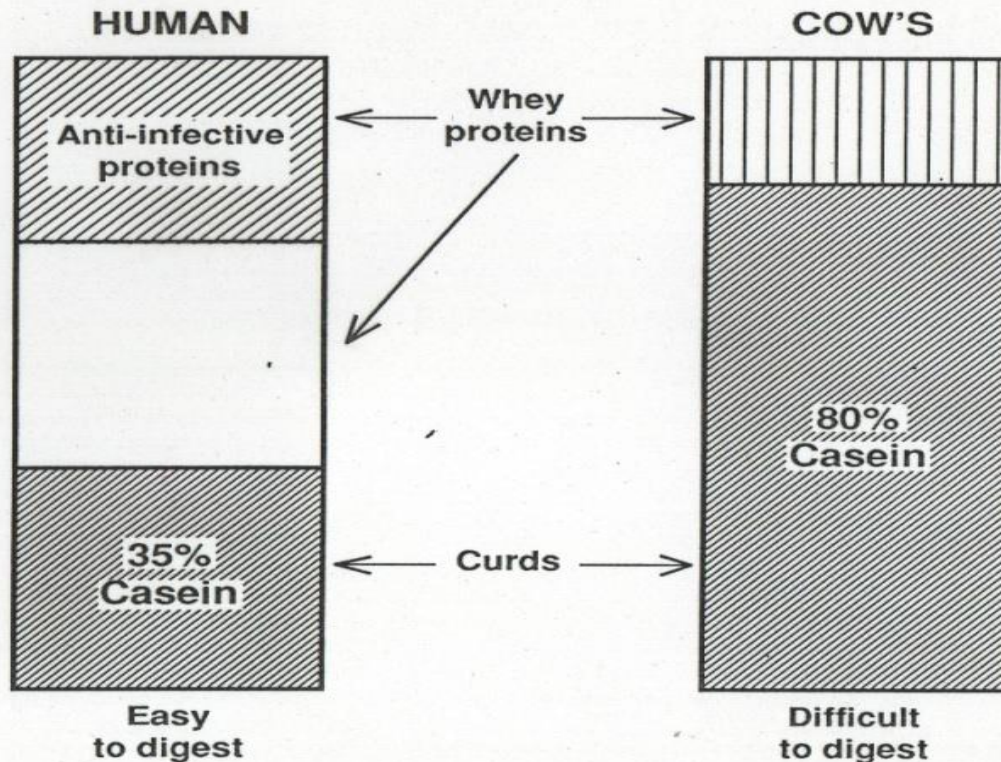


# Protein In Breastmilk

- Perfect for infant growth and brain development.
- It is easy to digest and quickly supply nutrients to baby.
- The level of protein in breast milk is not affected by the mother's food consumption.

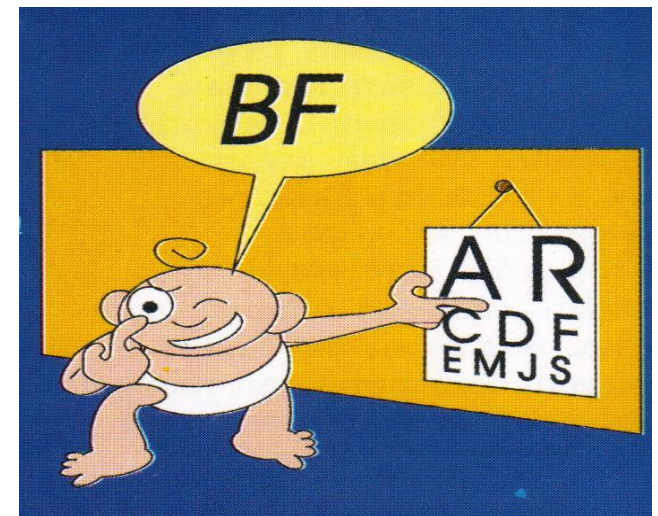
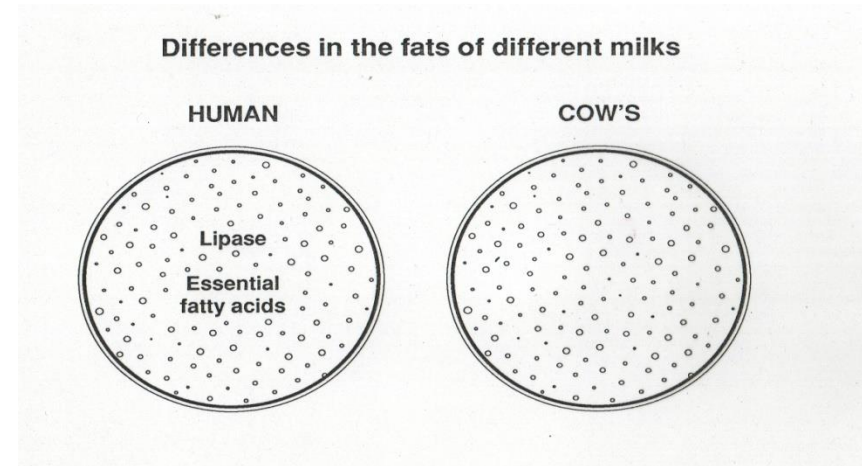
# Protein In Breastmilk

