

The normal breastfed baby

Full term healthy new born babies: (1)

- lose less than 10% of their birth weight,
- return to birth weight by approximately two weeks of age (subject to individual variation),
- should gain weight from 2-12 weeks at a minimum rate of 20g/day.

The following feeding pattern would be normal for a breastfed baby: (2)

- eight to twelve feeds in 24 hours,
- 'cluster feeds' – feeding every hour for 2-3 hours, usually in the evening, then sleeping for 4-5 hours,
- at least 6 wet nappies per day,
- 3-6 loose yellow bowel motions by day 5,
- stool changes from meconium on day 4,
- growth spurts on day 10, 3 weeks and 6 weeks with increased frequency of feeds for 24 hours.

Evaluating the breastfeeding process in the first three months (2)

The most common reason for mothers to stop breastfeeding prematurely is perceived insufficient milk supply. Actual insufficient milk supply is rare. In the Bristol Breastfeeding Clinical Support Service, a project investigating breastmilk insufficiency, 85% of referrals for poor milk supply were amenable to correction by offering the mother specific help on improving positioning and attachment, optimising feeding management and providing support and encouragement. Less than 2% of referrals had a pathophysiological cause.

The physiology of milk production (2)

Milk production is a product of effective milk removal from the breast. This requires good positioning and attachment and unrestricted access to the breast by the baby.

Poor weight gain may be due to:

- poor positioning and attachment
- too infrequent feeding
- restricting the baby's time at the breast
- restricting night feeds
- supplementing with infant formula
- pacifier use



Milk production in the first five days is very variable. It occurs without reference to the baby's size. In the next three to five weeks the milk supply is calibrated to the baby's needs, in most cases building up to meet them but in some cases down regulating to meet needs.

In some women the process of down regulation is irreversible during current lactation, so anything that interferes with the baby's needs at this critical stage may mean the mother never reaches peak milk output.



Offering calories other than breastmilk, such as supplemental formula feeds or glucose and water, may cause irreversible down regulation and signal the end of the breastfeeding relationship. Another cause is overuse of pacifiers, which satisfy a baby's desire for sucking and can lead to decreased demand for breastmilk.

Most cases of perceived insufficient milk supply can be resolved with:

- Careful history and examination of mother and baby,
- Observation of a feed by a lactation consultant may uncover latch-on difficulties which can be easily rectified,
- Treatment of maternal nipple pain if necessary (see factsheet 5: Nipple pain),
- Advice on increasing frequency and duration of feeds – sleepy, 'undemanding' babies may need to be woken at regular intervals for feeding. It is important to elicit what the mother means by 'feeding on demand' and 'sleeping through the night'.

When to refer for specialist advice (3)

The following situations indicate inadequate nutrition. Intervene promptly to uncover the cause and reverse the process if a baby:

- younger than two weeks is more than 10% less than birth weight;
- weighs less than birth weight at two weeks;
- has no urine output in any given 24 hours;
- does not have yellow milk stools by the end of the first week;
- has clinical signs of dehydration;
- between two weeks and three months has a weight gain of less than 20grms/day or has unexplained weight loss;
- older than 3 months has a completely flat or decelerating growth curve.

References

1. Nelson SE, Rogers RR, Ziegler EE, et al. Gain in weight and length during early infancy. *Early Human Development* 1989;19:223-39.
2. Woolridge MW. Breastfeeding: physiology into practice. In: Davis DP (ed). *Nutrition in Child Health*. London: Royal College of Physicians, 1995.
3. Powers NG. How to assess slow growth in the breastfed infant. *Pediatr Clin North Am* 2001;48(2);345-61.