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Nutrition is the driving force behind growth and development **(Krugman, 1992).**

Vitamin A is known to fulfil a number of biological functions in various animal and human tissues during fetal life. It is required for growth, for cellular differentiation, and for normal development of fetuses **(Koussoulakos and Anton, 1991)**

The human fetus derives its vitamin A content from the mother through the placental circulation, which limits and controls the passage of the vitamin. Many maternal factors have been reported to affect the delivery of nutrients and vitamin A to the fetus **(Charlton, 1986; Gross, 1989). Jonxis (1991)** stated that maternal malnutrition does of course affect vitamin A stores in the newborn.

The importance of adequate vitamin A supply during pregnancy to prevent vitamin A deficiency and intrauterine growth retardation is recommended by **Shah et al. (1987), Hussein et al. (1988), Neel and Alvarez (1990) and Others.**

Satisfactory vitamin A status is defined by **Olson (1987)** as a total body pool that provides adequate vitamin A to meet all known physiological needs and a reserve for four months on low intakes or during stress.

Plasma retinol levels are used as an indicator of vitamin A status in humans when direct liver analysis is not possible by autopsy or biopsy **(Sivakumar, 1991)** The cut off level of plasma vitamin A concentration is 20 µg/dl, below which a deficiency state is considered **(Barltrop, 1992)**. Vitamin A in blood consists almost entirely of retinol bound to its specific serum carrier protein, retinol-binding protein (RBP) **(Pinnock, 1991)**.

Most of the studies that were previously conducted on vitamin A status among Egyptian population were entirely based on clinical assessment **(Fahmi, 1979; Farouk, 1979; El-Naggar et al., 1981; & Rizk et al., 1992)**. Recently, **El-Shamy et al. (1989)** studied serum vitamin A and its relationship to anemia in Egyptian rural school children.

Information on maternal-neonatal serum vitamin A level and the factors affecting it, in Egypt, is scarce despite the well known biological importance of vitamin A during fetal life.

The foregoing facts led us to perform a more comprehensive study to investigate the degree of association between maternal and neonatal vitamin A status in relation to each other as well as maternal age, parity, residence, social class,and nutritional status, and growth status of the newborn.

The main objectives of this study are the following :

a- Assessment of serum vitamin A contents of mothers and their corresponding newborn infants at birth.

b- Study the influence of parity, maternal age, residence and social class on vitamin A status of the newborn.

c- Study the anthropometric and biochemical indices of nutritional status of mothers and their newborns and their relationship to vitamin A status of the newborn.

d- Evaluate the possible contribution of vitamin A deficiency to the prevalence of low birth weight and neonatal anemia.