

Breastfeeding with confidence – understanding normal breastfeeding patterns and milk production

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Parents and health professionals should have confidence that exclusively breastfed infants are receiving sufficient breast milk if they are showing steady growth, are generally alert, and are producing wet and dirty nappies (diapers) ^{1,2}. The most common reason cited by mothers for ceasing exclusive breastfeeding is a perception of insufficient milk supply. This perception is based on the mother feeling that her infant is not satisfied after breastfeeds, her concern that her infant is not attached and sucking well during breastfeeding, and/or that her infant is feeding too often or too quickly. Recent data from our research group indicate that more than half of all the mothers seeking assistance at the Breast Feeding Centre of Western Australia were concerned about the frequency of their infants' breastfeeds, or about the time taken for each breastfeed, and almost half of these mothers seeking professional assistance were not confident about their milk supply.

Perceptions can be validated or shown to be inaccurate by using objective measurements. Objective measurements can help to confirm or refute a perception of insufficient milk supply. It is standard practice to make frequent measurements of the naked weight and length of babies. These measures are compared with the well-established reference range for the growth of breastfed infants - the World Health Organization growth charts. It is well accepted that there is a wide range in growth, and even if there is a perception of growth that is too low or too high parents and health professionals can be reassured if infants are between the 3rd and 97th centiles, as long as they are not crossing centiles. In contrast, when there is a perception of insufficient milk supply or oversupply, objective measurement of milk supply is rarely made. An objective assessment of milk supply can be made when a mother measures her 24-hour milk profile, which involves the mother using accurate digital scales at home to weigh her fully-clothed infant before and after every breastfeed for a 24-26-hour period ³. This requires minimal interference in the infant's normal feeding and allows calculation of the frequency and duration of feeds, amount of milk transferred during each breastfeed and total milk intake over a day. Comparison of individual data with a reference range could establish whether or not the breastfeeding parameters are within normal limits, but there is currently no established reference range for these parameters.

We have used the 24-hour milk profile technique to gather data from 71 mothers who were exclusively breastfeeding healthy term infants 1 to 6 months old ⁴. These data demonstrated very wide ranges among normal dyads, but further data are needed to create a well-established reference range. We now have data from 212 healthy, term breastfeeding dyads. The central 95% values are: 6-17 breastfeeds per day, 6-24 minutes per breastfeed, 32-131 mL per breastfeed, and 528-1116 mL breast milk intake per day.

The objective measurement of 24-hour milk profiles has been shown to identify low milk transfer during breastfeeds and/or low milk supply and guide targeted advice to enhance the lactation. The objective measurement of 24-hour milk profiles and the awareness of the wide range in normal breastfeeding parameters have been shown to improve or maintain the confidence of breastfeeding mothers who had adequate milk supply, and support them to continue breastfeeding³.

References

- 1 Neifert MR. Prevention of breastfeeding tragedies. *Pediatr Clin North Am.* 2001;48:273-97.
- 2 WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Growth Velocity Based on Weight, Length and Head Circumference. *Methods and Development.* Geneva: World Health Organization; 2009.
- 3 Kent JC, Hepworth AR, Langton DB, Hartmann PE. Impact of measuring milk production by test weighing on breastfeeding confidence in mothers of term infants. *Breastfeed Med.* 2015;10:318-25.
- 4 Kent JC, Mitoulas LR, Cregan MD, Ramsay DT, Doherty DA, Hartmann PE. Volume and frequency of breastfeedings and fat content of breast milk throughout the day. *Pediatrics.*2006;117:e387-95.