FEEDING PROBLEMS DURING THE FIRST YEAR OF LIFE

A THESIS SUBMITTED FOR

PARTIAL FULFILMENT OF MASTER DEGREE IN

PAEDIATRICS

BY

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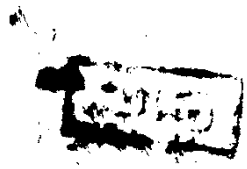

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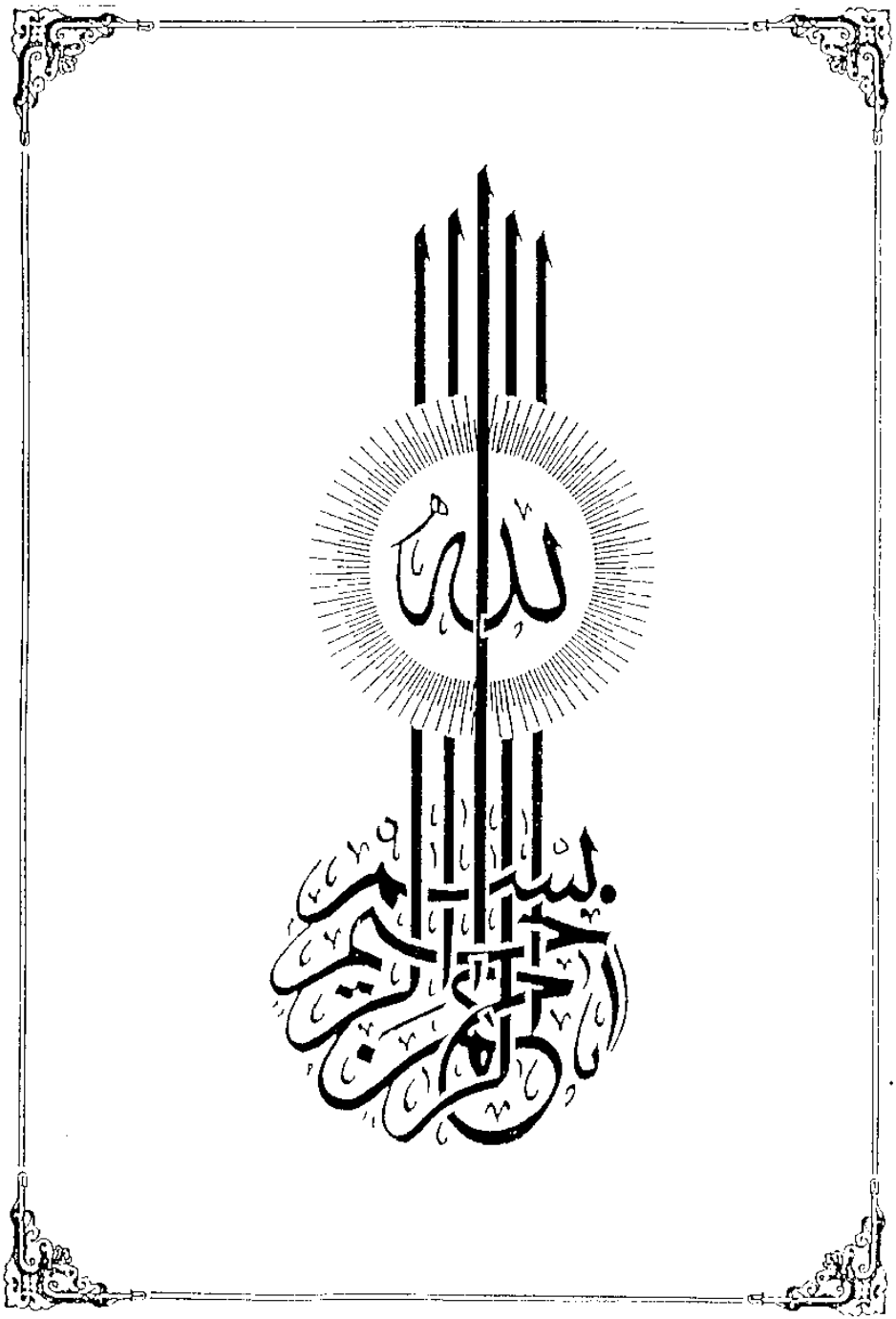
بسم الله الرحمن الرحيم

(والوالدات يرضعن أولادهن حولين كاملين
لمن أراد أن يتم الرضاعة)

صدق الله العظيم
(البقرة ٢٣٣)



DEDICATION

THIS REVIEW IS DEDICATED TO MY MOTHER

Prof, Dr. ROAFA A. KHALIFA

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Samiha Abdel Hamid Amin

INTRODUCTION

The first year of life is a time of more rapid growth, development, and maturation than any other subsequent year. Growth of the body and development of the nervous system depend on appropriate intake of calories and essential nutrients. Although adequate nutrition alone will not ensure normal development, a loving and stimulating environment is incomplete without it.

Two areas of knowledge, the nutritional requirements of infants and the Art of Infant Feeding (the practical application of nutrition information) form the basis for the clinical approaches taken by physician who are for infants. (Woodruff, 1978).

