INTRODUCTION AND AIM OF THE ESSAY

Breast milk is recogenised as the ideal method of providing nutrition for the infant for the first year of life at least. When an infant is not breast feed whether because of lack of sucess, stopping early, or insufficient quantitiy, formulas have been developed that, in areas where sanitation and education are approprite, provide good nutrition for infants (Barness, 1985).

The availability of satisfactory infant formulas is comparatively recent development, until the 20th centuary, there was virtually no safe and reliable altermative to breast feeding and few infants not suckled by mothers or wet nurse survived the first year.

While infectious diseases undoubtedly play a major role in infant mortality; availoble statistics reveal an increasing mortality among infants who were not breast fed (Anderson, 1982).

The great majority of modern infant formulas used throughout the World for normal infants are based on protein derived solely from cow's milk. Two types are available:

Group I:

Milks with protein supplied solely from cow's milk solids - not fat - (snf).

Group II:

Milks with the casein to non casein protein rtio adjusted with deminerlized whey to resemble more closely that in human milk.

Formulas using processed soya as the protein source are available but much formulas are only recommended in a small minority of instances where infants cannot tolerate cow's milk protein (Dixon, 1980).

The fats used in either group are based on butter-fat. Other animal fats (such as oleo) and a wide variety of vegetable fats. Vitamins and minerals are variously supplied by the natural levels in the milk solids used or by supplementation, or both (Department of Health Social Security, 1980).

The modern types of frmulas have been developed more prticularly since 1904 when the use of dried full cream milk powder was first used successfully. Since then various modifications have been mode due to increased nutritional knowledge and improved processing techniques became available. It was not until

the mid 1970's that pediatric opinion turned markedly in favour of low solute milks and hence the old full cream milk types of infant formulas disappeared (Meltter, 1980).

Thus from 1904 when the formula consisted wholly of cow's milk solids with sugar added by the mother i.e. a two component system, we have progressed to diets containing up to 25 separate ingredients (Mettler, 1982).

Infants are ready for beikost (foods other than breast milk or formulas) at about 5 to 6 months of age. There is no advantage to earlier beikost introduction. The common claim that feeding solids causes an infant to sleep through the night is unfounded, (FOMO, 1979).

Solid foods do, however provide supplemental nutrients to breast milk or formulas that are often necessary during the second 6 months of life.

As public interest in good nutrition increases, more families are preparing their own infant foods. However most infants still receive commercial infant foods, and one study showed that infants receive an verage of 300 baby food preparations in their first year (ESPGAN, 1981).

The aim of this essay is to review the literature of different types of dried milks concerning their composition, related nutritional properties and the indications for the use of each type of infant formula and infant foods, all of which are essential for their effective use and for avoidance of undesirable complications.