

MILK PRODUCTION IN WOMEN

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Although the growth rate of breast fed infants is considered to be a model for desirable infant growth (Foman, 1974), little is known about either the quantity or pattern of food intake in these infants. This lack of information led Whitehead *et al.* (1978) to conclude that "the universal shortage of information on the amount of milk produced by lactating mothers at different stages of infancy and our remarkable ignorance of the factors determining the lactation capacity of different individuals is a major stumbling block for those trying to improve the nutritional status of infants". The present investigation was undertaken to determine daily milk production by motivated mothers in Perth.

Milk production of the mothers was measured by test weighing the mothers before and after breast feeding. Groups of mothers at 1, 3, 6, 9, 12 and 15 months of lactation had their milk productions measured for two 24 hour periods. Milk production of two other mothers was measured during weaning of their infants. One mother fully breast fed her infant for 13.5 months and weaned completely at 29 months. The other mother fully breast fed her infant for 19 months and weaned completely after 41 months. The result of the milk productions recorded from each group of women is shown in Table 1.

TABLE 1. Milk Production at Different Durations of Lactation.

Lactation (month)	1	3	6	9	12	15
Milk Production (Kg/24 hr)	1.157	1.238	1.128	0.885	0.880	0.951
Standard Deviation	0.307	0.238	0.306	0.355	0.104	0.421
Number of Mothers	5	5	5	4	4	4

The milk production of the women studied during weaning was 1.51 and 2.15 Kg/24 hr before the commencement of weaning and 0.69 and 0.34 Kg/24 hr at the cessation of lactation respectively. These mothers showed a significant ($p < 0.01$) correlation between feeding frequency and milk production.

The milk production of the mothers fully breast feeding their infants was higher than the range of 0.7 to 0.9 Kg/24 hr that is generally accepted for human lactation (see review by Jelliffe & Jelliffe, 1978). It is commonly assumed that breast milk is solely adequate for infant growth for only the first 4-6 months of life (Jelliffe & Jelliffe, 1978). The present study indicates that breast milk is adequate for over 12 months and suggests that a reassessment of its role in infant nutrition is required.

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