The Influence of Maternal Nutritional Status on the Growth of Neonates of Saudi Women

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Abstract: This study was undertaken to investigate the effects of maternal nutritional status on the growth of neonates. One hundred Saudi Arabia pregnant women were chosen at delivery with their full term newborns. Anthropometric measurements and serum albumin, prealbumin, retinol binding protein, transferrin and fibronectin were determined in pregnant women at delivery and in the cord blood of their corresponding off springs. The data showed the presence of statistical significant correlation coefficient between the most maternal anthropometric measurements and the neonatal measurements. The mean serum albumin level in mothers was lower, while the mean levels of maternal serum prealbumin, retinol binding protein, transferrin and fibronectin were significantly higher than their corresponding level in the cord blood prealbumin, retinol binding protein, transferrin and fibronectin. None of these prealbumin, retinol binding protein, transferrin and fibronectinoteins were correlated to the birth weight. The mean serum albumin, retinol binding protein and fibronectin levels measured for mothers and in cord blood was correlated.

Key words: Anthropometric measurements, serum albumin, prealbumin, retinol binding protein, transferrin and fibronectin.

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