

## Impact of milk type on visual maturation during early infancy

Afaf Abd-Elwahab Korraa

Al Azhar University, Egypt



### Abstract

**Objective:** Human milk is acknowledged to provide bio-available nutrients that contribute to retinal development and visual maturation in infants. Our aim was to assess differences in visual function and retinal development in healthy full-term infants aged 4 to 6 months relation to two milk feeding regimes, exclusively breast-fed and standard formula-fed.

**Subjects and method:** This cross sectional comparative study included 55 healthy full-term infants aged 4 to 6 months; 25 were exclusively breast-fed and 30 were fed standard formula. Visual function and retinal development were examined using flash visual evoked potential (F-VEP) and flash electroretinogram (F-ERG).

**Results:** F-VEP revealed that breast-fed infants had significantly more rapid conduction than formula-fed infants in the form of shorter latency ( $123.68 \pm 18.44$  versus  $150.63 \pm 30.81$ ) and higher amplitude of P2 wave ( $30.64 \pm 23.94$  versus  $9.23 \pm 9.95$ ). Additionally, F-ERG a and b waves' amplitudes were significantly higher in breast-fed than formula-fed infants ( $11.96 \pm 4.82$  versus  $8.00 \pm 1.93$  for a wave and  $27.62 \pm 10.58$  versus  $19.21 \pm 6.81$  for b wave).

**Conclusion:** Exclusive breast milk feeding in early infancy promotes earlier retinal development and visual maturation.

### Biography:

Afaf Korraa is a chief in the pediatrics department, AL- Azhar University. She completed her MD in 1990 and Nutritional diploma in 2009. she was a International lactation consultant from 2008 to 2009. She has 4 international published papers and more than 40 nationally published papers. Afaf Korraa is member of ILCA, Egyptian Pediatric Society and also editor of Egyptian Neonatal Safety Newsletter.

### Speaker Publications:

1. "Impact of kangaroo mother care on cerebral blood flow of preterm infants"
2. "Cardiac troponin I levels and its relation to echocardiographic findings in infants of diabetic mothers"
3. "The effect of different techniques of breast milk expression in its fat content in mothers of preterm infants"
4. "Impact of Infant Nutrition on Visual Maturation"
5. "Impact of Kangaroo Position on Serum Nitric Oxide in Preterm Infants"

[2nd International Conference on Pediatrics and Primary Healthcare Nursing](#) Webinar- December 11, 2020

### Abstract Citation:

Afaf Abd-Elwahab Korraa, Impact of milk type on visual maturation during early infancy, Pediatrics & Nursing 2020, 2nd International Conference on Pediatrics and Primary Healthcare Nursing, December 11, 2020

<https://pediatrics-nursing.nursingmeetings.com/>

