

EXCLUSIVE BREAST FEEDING

Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. For a period of 0-6 months.

PHYSIOLOGY OF LACTATION

During pregnancy, the hormone estrogens and progesterone activate the breast. The breasts become larger and produce some fluid called COLOSTRUM. The secretion or production of milk is known as lactation.

The hormone which initiates lactation is called PROLACTIN. Prolactin inhibits the action of estrogen and progesterone which occurs within the first two days of puerperium. This explains why milk is secreted from about the third day of puerperium.

FACTORS RESPONSIBLE FOR THE MAINTAINANCE OF LACTATION

The breast should be able to produce enough milk for full or partial feeding of the baby for nine months post-partum. In order to achieve this, the following factors are necessary;

1. Maternal good health: a mother should be physically and mentally well and she should be free from anxiety.
2. Stimulation of the breast by sucking reflex of the baby. The baby should suck at the breast at regular intervals.
3. Adequate emptying of the breast by the baby or manual express of the breast.

ADVANTAGES OF BREAST FEEDING.

- It is cheap.
- It is readily available.
- It is convenient.
- It is easily digestible.
- It is in the Right temperature.

- During breastfeeding, antibodies pass to the baby. It contains several anti infective factors such as, bile salt stimulated lipase(protect against amoebic infections) lactoferin- binds to iron and inhibits the growth of intestinal bacteria. Immunoglobulin-A protecting against micro organism.
- It prevents constipation
- It has the entire food nutrient in the right composition and proportion.
- It promote bonding between mother and child
- Cot death is much less common
- It helps in involution of the uterus
- It saves time
- Reduces the risk of extreme obesity in children.

ADVANTAGES TO MOTHER

- It can also serve as contraceptive to some mothers.
- Beneficial hormones are released into the mother's body.
- Burn fat (lose weight) as the fat accumulated during pregnancy is used to produce milk, extended breastfeeding at least 6 months can help mothers lose weight.
- Help prepare the mother's body for subsequent pregnancy and reduces complications in later period.
- Reduces risk of post partum hemorrhage
- Breastfeeding diabetes mellitus mothers require less insulin.
- Women who breastfed for a longer duration have a lower risk of contracting rheumatoid arthritis than women who breastfed for a shorter duration.

PROPERTIES AND COMPONENTS OF BREASTFEEDING

Human milk varies in its composition; with the time of day (for example the fat content is lowest in the morning and highest in the afternoon. With the stage of lactation (for example, the fat and protein content of colostrums is higher than in mature milk)

The change in composition of milk occurs during the course of a feed. The 1st milk ejected is known as foremilk. The foremilk is thin and watery, low in fat, has little nutritional value and is known as thirst quencher.

As the feed progresses, the volume of milk decreases and this is known as the hind milk.

The baby's ability to obtain this fat-rich milk does not depend on the length of feed but by the quality of his attachment to the breast.

METHOD OF BREAST FEEDING

Breast feeding can be done at anytime or anywhere as long as both mother and baby are comfortable.

The mother should either be lying down on a bed or sitting on a chair with back rest and baby is held on the arm, facing the mother's Tommy.

The baby's lip should be on the mothers areola with the nipple on his tongue when well fixed at the breast.

The mother supports the baby's head and uses her other hand to direct the breast into the baby's head and uses her other hand to direct the breast into baby's mouth. Baby should be allowed to empty one breast for at least 10mins before going to the other breast to prevent breast engorgement.

After feeding, the baby is made to bring up wind. This is because it swallows a certain amount of air during feeding. The process of getting the baby to break up wind is known as "breaking the wind". It's achieved by holding the baby upright against the left chest of the mother; the back of the baby is gently parted. By so doing, air in the stomach is released and the baby belches. Failure to do this may result in regurgitation, vomiting or abdominal pain.

After feeding, manual expression of the breast is done if they were not completely emptied. The baby should be made to start the next feed with the breast that was not completely emptied.

DIFFICULTIES IN BREAST FEEDING

Lactation may be the result of the absence of security tissue in the breast.

Other factors are:

1. Material anxiety and poor nutrition
2. Breast and nipple problems such as retracted, sore and cracked nipples.
Engorge breasts and breast infection.

MINOR DISORDER/ COMPLICATION OF BREAST FEEDING

BREAST ENGORGEMENT: This is a venous congestion of the breast occurring from the 3rd day of puerperium. It's more common in primip. The skin of the breast is stretched and shinny. Breast engorgement may give rise to low grade pyrexia.

MANAGEMENT:

The breasts are best supported with a good and firm bra. Also the breasts are gently stroked with soapy hands towards the nipple while bathing.

Breast engorgement can be prevented by the baby completely emptying one breast before the other or by manual expression.

