

A-14: Serum prolactin concentrations and lactational behaviour in undernourished and well-nourished postpartum women during the early postpartum period *

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There are inconsistent reports about the effect of maternal nutritional status on prolactin concentrations in lactating women. We studied serum prolactin concentrations and the pattern of breast feeding in otherwise healthy undernourished (n=15; body mass index mean \pm SEM 17.47 ± 0.35 kg/M²) and well-nourished (n=15; body mass index mean \pm SEM 28.12 ± 0.58 kg/M²) fully breast feeding or nearly fully breast feeding women during the early postpartum period.

Basal serum prolactin concentrations were not significantly different between undernourished and well-nourished women either at 4 or at 8 weeks postpartum (geometric mean (95% confidence limits). They were 1481.38 (1122.02 to 1949.84), and 1043.69 (724.44 to 1513.56) for undernourished, and 1781.00 (1348.96 to 2344.23) and 1626.80 (1318.26 to 1995.26) for well-nourished subjects at 4 and 8 weeks postpartum respectively). Variables of lactational behaviour (i.e. frequency of breast feeds per 24 h, during day time and at night and the total duration of suckling per 24 h) were not significantly different between the 2 groups and did not affect basal prolactin concentrations. Only a few subjects (2 undernourished and 3 well-nourished) introduced any other feeds during the study period.

Thus serum prolactin concentrations in the early postpartum period do not seem to be affected by the maternal nutritional status in women who have comparable lactational behaviour.

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