## Differences in the quality of the proteins in different milks



# Fat In Breastmilk

- Main source of **energy**.
- Enzymes (**lipase**) help in digestion of fat to make it quickly available to baby for energy.
- Very **long-chain fatty acids**
  - for brain growth and eye development
  - cholesterol and vitamins.
- High level of **cholesterol** may help the infant to develop body systems to handle cholesterol throughout life.



# Fat In Breastmilk



## Foremilk

- Low level of fat – quenches babies thirsty.

## Hindmilk

- Higher level of fat - satiety.

# Fat In Breastmilk



- Fat content vary from feed to feed.

# Fat In Breastmilk

- The **type** of fat can be affected by the mother's diet, but the **total fat** is not unless mother is malnourished.



# Fat in Artificial Formula

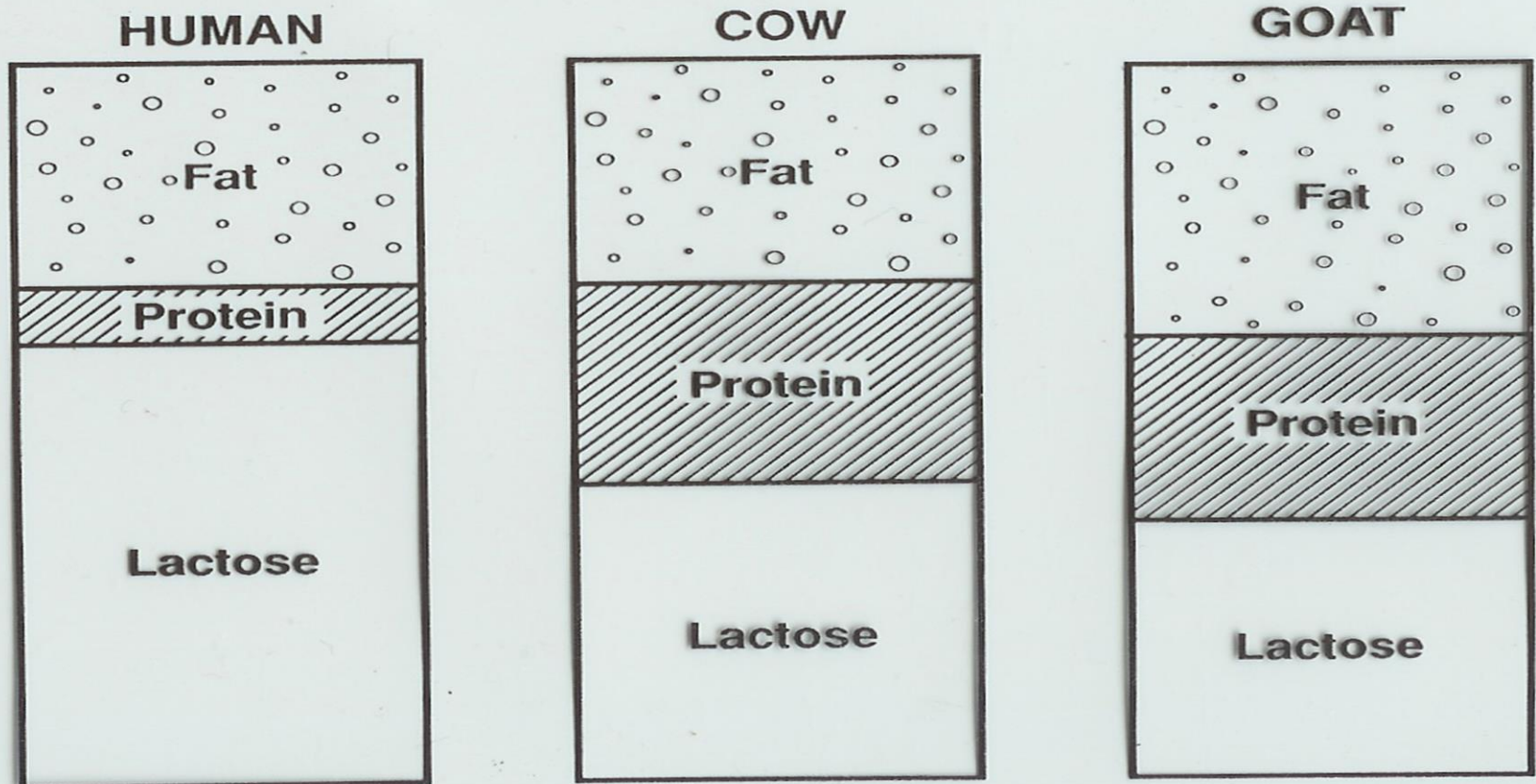
- Lacks digestive enzymes.
- Little or no cholesterol.
- Fatty acids added (some brands only).



