



Breastfeeding

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In the name of Allah the merciful and
compassionate

Allah (SWT) said {Mothers may nurse (breastfeed)
their children two complete years for whoever
wishes to complete the nursing} surah Al-Paqara
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Historical and Global Perspective

- Prior to 18th. Century, breastfeeding was the only source of food for newborns
- Then the use of Cow's milk or bread soaked in water began
- At the end of 19th. Century...glass bottle started
- From 1940 to 1970 there was decline in breastfeeding and increase in formulas
- From mid 1970s to present breastfeeding is seen as superior

World Breastfeeding Week

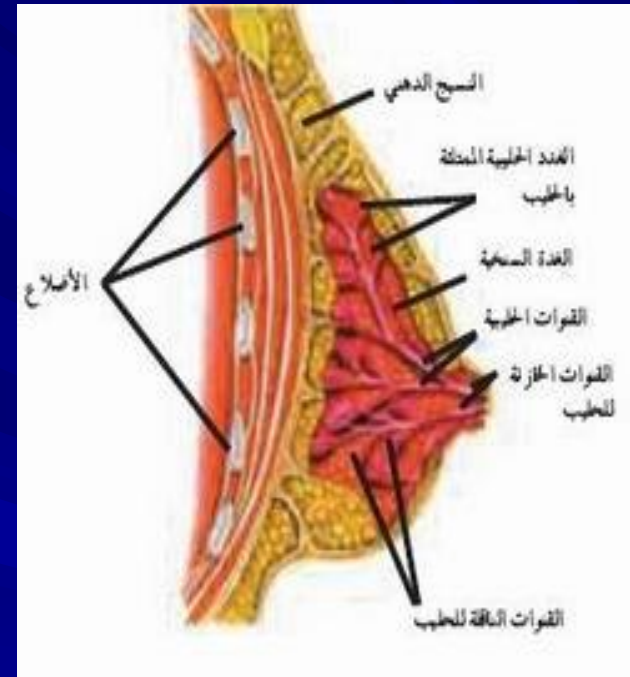
- *As a global goal for optimal maternal and child health and nutrition, all women should be enabled to practice exclusive breastfeeding and all infants should be fed exclusively on breast milk from birth to approximately six months of age. Thereafter children should continue to breastfeed while receiving appropriate and adequate complementary foods for up to two year of age or beyond. This child feeding ideal is to be achieved by creating an appropriate environment of awareness and support so that women can benefit in this manner.)1990*

Development of Breast

- Start at about 7-8 weeks as thickening of tissue
- 12-16 weeks various components start to be recognized
- In later pregnancy maternal hormones start to affect breast development
- In the final 8 weeks colostrum is secreted and is continuous during the first few weeks of life
- At puberty breast development is under estrogen and progesterone effects

Anatomy

- It is Apocrine skin gland
- Lies on the anterior thoracic wall between 2-6th ribs with a tail extending to axilla
- Breast tissue consists of glandular parenchyma and supporting stroma consisting of connective tissue and fat
- Each comprises 15-20 lobes which are divided into lobules--the milk secreting alveoli—surrounded by myoepithelial cells



Lactation

- Preparation for lactation occurs throughout pregnancy under the influence of placental hormones
- E2 influence duct growth and progesterone stimulates alveolar development
- Placental lactogen appear to encourage growth of alveoli and acinar lining
- Prolactin levels increase throughout pregnancy to reach from 20ng/ml to >100ng/ml at end of pregnancy

Initiation of lactation

Depends primarily on hormonal changes that occurred after birth

- Sudden drop in estrogen is essential with decrease in prolactin-inhibiting-factor and release of antagonistic effect at the duct level
- Milk-Ejection
- -Sucking and other stimuli stimulate the hypothalamus that stimulate production of oxytocin from posterior pituitary gland which leads to contraction of myoepithelial cells around the alveoli
- At the same time suckling stimulate release of prolactin

Composition Of breast Milk

- Colostrum
- The early secretion starts to appear by 13th. Week of pregnancy and continue for 72 hours after delivery
- It is rich in protein, sodium and chloride but has low fat content and less calories
- On 3rd-4th. Day postpartum it is replaced by mature milk

Composition of milk

	Mature Milk	Cow's Milk
Protein (g)	1.2-1.4	1.9
Casein (g)	0.5	1.5
Whey (g)	0.8	0.4
Fat (g)	3.7-4.8	3.4
Carbohydrate (g)	7.1-7.8	7.3
Energy kcal	65-75	66

Benefits of Breast feeding

- Infant
 - - Optimal nutrition for infant during first 4-6 months
 - - Provides materials that promote physiological and cognitive development
 - Reduces risk of gastro-enteritis, respiratory infection and cot death
 - - reduces incidence of childhood leukaemia
 - - Psychological development of infant may be enhanced through bonding with mother
- Mother
 - - Reduces risk of breast cancer
 - - Suppresses ovulation, lengthen birth intervals
 - - Facilitate uterine contraction and help's mother weight to return to pre-pregnancy levels
 - - Conserve maternal iron stores by prolonged amenorrhoea
 - - may have protective effect against ovarian cancer

Ten steps for 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 hour of birth
- 5- Show mothers how to breast feed and how to maintain lactation even if they should be separated from their infants
- 6- Give newborn infants no food or drink other than breast milk unless medically indicated
- 7- Practice rooming-in, allow mothers and infants to remain together 24 hours a day
- 8- Encourage breastfeeding on demand
- 9- Give no artificial teats or pacifiers to breastfeeding infants
- 10- Foster the establishment of breast feeding support group and refer mothers to them on discharge from the hospital or clinic