





Figure 1 - a) A light microscopic image showing thin and sparse hair with a longitudinal groove in hair shaft and multiple patchy corruption of cuticle pattern. b, c). Scanning electron microscopic images showing flattened areas, which disturb the normal round shape of hair shaft with some cuticle irregularities in these region. Also showing longitudinal groove or fissure like hair shaft changes with cuticular overlapping.

tissues as it permits considerable magnification. As it can be used in the Chédiak-Higashi syndrome<sup>4</sup> and hereditary trichodysplasia,<sup>5</sup> its routine usage in many dermatological hair diseases with surface alterations has resulted in valuable contributions to scientific literature. In the future, these unique scanning electron microscopic findings, that belong to the different multi-systemic syndromes, might be collected in an atlas for distinctive diagnosis of the diseases.

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## Fundamental rights of infants are guaranteed in Islam - Breastfeeding is mandatory

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The Qur-an advocates breastfeeding as the recommended method of nourishing infants. There are several verses in the Holy Book, which put stress on the practice of breastfeeding. Every Muslim mother has to feed her baby with her own milk for the first 2 years of the baby's life. Some schools of thoughts from the Muslim world consider it mandatory for a mother to feed her milk for at least 2 years. Breastfeeding has many advantages as proven by the modern day science. Breastfeeding is not only beneficial to the child but also it is good for the mother's own health. It helps the mother to return to her pre-pregnant size and weight. It helps the uterus to involute under the effect of oxytocin secreted by the pituitary gland and released by reflexes through suckling. Breastfeeding protects the baby from diarrhea, chest infections, respiratory, and gastrointestinal diseases. Those who do catch the diseases are less morbid and have a much lower mortality rate than those who are bottle-fed. There has been a debate as for how long breastfeeding be continued. Unfortunately, there is no universally accepted position that clarifies the optimal length of breastfeeding. As far as the Qur-an is concerned, it is 2 years. This fact has been supported by World Health Organization (WHO) and United Nations Children's Fund (UNICEF), and investigated extensively and supported widely by

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other organizations. It is imperative that the medical community supports the research that shows extended breastfeeding as beneficial to the baby in the long term.

Review of the scientific facts. Benefits of milk. Human milk has been shown to be beneficial to the infants, mothers, and the whole family as indicated in some studies conducted over the years. Some advantages from these include health, nutritional, immunological, developmental, psychological, social, economic, and environmental benefits. The policy statement entitled "Breastfeeding and the Use of Human Milk", published by the American Academy of Pediatrics (AAP) in 1997 emphasized on breastfeeding as the most effective tool for early infant development. The recommendations, as a result, are consistent with the goals and objectives of Healthy People 2010, which strongly stresses breastfeeding to infants. From a child health point of view, human milk is species-specific making it uniquely superior for infant feeding. Premature children get enormous benefits of host protection and improved developmental outcomes compared with formula-fed premature infants, despite the efforts of formula manufacturers, man-made formula remains significantly different from breast milk.1

*Infections of children and breastfeeding.* Studies<sup>2</sup> on infection and breastfeeding have shown that feeding infants with human milk decreases the incidence and or severity of a wide range of infectious diseases including bacterial meningitis, diarrhea, respiratory tract infection, necrotizing enterocolitis, otitis media, urinary tract infection, and late-onset sepsis in preterm infants. In addition, breastfeeding has been shown to reduce post-neonatal infant mortality rates by 21%. The immune factors in milk provide better protection to babies. Decreased leukemia, improved cognitive achievements, decrease in rates of sudden infant death syndrome, and reduction in incidence of insulin-dependent (type-1) and non-insulin-dependent (type-2) diabetes mellitus have been shown the positive outcomes of breast feeding. Also, lymphoma, overweight and obesity, hypercholesterolemia, and asthma in older children have been shown to be closely related with prolonged breastfeeding.

Benefits to mothers. Breastfeeding is good for the mothers' own health. The maternal benefits include decreased postpartum bleeding and more rapid uterine involution attributable to increased concentrations of oxytocin, decreased menstrual blood loss and increased child spacing attributable to lactational amenorrhea, earlier return to pre-pregnancy weight, decreased risk of breast cancer, decreased risk of ovarian cancer, and possibly decreased risk of hip fractures and osteoporosis

in the postmenopausal period. In China, women who breastfed for 2 years or more reduced their risk of breast cancer by 50%.<sup>2</sup>

Benefits to the community. From the viewpoint of the community, breastfeeding has been of enormous national savings. Decreased parental employee absenteeism and associated loss of family income, more time for attention to siblings and other family matters as a result of decreased infant illness, decreased environmental burden for disposal of formula cans and bottles, and decreased energy demands for production and transport of artificial feeding products.<sup>2</sup>