# Carbohydrate in Breastmilk

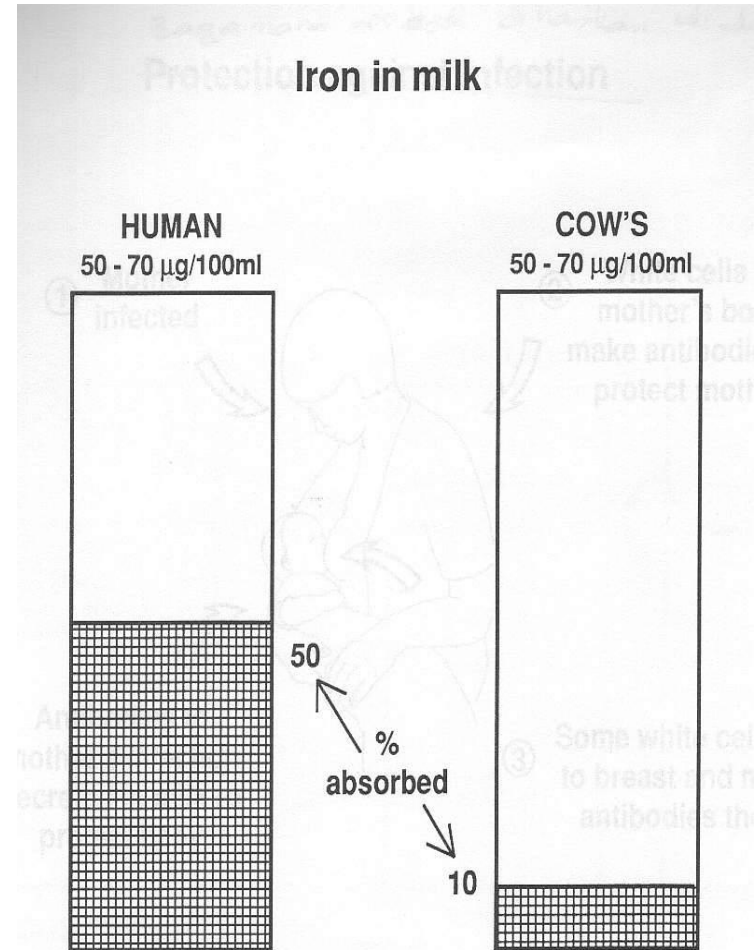
- Lactose is the main carbohydrate:
  - constant through out the day.
  - helps calcium absorption.
  - provides fuel for brain growth.
  - retards the growth of harmful organisms in the gut.
  - digested slowly.
  - lactose in the breastfed baby's stool is not a sign of intolerance.
  - **Not all** artificial formulas contain lactose.