1. **MASTITIS:** It's an infection of the breast. It can be associated with cracked nipples or breast engorgement. The affected lobe is red, hard and painful. There is increment in temperature and region management. The baby should not be allowed to suck on the affected breast.
A systemic antibiotic is prescribed.
2. **BREAST ABSCESS:** When an abscess develops, the patient is ill and the breast is more painful and tender. It's usually enlarged and edematous.

The treatment entails drainage of abscess and the use of appropriate antibiotics.

NIPPLE COMPLICATION

1. **SORE NIPPLES:** A nipple is sore when a mother experiences pain in the abrasion of the skin. This can be prevented by positioning the baby well on the breast (areola). The baby should not be allowed to suck for too long on an empty breast.

The treatment is by resting the nipple and keeps it dry for 24hours, while baby feeds on the unaffected side, or the affected side can also be manually expressed.

2. **CRACKED NIPPLES:** A nipple is said to be cracked when there is a fissure in it. The mother complains of pain and tenderness while baby is sucking. It predisposes to breast infection. The management is same sore nipple.
3. **FLAT NIPPLE:** This is when the nipple is in the same level as the areola. It can be corrected during ANC since it prevents the baby from sucking effectively. While bathing the nipple can gently be pulled out until delivery.

MANAGEMENT OF FLAT NIPPLES: use of 5ml syringe and its plunger. The outlet of the syringe is cut off. The plunger is inserted through the outlet. The blunt end of the syringe is applied on the areola and the plunger is drawn out steadily, this is done 2-3times daily

4. **LONG NIPPLES:** This is when the nipples are very long. Care should be taken when feeding baby to avoid choking the baby.
5. **RETRACTED OR INVERTED NIPPLE:** The nipple is said to be inside or retracted. Wool which shell can be used to bring it out or manual pulling

COMPLEMENTARY AND SUPPLEMENTARY FEEDS

Complementary feeds are any non-breast milk food or non nutritive foods that are given to young children. It should be introduced as from six month of age along side with breast feeding i.e. with food that are readily consumed and

digested by the young child and provides additional nutrition to meet all the growing child needs.

Complementary feeds of breast milk substitute schedules are given as a last resort.

Supplementary feeds are given in place of breastfeed.

ARTIFICIAL FEEDING

This is the feeding of the baby with milk (formula) other than breast milk. Since artificial feeding cannot satisfactorily replace breast milk it should be considered as 2nd best.

- **PREPARATION OF ARTIFICIAL FOOD**

All powdered formula feed is reconstituted using one scoop full /25ml of boiled cooled water.

- **THE WATER SUPPLY**

It is essential that the water used is free from bacteria contamination and any harmful chemicals, water supply from bore hole and communal tap should be boiled

- **FEEDING EQUIPMENT**

The teat should be boiled before using. The teat should be inspected for damage to prevent baby from swallowing any piece. Feeding bottles should be durable and well calibrated. Patterns or decorated bottles may make it less easy to see whether the bottle is clean.

- **STERILIZATION OF FEEDING EQUIPMENT**

Sterilization of utensils should always be preceded by thorough cleaning to remove solutes if boiling is to be used, the utensils should be solely immersed into boiled water for 10min

MINOR DISORDER/ COMPLICATION OF BREAST FEEDING

1. **BREAST ENGORGEMENT:** This is a venous congestion of the breast occurring from the 3rd day of puerperium. It's more common in primipare and varies in

degree from slight to severe. The skin of the breast is stretched and shiny. Breast engorgement may give rise to low grade pyrexia.

MANAGEMENT:

The breasts are best supported with a good and firm bra. Also the breasts are gently stroked with soapy hands towards the nipple while bathing.

Breast engorgement can be prevented by the baby completely emptying one breast before the other or by manual expression.

- 2. MASTITIS:** It's an infection of the breast. It can be associated with cracked nipples or breast engorgement. The affected lobe is red, hard and painful. There is increase in temperature and rigor may occur.

MANAGEMENT OF MASTITIS: The baby should not be allowed to suck on the affected breast.

A systemic antibiotic is prescribed.

- 3. BREAST ABSCESS:** When an abscess develops, the patient is ill and the breast is more painful and tender. It's usually enlarged and edematous.

The treatment entails drainage of abscess and the use of appropriate antibiotics.

WEANING

This is introduction of our local feed to baby. Weaning should be gradual and should contend the entire food nutrient (protein, minerals, carbohydrate and vitamins) to replace those of the breast.

Age of weaning depends on the health of infant. The approved age of weaning is from 6months.

Example of weaning with age;

- 6 months- introduce millet with 1 tea spoonful of palm oil + full spoon of granulated crayfish to each daily food.
- 2-8months- pap, porridges, mashed plantain can be given
-
- 8month-1 year- softly prepared amala with okro soup can be given.
- Weaning continues along with breast milk until the child is about 2years of age