Food is also the vehicle through which infants establish their initial relationship with their parents and serves as a tool for them to learn fine motor skills that lead to independence in eating. In addition, many believe that prevention of obesity, atherosclerosis, hypertention, and other chronic disease must be initiated in early childhood, by carful selection of the food consumed and pattering of food habits. There are indications that one's ability to learn may be compromized by inadequate intakes of food, nutrients, or both. In other words, experiences with food and nutrients consumed during early childhood not only are important to current physical growth and health of infants & children but also may have long term consequences. (Pipes, 1982).

The mother who encounters no difficulties in breast-feeding is the exception. (Willard, 1982).

It is necessary to consider how the dangerous process of artificial feeding may attempted in tropical countries. (Jelliffe and Jelliffe, 1979) (Evans et al., 1971) showed that adequate supplementary feeding during the first two years of life prevents malnutrition and retardation in growth and mental development in the most formative years.

The main need any where in the world is to devise, and teach, scientifically guided, biologically based infant feeding appropriate for the majority of mothers. (Jelliffe and Jelliffe, 1979).

Competant counseling and management could help most mothers overcome feeding problems. (Willard, 1982).

Feeding in early childhood can be most rationally approached in relation to three interrelated bilogical stages of early human development: The intrauterine fetus, the exterogextate fetus and the "transitional ".

(a) Intrauterine fetus: Recent studies have increasingly emphasized the interdependence between the nutritional health of the mother and her fetus and infant. The nutrients stores of minerals and vitamins including for example, iron and vitamin A and C laid down by the fetus will be needed as an "Internal supplement" to the diet of the growing baby ,

also, general malnutrition of the pregnant women is responsible for babies of lower birth weight, and even possibly for newborn with prenatal nutritional brain damage.

(b) Exterogestate fetus: The human fetus can be considered to have an "18 months" growth span, and the full term baby is, in fact, born "Prematurily". In traditional circumstances, the exterogestate fetus is dependent on the mother for the first 6-9 months of life, especially for human milk. The breast has the same function as had the placenta in utero.

(c) Transitional The process of transition from an exclusively milk diet, in traditional circumstances- human milk- to the complete range of foods taken by the adult section of the community is a fundamental mammilian process. The transitional period, the so called "weaning" or accustoming period, has always been recognized as being dangerous, as shown in many cultures by sites de passage (Jelliffe and Jelliffe 1979).

Daily recommended intakes (/Kg body weight) for new born infants consuming 120 K cal/Kg/day. Table (1).

(Table 1) Daily recommended intakes (/kg body weight) for newborn infants consuming 120 kcal (0·5 MJ)/kg/day

	Normal birthweight Minimum	Maximum	Special considerations for low birth weight
Fluid (ml)	130	150	Up to 200
Energy (kcal)	110		110–150
(MJ)	0·46		0·46–0·63
Protein (g)	2·2	5·4	Need about 2·5 g
Fat (g)	4·0	7·2	
Essential fatty acids (mg)	360		
Vitamins			Daily oral supplements of vitamins recommended as well as formula adequate for full term infants
Thiamin (mg)	0·05		
Riboflavin (mg)	0·07		
Niacin (mg)	0·3		
Vitamin B_6 (mg)	0·04		
Vitamin B_{12} (μg)	0·18		
Folic acid (μg)	4·8		
Pantothenic acid (mg)	0·36		
Biotin (μg)	1·8		
Choline (mg)	8·4		
Inositol (mg)	4·8		
Ascorbic acid (mg)	9·6		
A (μg retinol equiv.)	90	900	
D (μg)	1·2	3·0	
K (μg)	4·8		1 mg IM at birth
E (μg)	0·36		0·84
Minerals			
Calcium (mg)	60		Needs greater
Phosphorus (mg)	30		Needs greater
Magnesium (mg)	7·2		
Iron (mg) fortified	1·2		Supplements also needed
Zinc (mg)	0·6		
Iodine (μg)	6·0		
Copper (μg)	72		108 μg recommended
Manganese (μg)	6		
Sodium (mg)	24	72	Needs above minimum
(mmol)	1	3·1	
Potassium (mg)	96	240	
(mmol)	2·5	6·2	
Chloride (mg)	66	180	
(mmol)	1·9	5·1	

(Mclaren and Burman, 1982).

Aim of the Review

This is intended to be a review of the literature on the subject of (Feeding Problems During the First Year of Life). The aim is to cover the problems which might face the healthy infant feeding, and the valnurable groups feeding , with special stress on the healthy infant problems, and the way to handle such problems in order to feed the baby in the proper way. The proper way of handling feeding problems , during the lst year of life will certinlly decrease the infant mortality and morbidity through this year of rapid and maximum growth.

We can also avoid harmful effects of food to some infant by proper diagnosis, and management of their problems.

REVIEW OF LITERATURE

FEEDING DURING THE FIRST YEAR OF LIFE

- Milk Feeding:
  - . Breast Feeding
  - . Bottle Feeding
- Weaning

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