## *What can you say about the differences between these milk?*



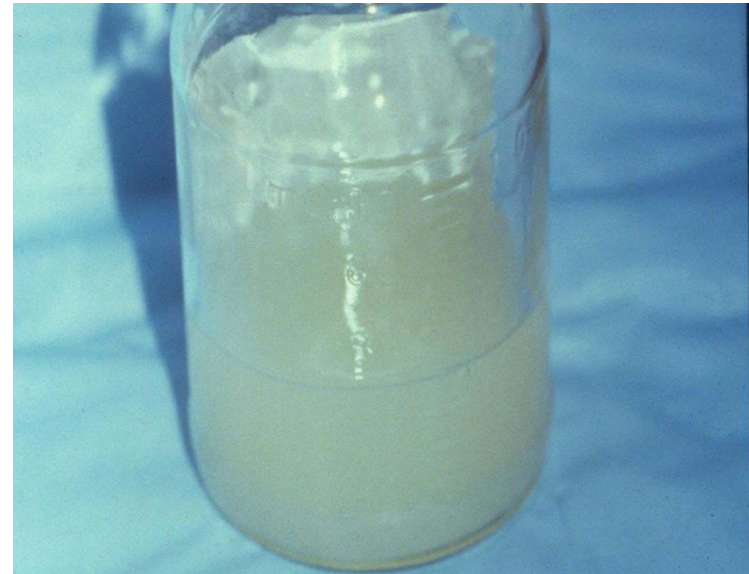
# Iron In Breastmilk

- The amount of iron in breast milk is **low** :
  - **well absorbed** from the baby's intestine if the baby is exclusively breastfed.
- A **high** level of iron added to formula
  - **NOT absorb well.**
  - The excess added iron can feed the growth of harmful bacteria.
- Iron-deficiency anemia is **rare** for 6-8 months exclusively breastfeed baby, healthy and full term.



# Water In Breastmilk

- Breastmilk is very rich in water (88%)
  - no supplemental water even in hot, dry climates.
  - does not overload a baby's kidneys and the baby does not retain unnecessary fluid.
- Giving water or other fluids such as teas, may **disrupt** the breastmilk production.



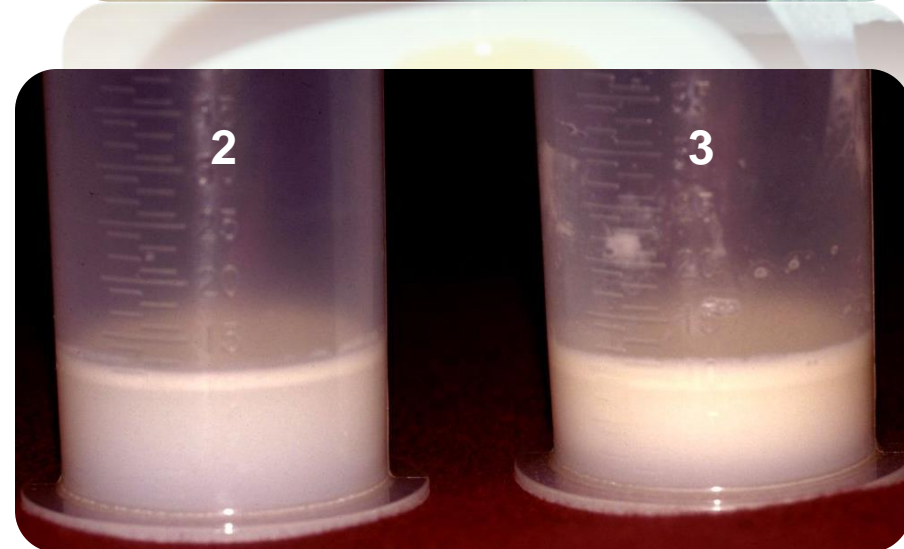
# Flavor In Breastmilk

- Affected by what mother eats.
- The variation in flavor can help the baby get used to family foods.
- Artificial formula tastes the same for every feed, and throughout the feed.
- The taste of formula is not related to any foods.



# Stages of Breastmilk

- The content of breastmilk changes over the course of baby's development.
- There are **3 stages** of breastmilk:
  - *colostrum*
  - transitional milk
  - mature milk.



# Colostrum

- Produced from the 7th month of pregnancy to **first few days** after baby's birth.
- **Thick, sticky** and clear to **yellowish** in colour.
- Produced in **very small amounts** to suit baby's small stomach
- Is the **perfect food** for newborn baby (*more protein and vitamin A*)



