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The Midwife.

On the Value of Test Meals as a Buide to Infant Feeding.

Dr. Ronald Carter, M.R.C.S., writing in the British Medical Journal, says in part:---

Three years ago I started "infant consultations" in North Kensington (Notting Dale), with the help of the Kensington Health Society.

The mothers brought their infants once a week for advice, because they were not progressing favourably. The majority were breastfed, and, as is usual in these cases, friends told the mothers to wean the child. It seemed to me it would be a help in the elucidation of this problem to follow Professor Budin's plan and weigh the infant before and after a breast feed, and so discover at any rate the quantity of milk it obtained, and I have found this method to be of great practical importance. The number of breast-fed infants that "go wrong" is really amazing, and I feel quite certain that a large proportion of the deaths from gastro-enteritis attributed to bottle feeding are in reality breast-fed infants who have been artificially fed. as a last resort. I have watched several of these cases, and I can positively say that the initial disturbance in nutrition started whilst the infant was breast-fed, and that artificial feeding was only resorted to when the degree of wasting had become noticeable to friends and relations.

In the case of breast-fed infants there should be some sort of co-ordination between the supply on the part of the mother and the demand on the part of the infant. A strong infant, by reason of its active powers of suction, affords the appropriate stimulus for a parallel activity on the part of the secreting gland, while the feeble nursling, on account of its indifferent powers of stimulation, excites little reaction in the breast. In a considerable proportion of cases there is no co-ordination between the supply and the demand; sometimes there is too much milk, and sometimes not enough. Apart from the physiological testnamely, the progress of the infant-there is no way of finding out how much milk an infant receives unless we weigh the infant before and after feeding on very accurate scales; the amount consumed is estimated by noting the difference in the two weighings. This method is known as the "test feed." The following case illustrates its practical application :--

A woman came to my consultations with a very wasted infant aged 2 months, and weighing 6 lb. She had fed it entirely on the breast, and assured me that it obtained the milk because it sucked for about ten minutes and then fell asleep. A "test feed" was arranged, and two hours after the last feed the infant was put to the breast. The scales proved that it obtained no milk at all. Milk could, however, be easily squeezed from the nipple, showshowing that an adequate supply was present. I ordered the mother to give 1 oz. of cow's milk with 1 oz. of barley water alternately with the breast feedings. During the following week the test feed showed that the infant obtained 1 oz. from the breast, and the child had increased 4 oz. in weight. She continued to feed in this manner for another week and the test feed then showed that 1 oz. was obtained from the breast, the child having gained another 5 oz. in weight. At the end of a month's treatment 2 oz. was obtained from the breast, and the child had gained nearly 1 lb. The cow's milk was now discontinued and the child was fed entirely on the breast till it was 8 months old.

Irregular feeding is a frequent cause of vomiting and diarrhœa in breast-fed infants; the scales have often shown what small quantities these infants obtain, and when the mothers are told to feed "by the clock," the result is that the vomiting and diarrhœa cease and the child obtains often double the quantity of nourishment from the breast. When irregular feeding is persisted in, the child begins to waste, the mother then commences bottle feeding, with of course a bad result; should such a case end fatally, the doctor in attendance, if he had not inquired into the previous history, would naturally assume that bottle-feeding was the cause of death.

Another interesting observation that the test feed has disclosed is that among breast-fed infants it is not always those who are inadequately fed according to our accepted scientific data who suffer from wasting, but often those who receive an adequate or even excessive amount. I have notes of at least forty cases in which the infant appeared to thrive and maintain a good weight curve on half the quantity of food that it should normally obtain; for instance, it is a common experience to find that an infant 3 or 4 months old is fed ten times a day and only obtains 1 to $1\frac{1}{2}$ oz. of milk at a feeding, or about 12 oz. in the 24 hours. Evidence from an independent source confirms these observations, for Dr. Eric Pritchard at his consultations at the Marylebone Dispensary has come to exactly the same conclusions.

A starvation diet is hardly likely to promote