*Duration of breast feeding.* There has been a debate in the health circles on duration of breastfeeding. In a survey by the AAP conducted in 2000, approximately 25% of the participants favored breastfeeding up to 2 years.<sup>3</sup> The WHO and UNICEF stated that breastfeeding should be continued for the first 2 years of life.4 Many studies support the WHO's recommendations. The research on breastfeeding documents the advantages of extended breastfeeding to the general health, growth and development of infants at every socio-economic level, while the optimal duration of breastfeeding continues to be discussed and investigated throughout the world. Finally, recognizing that the scientific evidence indicates that breastfeeding is one of the most important contributors to infant health, the United States has reached the conclusion to increase breastfeeding. The new recommendations in the National Health Observations for 2010 include goals of 75% of mothers initiating breastfeeding, 50% of infants still receiving breast milk at 6 months, and 25% of infants still breastfed at 12 months.<sup>1</sup>

Qur-anic Instructions. It is stated in the Qur-an: "The mothers shall give suck to their offspring for two whole years, for him (the father) who desires to complete the term. But he (the father) shall bear the cost of their food and clothing on equitable terms. No soul shall have a burden laid on it greater than it can bear. No mother shall be treated unfairly on account of her child. No father, on account of his child, and here shall be chargeable in the same way. If they both decide on weaning, by mutual consent, and after the consultation, there is no blame on them, if ye decide on a foster-mother for your offspring there is no blame on you, provided ye pay the foster mother what ye offered, on equitable terms" (2:234).

These are the regulations in case of divorce. The rights of the child, however, are safe guarded. The principle of care of the child applies equally to the father and the mother in wedlock: each must fulfill his or her part in fostering of the child. By mutual consent they can agree to some course that is reasonable and equitable, both as regard the period before weaning (the maximum being 2 years) and the engagement of a wet-nurse, or (by analogy) for artificial feeding. This is

what is telling us that breastfeeding is to be continued for 2 years completely, even if the parents are divorced. However, the father of the child shall bear the cost of the mother's food and clothing on a reasonable basis. And if it is decided to hire a foster mother to suckle the child, the father will bear all the costs of the foster mother. At another place, it is quoted;

"His mother bore him by strain after strain. His nursing (suckling) period lasts two years. Be grateful to Me and to your parents" (31:14).

The set of milk teeth in a human child is completed at the age of 2 years, which is therefore the natural extreme of breastfeeding. At another place we read in the Holy Qur-an;

"We have enjoined on man, kindness to his parents: in pain did his mother bear him, and in pain did she gave him birth, the carrying of the child to his weaning is (a period of) thirty months" (46:15).

The maximum period of breastfeeding (2 years) is again in accordance with the time that the first dentition is ordinarily completed in a human child. The lower milk incisors in the center come out between the sixth and ninth months; then the milk teeth come out at intervals, until canines appear. The second molars come out at approximately 24 months, and with them the child has a complete apparatus of milk teeth. Nature now expects him to chew and masticate and be independent of his mother's milk completely. On the other hand, it hurts the mother to feed from the breast after the child has a complete set of milk teeth.

From these verses, we can understand that mothers are encouraged to nurse their babies for a period of 24 months. Even if the mother is divorced, she should be supported in her nursing of her child for that period. The father should pay her cost of living, as she will be fully occupied by nursing his offspring. If the parents are separated or divorced they should frequently counsel each other for the sake of the child's future. If it is decided that the mother cannot nurse the baby (for example, if she lacks milk in her breasts), then a wet nurse must be asked to help. The wet nurse in Islam is a foster mother; she is also considered as the child's mother. Her children become the baby's brothers and sisters, and her husband becomes another father for the baby. If the mother dies, the baby's heir should support both the nursing mother and her baby for the period of breastfeeding. The custody of the baby remains in the hands of the nursing mother.

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Protozoa infection and its associated factors among urban babies 6 to 24 months age, in Semnan, Iran

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Darasitic infection is one of the most important ▲ health problems in the entire world, hence, there was no region in the world that free from parasites. Some of them can induce anemia, malnutrition, diarrhea, and other infections. Parasitic infection depends on geographical area and time, demographic factors, health, knowledge and attitudes, socioeconomic conditions, and others; hence, it has a wide range. The high risk category are the children. The range of parasite infections can be wide, due to the variety of the weather and the socio-cultural conditions in Iran. In our research, we surveyed the status of parasites between 6-24 months in Semnan, Iran. The surveyed zones in this study were the urban areas of Semnan province nearly in the central north of Iran, which has been divided into 2 regions of wet-cold and dry-warm weather. A total of 482 children under 2 years old were surveyed (399 in warm and 83 in cold regions). The mothers that were referred to the health center in Semnan province and had children under 2 years, were given the sample container containing 30 cc of Phenol Alcohol Formaldehyde (PAF), an applicator for sampling accompanied by a questionnaire for filling up. They were trained to pour the stool of the children into the container with the help of the applicator, and shake it until the stool becomes homogenous. The samples were examined by direct and formalin-ether methods. For staining of the samples, Thionin was used, which is the preferred color for the samples fixed