# Colostrum

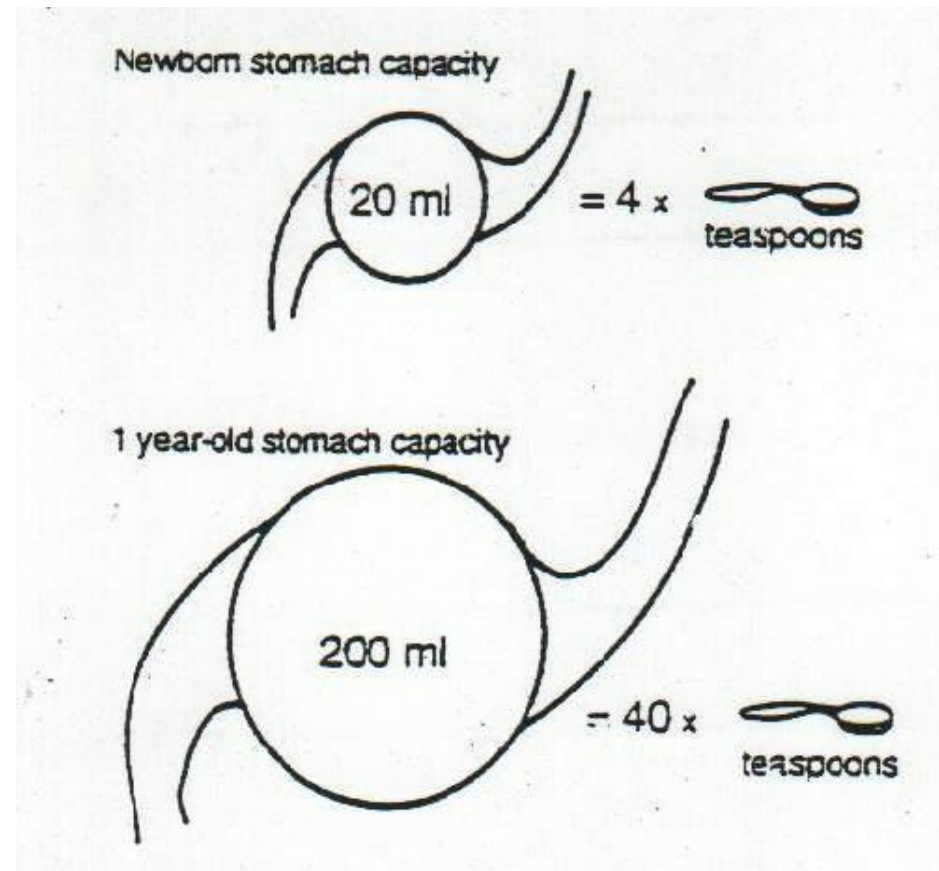
## Functions:

- Acts like “paint coating”
  - Protect baby’s gut from infections.
- *Acts as first immunization* against many bacteria.
- Helps establish good bacteria in baby’s gut.
- laxative and helps the baby to pass meconium- to prevent jaundice.

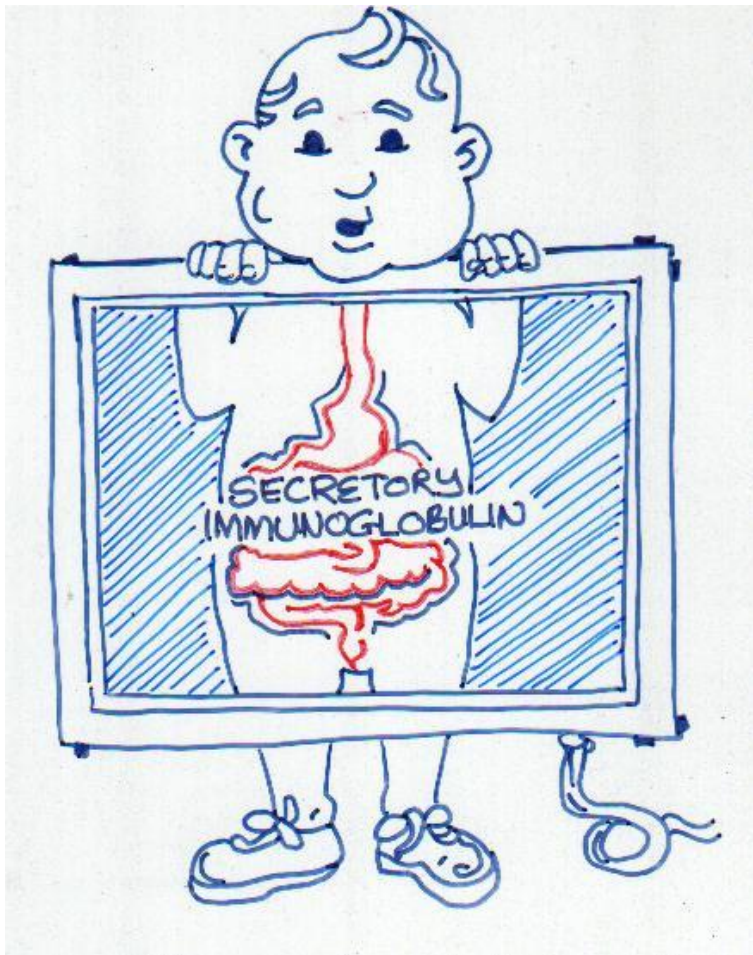


# Colostrum

- The volume is approximately 100 cc's in a 24-hour period.

