

# Infant feeding

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# بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

((وصينا الإنسان بوالديه احسانا حملته أمه كرها ووضعته كرها  
وحمله وفصاله ثلاثون شهرا)) صدق الله العظيم

# Infant feeding

- ❑ In first 4-6 months of life human milk or, often, various infant formulas can provide complete nutrition to the growing infants. However, breast milk is the recommended source of nutrition for almost all children. Every effort should be made to encourage and promote feeding.
- ❑ The alternate to human milk is iron-fortified formula. And cow's milk (fresh) should not be introduced until after 1<sup>st</sup> year of life.
- ❑ After 4-6 months of life, solid food and juices are introduced.

# ❑ Most term infants may start feeding by 6 hours of life or earlier

- ❑ Breast feeding or formula usually provided every 2-4 hr/day.
- ❑ By the end of the 1<sup>st</sup> month 90% of infants have established a regular schedule
- ❑ By the end of 1<sup>st</sup> wk most term infants want 6-9 feeding/day and have increased their intake from 30ml to 80-90ml every 3-4 hour
- ❑ Feeding is satisfactory if the infant is no longer losing weight by 4-5 days and gaining weight by 12-14 days.
- ❑ Infants cry from many reasons aside from hunger as being uncomfortably hot or cold or cold, soiled wet or ill.



# breast feeding

## □ Physiology;

- milk synthesis begins in the 6<sup>th</sup> or 7<sup>th</sup> month of pregnancy.
- with delivery of placenta at birth estrogen and progesterone levels fall and prolactin levels rise,lead to increase milk synthesis.
- when neonate placed to the breast and begins sucking, the neuroendocrine reflex is triggered causing oxytocin to be released ,oxytocin causes the cells that line the breast ducts to contract, expelling milk from alveoli into ducts and subareolar sinuses that empty into anipple pore,this known as the milk ejection or ((let down)) reflex
- Breast milk during first several days after birth is primarily composed of ((colostrum)),mature milk usully begins at the end of the 1<sup>st</sup> week after birth.

# Colostrum & mature milk

- Colostrum : contains high protein and mineral and low fat and carbohydrate. It has very potent immunological and maturational properties.
- Mature milk is composed of ((foremilk)), which is the milk that first drawn during feeding, which is low in fat and more in protein.\*and ((hind milk)) which follow foremilk, it contains more fat and higher caloric contents. So foremilk for infant thirst while hindmilk for growth.
- Breast milk from mothers of premature infants contains greater amount of antibodies and nutrients than breast milk from mother of full term.



# Advantages of breast milk

- 1-Anti-infective properties which include: \*A-It contain Ig A which play arole in respiratory and GIT mucosal proliferation. \*B-It contain a lot of macrophages and T-lymphocytes which produce lysozymes. \*C-It contain some substances protecting from viral infection.  
\*D-Contain bile salt stimulated lipase which has aprotective function against some infection as giardiasis
- 2-Breast milk is fresh and aviable at any time and needs no preparation and cost nothing to the family.

- 3-It has proper temp.(body temp.).
- 4-More attachment and bonding between mother and her baby.
- 5-Studies show that breast fed babies have a higher IQ than bottle fed babies.
- 6-For mother,breast feeding may provides protection against breast,ovarian and endometrial malignancies.,also can be a method of contraception with help to decrease post partum bleeding.
- 7-In future breast fed infant are less liable to develop Coronary artery disease and ciliary disease.



# Drugs that should avoided during lactation by mother;

- \*-Alcohol \*-Chloramphenicol \*-Cimetidine
- \*-Clindamycine \*-Codeine \*-Diazepam?
- \*-Ergotamine \*-Marijuana \*oral cotraceptive
- \*-Salfonamides \*- Iodine \*Tetracycline
- \*-Radionuclide material \*-Lithium
- \*-Cyclosporin \*-.....

# How to assess the adequacy of milk intake ?

- Babies should look satisfied after feeding, with a period (1-2 hr) of sleep.
- Adequate weight gaining (20-30 g/day)
- Yellow seedy stool passed at least 4 times daily, which increase in frequency gradually, so that parents think that is diarrhea.
- Infant void(urinate) 6-8 times daily.
- ❖ Note;-the mother must be physically and mentally at rest with adequate nutrition.
- ❖ Expressed breast milk : means expressed breast milk in a bottle and giving it to a baby in absence of mother, usually can be given in 2<sup>nd</sup> month age.

# Contraindication to breast feeding:

## □ Related to mother:

- A-HIV infection
- B-Infectious tuberculosis (until they have received 2 or more weeks of treatment.
- C-Other relative C.I.((HF,RF.psychosis))

## □ Related to infants:

- Galactossemia, phenylketonuria(PKU),...

# Thank you