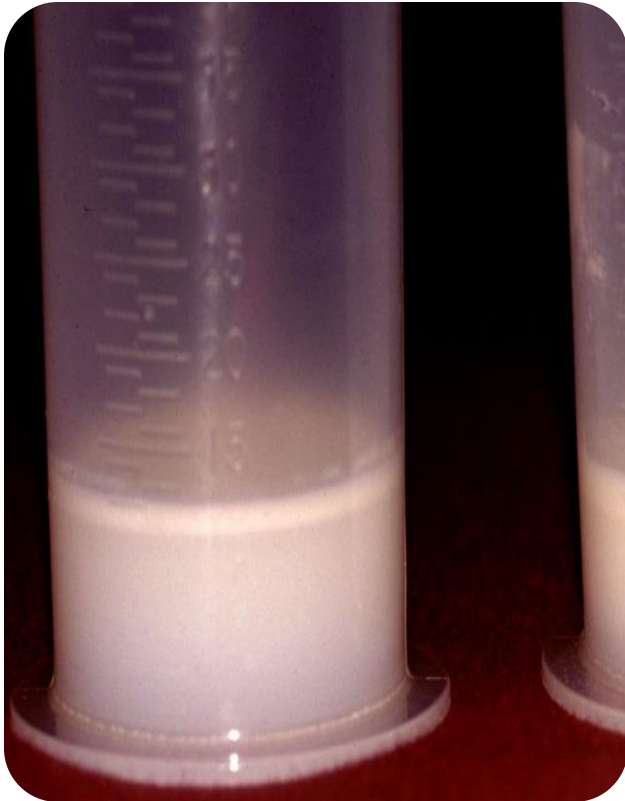


# Preterm Breastmilk



- Milk from mother who give birth before 37 weeks gestation has **MORE protein, Ig A, lactoferrin** than mature milk - more suited for the needs of a premature baby.
- A mother's milk can even be used before the baby is able to breastfeed.
- She can express her milk and fed her baby by cup or spoon.

# *Transitional milk*



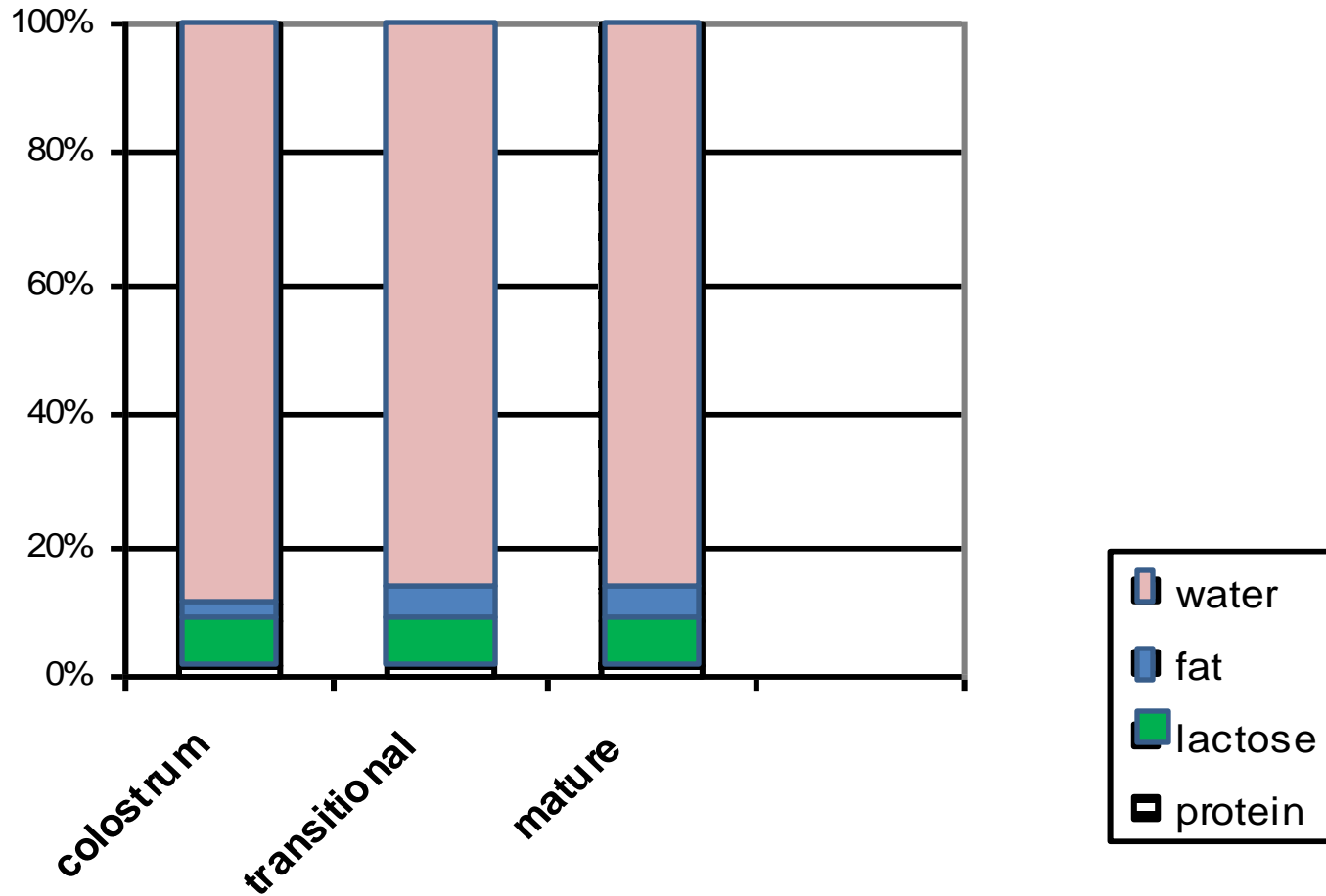
- Produced from 3 to 5 days after birth until the mature milk come in (2 -3 weeks).
- It is intermediate in composition in between colostrum and mature milk.
- The immunoglobulins and protein contents decrease whereas fat and sugar contents increase.

# Mature Milk

- Contains **ALL** major nutrients:
  - *Proteins/carbohydrates/fats*
  - *Vitamins and minerals*
  - *water*
- Changes in relation to:
  - *the time of day*
  - *the length of breastfeed*
  - *the needs of the baby*
  - *diseases with which the mother has had contact*

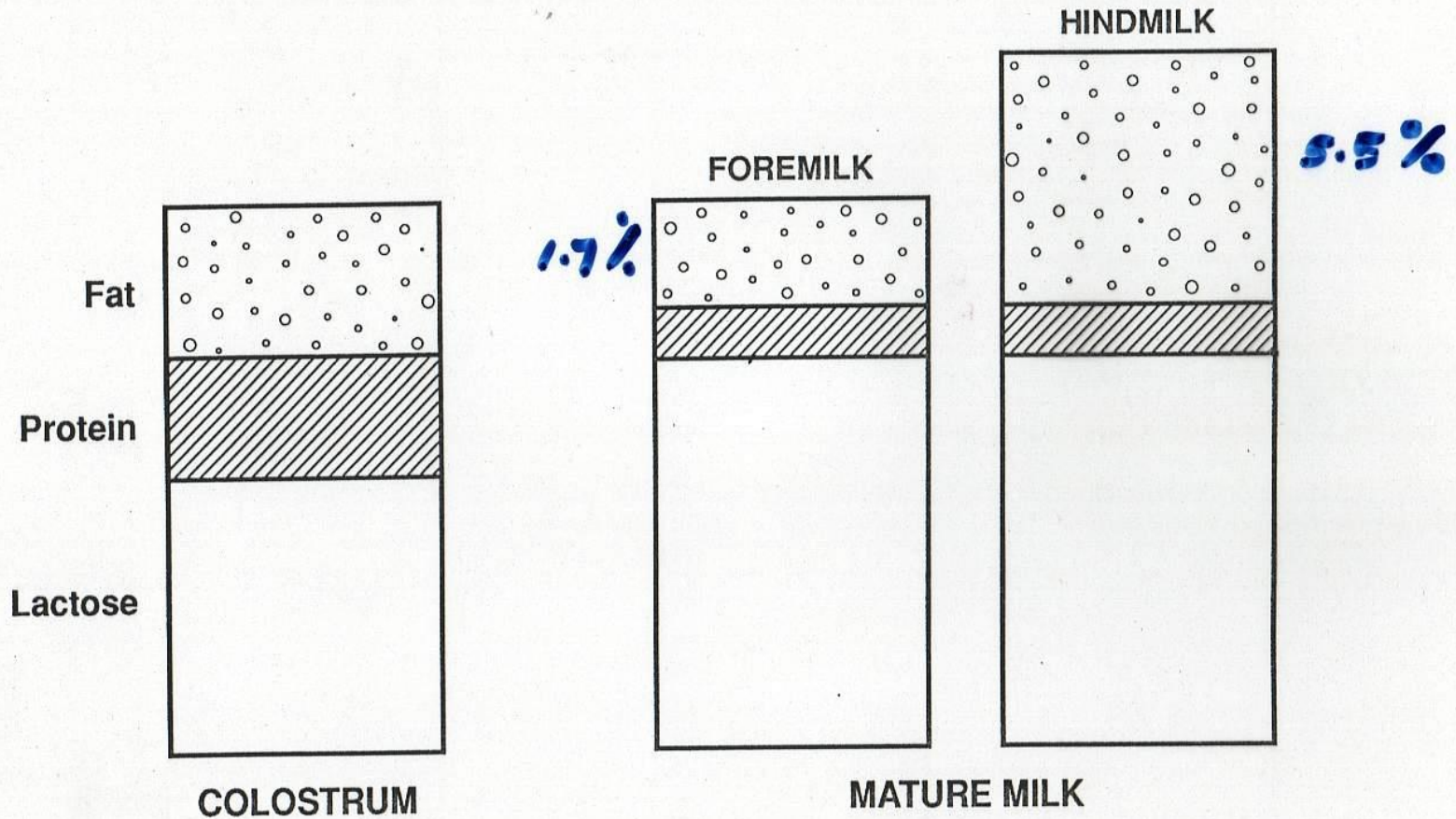


Figure 1: Composition of colostrum, transistional and mature milk



# Composition:

## Colostrum vs Mature Milk



### **3. Explain what kind of antenatal breast preparation women need for breastfeeding**

***What can you say to mothers who are concerned if her breasts are correct for breastfeeding?***

# Antenatal Breast and Nipple preparation

- Breasts and nipples can look different and still work perfectly well, except in very rare cases
- Breasts are increasing in size due to blood flow and changes in sensitivity; sign for the readiness to breastfeed
- Antenatal practices like wearing a bra, creams, breast massage, nipple exercise, wearing breast shells **DO NOT** assist breastfeeding
- Practices like ‘toughening’ of the nipples by rubbing with rough towel, putting alcohol or excessive pulling are **NOT NECESSARY** – *may damage skin and tiny muscle*

## ***Breast examination during pregnancy can be helpful if it is used to:***

- Point out to a woman:
  - how her breasts are increasing in size
  - there is more blood flow to them and changes in sensitivity,
  - how these are all signs that her body is getting ready to breastfeed,
- Check for any previous chest or breast surgery, trauma or other problem (e.g. lumps in breast),
- Talk to the mother about regular breast self-examination and why it can be useful

***Breast examination during pregnancy can be harmful if it is used to:***

- judge a woman's nipples or breasts as suitable or unsuitable for breastfeeding.
  - It is very rare for a woman to be unable to breastfeed due to the shape of her breasts or nipples.

# *Antenatal Preparation*

- use the time to discuss the woman's knowledge, beliefs and feelings about breastfeeding
- to build the woman's confidence in her ability to exclusively breastfeed her baby.



***What do mothers need to know about caring  
for their breasts when breastfeeding?***

# *Breast Care*

- Teach mothers how to care for their breasts.
- Clean the breasts with water only and use a morning towel.
- No soaps, lotions, oils, and vaseline - interfere the natural lubrication of the skin.



## *Breast care*

- Wash the breasts once a day as part of general body hygiene is sufficient.
- It is not necessary to wash the breasts directly before feeds:
  - removes protective oils and alters the scent that the baby can identify as his or her mother's breasts.
- Brassieres are not necessary, but can be used if desired:
  - Choose a brassiere that fits well and is not too tight.

## **4. Identify women who need extra attention**

***Which pregnant women may need extra counselling and support on feeding their babies?***

# Women Who Need Extra Attention

- Had difficulties to breastfed baby in the previous baby
- Works place is far away
- Unsupportive family's members
- Depressed
- Isolated without social support
- Young or single mother
- Has an intention to leave the baby for adoption
- Previous breast surgery /trauma
- Chronic illness or needs medication
- Twin pregnancy
- HIV positive



## **5. Practice to discuss breastfeeding with a pregnant woman**

# Summary

1. Pregnant woman need to understand;
  - Importance of breastfeeding
  - What is exclusive breastfeeding
  - Beneficial practices in breastfeeding
2. Breast and nipple preparation is not needed and can be harmful
3. Some women need extra attention if they have previous poor experiences of breastfeeding

# THANK YOU